

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ALPHA COGNITION INC.

(Exact name of registrant as specified in its charter)

British Columbia	2836	N/A
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

**1200 – 750 West Pender Street
Vancouver, BC, V6C 2T8
(858) 344-4375**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Michael McFadden
Chief Executive Officer
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(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box: ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said section 8(a), may determine.

STATEMENT PURSUANT TO RULE 429(b)

This registration statement also acts as a post-effective amendment to the registrant's registration statements on Form S-1 (333-282675) related to the resale of up to 904,753 common shares by selling stockholders. The registrant is filing a single prospectus in this registration statement, pursuant to Rule 429 under the Securities Act, in order to satisfy the requirements of the Securities Act for the offering in its Registration Statement on Form S-1 (No. 333-282675). The prospectus in this Registration Statement is a combined prospectus for (i) 542,913 common shares being newly registered hereunder and (ii) 904,753 common shares remaining for resale under the Form S-1 (333-282675). The combined prospectus in this registration statement constitutes a post-effective amendment to the prior Registration Statement, which shall hereafter become effective concurrently with the effectiveness of this registration statement. The post-effective amendment is being filed by the Registrant to (i) reflect the Company's 1 - for-25 reverse stock split which became effective on November 5, 2024 (the "Reverse Stock Split") in the share amounts and per share values stated in the Form S-1, (ii) reflect the conversion of convertible notes and the issuance of common shares previously registered for resale upon such conversion, (iii) add its financial statements for the three and nine-month periods ended September 30, 2024, (iv) update the audited annual financial statements for the years ended December 31, 2023 and 2022 to reflect the Reverse Stock Split and (v) to reflect recent material events. If any securities previously registered under the Prior Registration Statement are offered and sold before the effective date of this registration statement, the amount of previously registered securities so sold will not be included in the prospectus that is a part of this registration statement.

Pursuant to Rule 416, this Registration Statement also covers additional securities that may be offered as a result of anti-dilution provisions regarding stock splits, stock dividends, or similar transactions relating to the shares of common stock issuable upon exercise of warrants covered by this registration statement.

The Registrant previously paid a registration fee of \$1,367.86 in connection with the filing of the initial registration statement on Form S-1 (No. 333-282675) filed with the Securities and Exchange Commission on October 16, 2024, to register the 904,753 shares of common stock. The common shares registered herein are subject to the lock-up provisions from the Company's November 2024 public offering.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Preliminary Prospectus

Subject to completion, December 31, 2024



1,447,666 Common Shares

This prospectus covers up to 1,447,666 common shares of Alpha Cognition Inc. (the "Company", "Alpha", "we" or "our") that may be offered for resale or otherwise disposed of by the selling stockholders set forth under the caption "Selling Stockholders" beginning on page 158 of this prospectus, including their pledges, assignees or successors-in-interest.

The common shares offered for resale consist of (i) 801,413 common shares issued upon conversion of \$4,545,000.00 USD principal amount of convertible notes of the Company at a conversion price of \$5.75 per share and (ii) 646,253 common shares issuable upon exercise of warrants exercisable on or before September 24, 2029 at an exercise price of \$7.19 per share, in each case, issued to our selling stockholders. The selling stockholders acquired their convertible notes and warrants from us in a private placement transaction that closed on September 24, 2024 (the "Private Placement"). Please see "Description of Private Placement" beginning on page 157 of this prospectus.

We will not receive any proceeds from the sale of common shares by the selling stockholders.

The selling stockholders may offer all or part of the shares registered hereby for resale from time to time through public or private transactions, at either prevailing market prices or at privately negotiated prices. Our registration of the common shares covered by this prospectus does not mean that the selling stockholders will offer or sell any of the common shares. With regard only to the shares the selling stockholders sell for their own behalf, such selling stockholder may be deemed an "underwriter" within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

Our common shares are currently traded on the Nasdaq Capital Market (the "Nasdaq") under the symbol "ACOG".

On December 30, 2024, the last reported sale price of our common shares on the Nasdaq was \$5.64. On November 5, 2024, we completed a reverse stock split of our common shares with a stock split ratio of 1-for-25 ("Reverse Stock Split").

We are an "emerging growth company" and a "smaller reporting company" as defined under the federal securities laws and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and may elect to do so in future filings. See the section entitled "Implications of Being an Emerging Growth Company."

Investing in our common shares involves a high degree of risk. See the section entitled "Risk Factors" beginning on page 19 to read about factors you should consider before buying our common shares.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Prospectus dated _____, 2024

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ABOUT THIS PROSPECTUS

We are responsible for the information contained in this prospectus and in any free-writing prospectus we have authorized. We have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by us or on our behalf or to which we have referred you and which we have filed with the U.S. Securities and Exchange Commission (the "SEC"). We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the common shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted or where the person making the offer or sale is not qualified to do so or to any person to whom it is not permitted to make such offer or sale. The information contained in this prospectus is current only as of the date on the front cover of the prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not done anything that would permit the resale of the common shares under this prospectus or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common shares and the distribution of this prospectus outside the United States.

PROSPECTUS SUMMARY

This summary highlights information regarding our business and the offering contained elsewhere in this prospectus and does not contain all of the information that may be important to you in making an investment decision. You should read this entire prospectus carefully, including the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

As used in this prospectus, unless the context otherwise requires, references to "we," "us," "our," the "Company," and similar references refer to Alpha Cognition Inc., and its consolidated subsidiaries.

A 1:25 reverse stock split of our common shares has been effected on November 5, 2024. All share amounts in this prospectus have been retroactively adjusted to give effect to this reverse stock split.

Our Business

The Company is a biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's disease ("Alzheimer's disease" or "AD"), for which there are limited or no treatment options. On July 26, 2024, the Company received approval by the FDA of the Company's New Drug Application (the "NDA") for ZUNVEYL™ (benzgalantamine) previously known as ALPHA-1062 ("ZUNVEYL" or "ALPHA-1062") a delayed release oral tablet formulation indicated for the treatment mild to moderate dementia of the Alzheimer's type in adults (Alzheimer's disease). The Company will now focus on the commercial manufacturing and sales of ZUNVEYL oral tablet formulation. The Company's commercial development program for ZUNVEYL is primarily focused on building a long term care commercial team that can focus on providing key points of differentiation, exploiting key issues with existing Acetylcholinesterase inhibitors ("AChEI") treatments, and seeking potential licensing partners for other additional indications and new formulations. The Company intends to target large volume nursing homes specializing in Alzheimer's, to leverage an account based sales team with demonstrated success in long-term care ("LTC"), in order to position ZUNVEYL with Medicare payors, and to work with strategic and clinical partnerships with consultant pharmacists and long term care pharmacies. The Company has five additional pre-clinical development programs: (1) ZUNVEYL in combination with memantine for the treatment of moderate-to-severe Alzheimer's disease, (2) ALPHA-1062 sublingual formulation, (3) ALPHA-1062 intranasal ("ALPHA-1062IN") formulation for the treatment of cognitive impairment with mild traumatic brain injury (mTBI; otherwise known as concussion), (4) ALPHA-0602, and (5) ALPHA-0702 & ALPHA-0802, the latter two programs also referred to as 'Progranulin' and 'Progranulin GEM's', respectively, for the treatment of neurodegenerative diseases including amyotrophic lateral sclerosis (ALS) or Lou Gehrig's disease and spinal muscular atrophy (SMA).

ZUNVEYL, is a patented next generation acetylcholinesterase inhibitor indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults. ZUNVEYL's active metabolite is differentiated from donepezil and rivastigmine in that it binds neuronal nicotinic receptors, most notably the alpha-7 subtype, which is known to have a positive effect on cognition. In addition to our approved oral formulation, ZUNVEYL is also in pre-clinical development (1) in combination with memantine to treat moderate to severe Alzheimer's disease, (2) alone as a with sublingual formulation for patients suffering from dysphagia, and (3) alone and referred to herein as "ALPHA-1062IN" that is intended to be out-licensed for pre-clinical development to study an intranasal formulation for cognitive impairment with mTBI.

Our other pre-clinical assets include ALPHA-0602 and ALPHA-0702 & ALPHA-0802 (Progranulin and Progranulin GEM's). In general, progranulin is a protein expressed in several cell types in the central nervous system and in peripheral tissues that promote cell survival, regulate certain inflammatory processes, and play a significant role in regulating lysosomal function and microglial responses to disease. Its intended use for the treatment of neurodegenerative diseases has been patented by the Company and ALPHA-0602 has been granted an Orphan Drug Designation for the treatment of ALS by the FDA. Orphan Drug Designation was provided for ALPHA-0602 by the Office of Orphan Drug Products, FDA on February 2020 based on the Federal Food Drug, and Cosmetic Act, whereby the ALPHA-0602 met the criteria designated in Section 526 of such Act. For a further description see the section entitled "*Business — Government Regulation — Orphan Drug Designation*". The Orphan Drug Designation allows for exclusivity provisions provided the drug is approved first for indication: treatment of amyotrophic lateral sclerosis ALPHA-0702 and ALPHA-0802 are Granulin Epithelin Motifs, ("GEMs"), derived from full length progranulin which have therapeutic potential across multiple neurodegenerative diseases. GEMs have been shown to be important in regulating cell growth, survival, repair, and inflammation. ALPHA-0702 and ALPHA-0802 are designed to deliver this result with potentially lower toxicity, and

greater therapeutic effect than full length progranulin. As the assets are pre-clinical and do not add material value to the Company, the Company will not develop these assets further and instead will seek to out-license the assets to interested third parties. Given the early stage of discussion with third parties, the Company cannot assess value to a license agreement.

Future TBI Out-License

The Company obtained shareholder approval to out-license ALPHA-1062IN for applications in treating mild traumatic brain injury ("mTBI") and traumatic brain injury ("TBI") to Alpha Seven Therapeutics Inc. ("Alpha Seven") a newly incorporated related entity. Alpha Seven will focus its business on the advancement of the use of ALPHA-1062IN for the treatment of TBI and mTBI with a focus on using intra-nasal delivery, including development and manufacturing work, completing a pre-clinical toxicity study, and advancing to clinical trials and potential FDA approval. The establishment of Alpha Seven provides for the separate funding and advancement of the TBI and mTBI applications of ALPHA-1062IN while permitting the Company to remain focused on advancing ZUNVEYL for use in the treatment of symptoms of Alzheimer's disease. Alpha Seven was incorporated in Delaware in July 2023. The out-license of ALPHA-1062IN technology has not yet occurred. The Company currently expects the out-license to occur in Q1 of 2025 concurrent with the anticipated financing of Alpha Seven.

The Company met with the U.S. Food and Drug Administration (the "FDA") in a pre-investigational new drug ("IND") meeting in Q2, 2023. The meeting was scheduled to align with FDA on pre-clinical, clinical, and manufacturing items necessary to file an IND and initiate a Phase 2 trial for ALPHA-1062IN. We have shared information related to this meeting with Alpha Seven. As a result of FDA feedback, our understanding is that Alpha Seven intends to complete additional manufacturing and toxicity work which the Company believes will allow Alpha Seven to advance the program to file an IND with the FDA. Additional capital will be needed by Alpha Seven to advance the manufacturing, toxicity work, and future clinical trials for ALPHA-1062IN.

The Company is expected to initially have 86% ownership of Alpha Seven and key management of Alpha Seven ("Alpha Seven Management") will hold the remaining 14% ownership interest. It is expected that Alpha Cognition's ownership will be diluted when Alpha Seven raises capital. At this time our understanding is that Alpha Seven is still exploring financing options and hasn't engaged a banker for such purpose.

Alpha Seven Management is as follows: Michael McFadden, who is the Chief Executive Officer and a director of the Company, also serves as the Chief Executive Officer of Alpha Seven, and Lauren D'Angelo, who is the Chief Operating Officer of the Company, also serves as the Chief Operating Officer of Alpha Seven. It is expected that management would spend approximately eight hours per week on this venture and it is expected that when capital is raised that additional employees and consultants would be hired to work for Alpha Seven Therapeutics, Inc. While the Company believes that having Mr. McFadden and Ms. D'Angelo serving as officers of Alpha Seven is in the best interests of the Company given the Company's substantial ownership in Alpha Seven, such service may give rise to a conflict of interest that will be a matter of oversight by our Board of Directors. Please see the section entitled "Risk Factors — *Our officers also serving as officers of Alpha Seven may give rise to a conflict of interest which may adversely impact the Company's interests*".

The funding of Alpha Seven as described above is at the proposal stage only. There is no guarantee that Alpha Seven will attract funding as described above or at all. There is no guarantee that Alpha Seven will be successful in advancing the ALPHA-1062IN for use in TBI or mTBI.

Our Markets and Opportunities

We are dedicated to developing treatments for under-served neurodegenerative diseases, specifically Alzheimer's disease and Traumatic Brain Injury through our out-licensing agreement with Alpha Seven.

Alzheimer's Disease Mild-to-Moderate Stage & Moderate-to-Severe Market:

An estimated 6.7 million Americans age 65 and older were living with Alzheimer's dementia in 2023 ⁽¹⁾. This often causes burdensome effects on their families and caregivers. It is by far the most common form of dementia, estimated to be 60% to 80% of all diagnosed cases⁽¹⁾. Treatment options for Alzheimer's disease are limited, and health care professionals along with patients/caregivers are generally dissatisfied with the currently available treatments due to limited efficacy and unmanageable tolerability from adverse events.

(1) Alzheimer's Association. 2023 Alzheimer's Disease Facts and Figures. *Alzheimers Dement* 2023;19(4). DOI 10.1002/alz.13016.

Of the patients with Alzheimer's disease, the vast majority, approximately 2.5 million ⁽¹⁾, have been diagnosed with mild Alzheimer's disease. Mild Alzheimer's disease is expected to grow over the next decade, signaling a continued need for symptomatic drugs with greater efficacy and fewer side effects.

Current acetylcholinesterase inhibitor medications are absorbed in the gastrointestinal system and bind to locally present acetylcholinesterase, the enzyme responsible for breaking down the neurotransmitter, acetylcholine. The local acetylcholine levels are then increased, and the neurons associated with the gastrointestinal system become overstimulated. The result is an increase of gastrointestinal side effects (nausea, vomiting, diarrhea).

Alzheimer's disease symptomatic treatments are currently limited and perceived to provide limited symptom improvement and cause difficult to manage tolerability side effects. Symptomatic treatments are designed to improve the ability to learn, remember data, and function normally with daily tasks like toileting, cooking, or home care. Each year more than 2 million patients are on medication for the disease, which makes up half of the estimated number of people with Alzheimer's disease in the US. Approximately 70% of patients with mild Alzheimer's disease, 80% with moderate, and 75% with severe Alzheimer's disease are on drug-treatment. On average, it can take up to 2.5 months from diagnosis to treatment, but can take up to 2 years, and roughly 32% will never go on treatment. Patients are treated primarily with symptomatic medications to help the cognitive and functional symptoms of Alzheimer's disease. In addition to symptomatic treatments, patients are often prescribed behavioral and psychiatric medications for depression, hallucinations, aggression and agitation.

Alzheimer's Disease Moderate-to-Severe Stage Market:

Of the approximately 3.9 million people that have been diagnosed with Alzheimer's disease, the moderate-to-severe market size is approximately 1.4 million people in the U.S. (moderate Alzheimer's disease accounts for approximately 899 thousand patients and severe Alzheimer's disease affects approximately 508 thousand patients). In the moderate stage of Alzheimer's disease symptoms becomes more intense, significantly affecting their everyday life. They have difficulties with communication and personality and behavioral changes present. It's estimated that 61% of Alzheimer's disease patients living in a nursing home are in the moderate to severe stages of the disease. On average, 40% of the final years of an Alzheimer's disease patient's life will be spent in the severe stage of the disease and majority will have to be placed in a long-term care home due to the immense burden this stage places on family members and caregivers. According to third-party market research reviewed by the Company, the Company understands that many providers and caregivers believe the approved generic medications provide limited efficacy and adverse effects.

Traumatic Brain Injury (TBI) Market

According to secondary market research conducted by and for the Company, including a report prepared by a third-party paid for by the Company dated June 2020, we believe that TBI is a highly prevalent, and increasingly common condition, with nearly 3 million diagnosed events occurring in the United States alone in 2019 with an estimated 91% of such events being mTBI. Based on hospitalizations and emergency room visits data reported by the Brain Injury Association of America, we estimate that 79% of these diagnosed annual events are adults. Residual Traumatic Brain Injury symptoms may impact patient Quality of Life, social relationships, and ability to work. Approximately 50% of mTBI patients have persistent cognitive dysfunction¹, representing an estimated, based on events data above, 1.5M cases per year. Cognitive impairment includes symptoms such as short-term memory loss, trouble concentrating, difficulty multi-tasking, lack of focus, and slowed brain processing. We expect that once the out-license is complete and Alpha Seven obtains funding, both anticipated in Q1 2025, Alpha Seven will pursue a study of ALPHA-1062 Intranasal ("ALPHA-1062IN") in adult patients (18+ years) who are suffering from the cognitive symptoms associated with mild traumatic brain injury, with an addressable market of 1.1 million patients per year (3M diagnosed per year, 91% mild, 50% with cognitive impairment, 79% adults). We estimate that a treatment to manage cognitive impairment with mTBI would have a \$13.5B market size (1.1M cases per yr X assuming a \$12.5K per treatment course) in the U.S. Due to high unmet need, no approved treatment, and disability associated with the disorder, there is a significant need for an approved treatment expressed by governments, payers, and physicians.

1 McInnes K, Friesen CL, MacKenzie DE, Westwood DA, Boe SG. Mild Traumatic Brain Injury (mTBI) and chronic cognitive impairment: A scoping review. PLoS ONE. 2017; 12: e0174847

Our Product and Product Candidates and Approaches to Treatment

The following table highlights our commercial development products and preclinical programs.



Alpha Cognition Clinical Pipeline

Indication	Preclinical	Phase 1	Phase 2	Phase 3/Pivotal	Approved	Entity Responsible
Zunveyl, ALPHA-1062						
Oral: Mild-to-Moderate Alzheimer's Disease (AD)					★	Alpha Cognition
Sublingual Formulation: Mild-to-Moderate Alzheimer's Disease (AD) ¹	■					Alpha Cognition
Moderate-to-Severe Alzheimer's Combination with Memantine (AD) ¹	■					Alpha Cognition
Zunveyl Intranasal (Partnered Asset)						
Cognitive Impairment with Mild Traumatic Brain Injury ^{1,2}	■					ALPHA SEVEN THERAPEUTICS

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¹. Contingent on sufficient capital to be raised

². Alpha Seven Therapeutics was incorporated in Delaware in July 2023. The out-license of ZunveylIN technology has not yet occurred.

Commercial Development Products

Alzheimer's Disease Mild-to-Moderate Stage: ZUNVEYL prodrug, delayed release oral tablet

On July 26, 2024, the Company received approval by the FDA of its NDA for ZUNVEYL delayed release oral tablet formulation indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults (Alzheimer's disease). The Company will now focus on the production and commercial sales of ZUNVEYL delayed release oral tablet formulation.

The Company's ZUNVEYL commercial development plans for ZUNVEYL involve:

- Building a commercial long term care team with a focus on potential points of differentiation, exploiting key issues with existing AChEI treatments, and out-licensing the product for other potential indications and new formulations.
- Targeting long term care homes and physicians specializing in Alzheimer's disease to educate and inform them with information about ZUNVEYL
- Hiring an experienced, account based sales team with demonstrated success in long term care
- Working with payors to position ZUNVEYL for coverage with Medicare payors
- Working with strategic and clinical partnerships with consultant pharmacists and long term care pharmacies

ZUNVEYL received regulatory approval from the FDA using the 505(b)(2) pathway for approval. The Section 505(b)(2) regulatory approval pathway is a provision in the U.S. Federal Food, Drug, and Cosmetic Act. It allows a company to seek FDA approval for a drug product that contains previously approved active ingredients, but with new formulations, dosages, routes of administration, or indications. This pathway enables companies to rely on existing data, such as safety and efficacy information from studies on the previously approved drug, along with additional data to support the changes. It can offer a more streamlined and potentially faster route to market compared to traditional new drug clinical study process.

Generally, a pivotal study or trial is considered to be any trial or trials that could be the basis for the FDA reaching the conclusion that there is “substantial evidence of effectiveness” for the new drug and means the FDA considered the trial(s) “adequate and well-controlled investigations”. In the traditional process, this usually entails Phase III clinical trials following a multi-year process of pre-clinical and clinical research. However, under the Section 505(b)(2) pathway, a bioavailability and bioequivalence study is a type of pivotal clinical trial conducted to assess the pharmacokinetic properties of a drug formulation and its similarity to another formulation, typically a reference product. The primary objective of a bioavailability and bioequivalence study is to demonstrate that the test drug (e.g., a generic or modified formulation) is equivalent to a reference drug in terms of its rate and extent of absorption into the bloodstream (bioavailability) and its subsequent distribution, metabolism, and excretion (pharmacokinetics). In contrast, traditional efficacy trials focus on demonstrating the clinical effectiveness and safety of a drug in treating a specific disease or condition.

ZUNVEYL is a patented prodrug product. Upon absorption, through mucosal tissue or ingestion, it is enzymatically converted to an active moiety, galantamine, that has previously been approved by the FDA and previously marketed by Janssen, a wholly-owned subsidiary of Johnson & Johnson, as Razadyne (generic name is galantamine) in North America, and as Reminyl in Europe and elsewhere. Patients treated with Razadyne have experienced gastrointestinal side effects which can cause patients to discontinue treatment, thus limiting its utility. Drugs that convert from an inert form to an active substance in-situ are referred to as “prodrugs”. ZUNVEYL’s active moiety is galantamine. ZUNVEYL was designed as a prodrug to eliminate drug absorption in the gastrointestinal tract, potentially addressing certain tolerability issues. The Company plans to leverage galantamine’s efficacy data in promotion.

ZUNVEYL works in two different ways within the brain, by (1) raising the concentration of an essential chemical called acetylcholine that transmits signals between nerve cells, and (2) increasing the sensitivity of another chemical, called nicotinic acetylcholine receptors (nAChRs), which also enhances acetylcholine, regulates inflammation, defends against the loss of amyloid and strengthens other transmitters within the brain. This results in enhancement and improvement of:

- Memory acquisition and retrieval
- Attention and activity
- Stabilization of behavior
- Inhibition of cell death and neuroprotection

Pre-Clinical Product Candidates

Alzheimer’s Disease Mild-to-Moderate Stage: ALPHA-1062 sublingual formulation

ALPHA-1062 sublingual formulation will also be developed as an alternative formulation for patients who suffer from dysphagia (inability to swallow). A number of Alzheimer’s patients are estimated to suffer from dysphagia and utilize alternative liquid or patch formulations for medicine administration. A systematic review (*Dement Neuropsychol.* 2022 Jul-Sep; 16(3): 261-269) estimated dysphagia prevalence of greater than 80% of moderate to severe patients with Alzheimer’s. The sublingual formulation would allow for a dissolvable tablet that could provide medicine to these patients in an alternative method of administration. The Company completed an internal, unpublished in vitro study to evaluate absorption of the technology with a sublingual tablet formulation. The study demonstrated that the tablet enabled active drug release in 30 seconds. An open label, single-dose, bioavailability study was conducted to determine the plasma levels of ALPHA-1062 in healthy, adults under fasting conditions. An 11mg sublingual tablet was administered to 10 subjects to measure active bioavailability, tolerability, and safety. Study results demonstrated 90% bioavailability and a formulation that was well tolerated. No safety signals were observed in the study. The formulation is in early development phases and further development will be contingent upon additional capital resources through financing and alignment with Food and Drug Administration (FDA) regarding this development program, no specific development plans have been determined at this time.

Alzheimer’s Disease Moderate-to-Severe Stage: ALPHA-1062 + Memantine Fixed Combination Drug

On July 26, 2024, the Company received approval for ALPHA -1062 indicated for the treatment of mild to moderate dementia of the Alzheimer’s type in adults (Alzheimer’s disease), and the Company plans to progress the development of a combination product candidate comprising ALPHA-1062 + memantine. The product candidate combination is

currently in pre-clinical development and will require formulation work and potentially a preclinical study before submitting an IND to FDA. The Company plans to initiate the streamlined 505(b)2 regulatory path for approval but will need additional FDA feedback on the required development steps for the combination product candidate. The Company believes an ALPHA-1062 + memantine product candidate may utilize a triple mechanism of action approach to optimize therapeutic effect. We believe that the mechanism of action works via the dual ALPHA-1062 pathways, acetylcholinesterase inhibition and enhancing the nicotinic receptor activity and sensitivity, plus the memantine pathway via a different neurotransmitter called N-methyl-D-aspartate receptor antagonism (NMDA receptor). The Company believes ALPHA-1062 + memantine could potentially capture market share by providing education on its differentiating features and product profile to physicians who prescribe combination products, and to caregivers who care for patients already on a combination product and/or are in the later stages of Alzheimer's disease symptom progression. The formulation is in early development stages and further development will be contingent upon the Company obtaining additional capital resources through financing and further alignment with the FDA on the scope and requirements of a development program.

Traumatic Brain Injury: ALPHA-1062 Intranasal Formulation

mTBI: The Company has completed a pre-clinical study of ALPHA-1062IN in mTBI. The Company is encouraged by the preclinical data and met with the FDA in Q2 2023 to discuss IND submission and gain alignment with FDA on further clinical plans. The FDA indicated in this meeting that further pre-clinical single species toxicity study and additional manufacturing work will be needed to file IND for Cognitive Impairment with mild mTBI and potentially enter into a Phase 2 trial. The Company has completed Phase 1 clinical single ascending dose ("SAD") and multiple ascending dose ("MAD") studies with ALPHA-1062 Intranasal formulation for a different indication (Alzheimer's disease) and believes these studies can be utilized with the mTBI indication because the formulation utilizes the same delivery system and active drug. The Company expects that, following out-licensing to Alpha Seven, Alpha Seven will initiate the additional pre-clinical toxicity and manufacturing work which is anticipated to be completed within 8 months of Alpha Seven receiving sufficient capital resources. The Company believes that Alpha Seven would then be in the position to file an IND for ALPHA-1062IN. Further development work for ALPHA-1062IN will require completion of the out-licensing to Alpha Seven and Alpha Seven obtaining additional capital resources through financing which Alpha Seven does not currently have but is anticipated to pursue in Q1 2025.

In December 2021, the Company announced functional data from an animal study under the ALPHA -1062 TBI program. ALPHA-1062 intranasal administration significantly reduced the extent of the functional deficit, and improved functional recovery of TBI animals compared to untreated animals suffering a TBI. Notably, in four of five functional measures of recovery, the performance of the ALPHA-1062IN treated group was statistically indistinguishable from that of the uninjured cohort.

In a rodent model of TBI, ALPHA-1062IN or vehicle (purified water as treatment control) was administered intranasally, with treatment initiated 2 hours after injury and continued twice daily for 35 days. ALPHA-1062IN significantly:

- Acutely limited the extent of motor deficit.
- Improved motor and sensory functional recovery measured by motor skill assessment, sensory/motor skill assessment, and Modified Neurological Severity Score which comprises motor, sensory, balance and reflex assessment.
- Improved cognitive functional recovery measured by tests which assess recognition memory, and spatial learning and memory.

The Company completed SAD with intranasal administration. The study was a double-blind, comparator and placebo-controlled, sequential cohort, SAD in 58 healthy human subjects with ALPHA-1062IN in doses of 5.5, 11, 22, 33, 44mg compared to oral galantamine 16mg and donepezil 10mg. Safety, tolerability, pharmacokinetics, and pharmacodynamics were assessed. ALPHA-1062IN doses up to 33mg were well tolerated and induced a dose-dependent increase in plasma concentrations of ALPHA-1062IN and galantamine. ALPHA-1062IN was well tolerated and no safety issues were observed.

The Company completed a MAD with intranasal administration. The study was a randomized, double-blind, placebo-controlled study with multiple intranasal doses of ALPHA-1062IN in 48 healthy human subjects. Results from the study were ALPHA-1062IN plasma concentrations increased immediately following dosing, Cmax and AUC increased in a dose-linear manner over all three dose levels. ALPHA-1062IN adverse events were equivalent with placebo with no safety signals observed.

Our Strategy

The Company's principal business objectives are to:

- 1) Obtain commercial success with the newly FDA-approved ZUNVEYL delayed release oral tablet formulation indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults (Alzheimer's disease). On July 26, 2024, the Company received this FDA approval. The Company will now focus on the development of commercial manufacturing and commercial sales of ZUNVEYL oral tablet formulation. Even though ZUNVEYL was approved, it may not achieve commercial success. The Company expects that ZUNVEYL will be available by prescription in pharmacies nationwide by second quarter of 2025. The Company will need to raise substantial additional capital in order to fund its operations and commercialization plans for ZUNVEYL.
- 2) Pursue the out-licensing of its intranasal formulation with a proposed TBI indication to Alpha Seven, where the TBI indication can be further developed through a complete IND application submission following the completion of an additional toxicity study and formulation work.

In order to meet these business objectives, the Company plans to initiate or complete the following milestones over the coming year:

- Begin commercialization of the FDA-approved ZUNVEYL oral formulation. ZUNVEYL is the second oral therapy available for Alzheimer's patients in the past decade. The Company may pursue new business opportunities for commercial and/or development partners both domestically and internationally.
- Commercialization — The Company plans to continue its commercialization preparations around ZUNVEYL. CMC activities may involve continuing to refine and defining manufacturing practices and product specifications to be followed and met to ensure product safety and consistency between batches. This will include further CMC activities specifically to target commercial batches. The Company will also refine its commercialization marketing plan which includes the Long Term Care target market, prioritization of Long Term Care ("LTC") customers, commercialization positioning, marketing messages, and operational plans.
- ALPHA-1062 Intranasal for TBI out-licensing — The Company plans to complete the out-license the TBI asset into Alpha Seven in Q1 2025, where Alpha Seven plans to raise the additional capital to advance the TBI program. The Company expects to include the following in the TBI out-license agreement with the Alpha Seven: intellectual property specific to TBI, implementation of a data sharing agreement, and supply and comprehensive manufacturing agreements for technology advancements in the product. The Company also intends to utilize its existing management and new consultants experienced in TBI research and development to staff Alpha Seven. Data will be shared from pre-clinical, clinical, and manufacturing work to Alpha Seven to help the Company advance the asset.

Our Team

The Company's executive team comprises pharmaceutical experts with over 27 drug approvals and 33 commercial launches, specifically in the Central Nervous System and the Alzheimer's disease space. They have a combined track record of managing drug development programs that have received regulatory approval and have been successfully commercialized.

Michael McFadden, Chief Executive Officer ("CEO"). Mr. McFadden has served as a Pharmaceutical and Biotechnology Executive since 2010. Most recently, he was Chief Commercial Officer (CCO) for MPower Health. Prior to that he was CCO for Urovant Sciences and SVP Sales and Marketing for Avanir Pharmaceuticals. Mr. McFadden has over 30 years' experience in biotech/pharmaceutical business and has worked for companies in the start-up/early stage through commercialization. Mr. McFadden received a B.B.A. in Accounting from

the University of Louisiana Monroe. Mr. McFadden provides services to the Company as an employee. See the section entitled “*Executive Compensation — Employment, consulting, and management agreements — Current employment, consulting and management agreements.*” Mr. McFadden devotes approximately 90% of his time to the business of the Company and 10% to Alpha Seven to effectively fulfill his duties. Mr. McFadden has served as the Company’s CEO since April 2021 and as a director of the Company since March 2022. He serves on the advisory board for MPower Health.

Lauren D’Angelo, Chief Operating Officer (“COO”). Ms. D’Angelo has more than 20 years of experience leading successful drug commercialization efforts across eight therapeutic areas, including multiple central nervous system therapies. Ms. D’Angelo has extensive marketing, sales, and operations experience in specialty areas including central nervous system, oncology, gastrointestinal, pain management, respiratory, urology and diabetes. Ms. D’Angelo was recognized as a 2023 PharmaVoice Top 100 Industry Leader, Medical Marketing & Media’s (MM+M) 2022 Woman of Distinction, MM+M’s 2017 Woman to Watch, and was selected as one of Pharmaceutical Executive’s Emerging Pharma Leaders for 2020. Ms. D’Angelo received a B.S. in Management Information Systems and Finance from Florida State University and an MBA from the University of Florida. Ms. D’Angelo provides services to the Company as an employee. See the section entitled “*Executive Compensation — Narrative Disclosure to Summary Compensation Table — Employment Agreements.*” Ms. D’Angelo devotes approximately 90% of her time to the business of the Company and 10% to Alpha Seven to effectively fulfill her duties. Ms. D’Angelo has served as the Company’s Chief Commercial Officer since May 2021 and was promoted to Chief Operating Officer as of October 1, 2023.

Henry Du, Vice President of Finance and Accounting and interim Chief Financial Officer.

Mr. Du brings to the Company over 20 years of experience in corporate accounting and finance, with a strong business background in the life science industry. From November 2022 to October 2024, Mr. Du was Sr. Vice President of Accounting and Administration at Amplify Surgical, a medical device company focused on developing innovative endoscopic surgical techniques and spinal implant technologies, where he led the finance and accounting functions, as well as administrative roles including human resources, payroll, compliance, corporate legal, and investor relations. During his tenure there, he was instrumental in helping the company achieve consistent positive EBITDA and profitability, along with doubling average daily operating liquidity. From September 2021 to November 2022, Mr. Du was also VP of Finance and Senior Corporate Controller at HUYABIO International, a leader in globalizing Chinese pharmaceutical innovation, where he established the commercial accounting policy for the company’s product launch in Japan. Prior to HUYABIO, Mr. Du served in leadership roles at Eledon Pharmaceuticals (formerly Novus Therapeutics), a publicly traded clinical-stage biopharmaceutical company from May 2018 to September 2021, United Auto Credit from August 2017 to May 2018, and at Avanir Pharmaceuticals from March 2010 to August 2017.

For further information about our business, see the section entitled “*Business*”.

Implications of Being an Emerging Growth Company

As a company with less than \$1.235 billion in revenues during our last fiscal year, we qualify as an emerging growth company as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in 2012. As an emerging growth company, we expect to take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to present only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements;
- exemption from certain executive compensation disclosure provisions requiring a pay -for-performance graph and CEO pay ratio disclosure; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We elected to take advantage of all of these reduced reporting requirements and exemptions, including the longer phase-in periods for the adoption of new or revised financial accounting standards under §107 of the JOBS Act. Our election to use the phase-in periods may make it difficult to compare our financial statements to those of non-emerging growth companies and other emerging growth companies that have opted out of the phase-in periods under §107 of the JOBS Act.

We may use these provisions until the last day of our fiscal year following June 7, 2029. However, if certain events occur prior to the end of such five-year period, including if we become a “large accelerated filer,” our annual gross revenues exceed \$1.235 billion or we issue more than \$1 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

To the extent that we continue to qualify as a “smaller reporting company,” as such term is defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, after we cease to qualify as an emerging growth company, certain of the exemptions available to us as an emerging growth company may continue to be available to us as a smaller reporting company, including: (i) not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes Oxley Act; (ii) scaled executive compensation disclosures; and (iii) the requirement to provide only two years of audited financial statements, instead of three years.

Implications of Being a Smaller Reporting Company

Rule 12b-2 of the Exchange Act defines a “smaller reporting company” as an issuer that is not an investment company, an asset-backed issuer, or a majority-owned subsidiary of a parent that is not a smaller reporting company and that:

- had a public float of less than \$250 million as of the last business day of its most recently completed second fiscal quarter, computed by multiplying the aggregate worldwide number of shares of its voting and non-voting common equity held by non-affiliates by the price at which the common equity was last sold, or the average of the bid and asked prices of common equity, in the principal market for the common equity; or
- in the case of an initial registration statement under the Securities Act, or the Exchange Act of 1934, as amended, which we refer to as the Exchange Act, for shares of its common equity, had a public float of less than \$250 million as of a date within 30 days of the date of the filing of the registration statement, computed by multiplying the aggregate worldwide number of such shares held by non-affiliates before the registration plus, in the case of a Securities Act registration statement, the number of such shares included in the registration statement by the estimated initial public offering price of the shares; or
- in the case of an issuer whose public float as calculated under the previous two bullet points was zero or less than \$700 million, had annual revenues of less than \$100 million during the most recently completed fiscal year for which audited financial statements are available.

We believe that we are a smaller reporting company, and as such that we will not be required and may not include a Compensation Discussion and Analysis section in our proxy statements; we will provide only two years of financial statements; and we need not provide the table of selected financial data. We also will have other “scaled” disclosure requirements that are less comprehensive than issuers that are not smaller reporting companies. These “scaled” disclosure requirements may make our securities less attractive to potential investors, which could make it more difficult for our security holders to sell their securities.

Recent Developments

- On December 17, 2024, the Company's common shares were voluntarily delisted from the Canadian Securities Exchange (the “CSE”).
- On December 12, 2024, the underwriter of the Company's underwritten U.S. public offering partially exercised its over-allotment option to purchase an additional 488,506 common shares at the public offering price of \$5.75 per share for an additional \$2.8 million in gross proceeds. After giving effect to the partial exercise of the over-allotment option, the Company sold an aggregate 9,184,159 common shares for gross proceeds of approximately \$52.8 million, before deducting underwriter discounts and other related expenses. The option closing date was December 16, 2024.
- On November 13, 2024, the Company completed a public offering of common shares by issuing 8,695,653 common shares at a public offering price of \$5.75 per share for gross proceeds of \$50,000,005. In connection with the public offering, the Company incurred underwriting fees of approximately \$3.58 million.

- On November 13, 2024, as a result of the completion of the public offering, the Company's convertible notes automatically converted pursuant to their terms into 801,413 common shares at a conversion price of \$5.75 being the public offering price per share in the public offering. Additionally, the Company issued an additional 215,418 warrants exercisable to acquire 215,418 Common Shares at an exercise price of \$7.19 per share and the exercise price of the Company's existing 430,835 warrants issued in connection with the offering of the convertible notes was repriced from \$10.55 per share to \$7.19 per share.
- On October 21, 2024 the Company announced the resignation of Jay Yoo as the interim Principal Accounting and Financial Officer of the Company and the appointment of Henry Du as the Company's Vice President of Finance and Accounting and interim Chief Financial Officer effective October 21, 2024.
- On October 3, 2024, the Company announced the resignation of Don Kalkofen as Chief Financial Officer of the Company and the appointment of Jay Yoo to assume interim accounting leadership responsibilities for the Company. On October 8, 2024, Jay Yoo was appointed as the interim Principal Accounting and Financial Officer of the Company, effective October 2, 2024.
- On September 24, the Company announced the closing of a \$4.545 million bridge financing through the issuance of convertible notes and warrants led by existing investors and select new investors comprised of institutional funds and high-net-worth accredited investors.
 - The notes are convertible into common shares of the Company at a conversion price of \$10.55 per share. The notes mature on September 24, 2026, have an aggregate face value of \$4.545 million and bear interest at a rate of 10% per annum paid in common shares of the Company at the conversion price, subject to certain limitations. The notes are subject to mandatory conversion into common shares of the Company in conjunction with the closing of an offering of securities of the Company for at least \$10 million in aggregate gross proceeds in coordination with the simultaneous uplisting of the common shares of the Company onto a United States national securities exchange (a "Qualified Offering"). Such conversion will be completed into the securities offered in such Qualified Offering at the lower of (i) the conversion price in effect at such time and (ii) the offering price of the securities in the Qualified Offering. If, prior to the completion of a Qualified Offering, the common shares of the Company close at a price of at least 250% of the conversion price for 10 consecutive trading days and the common shares issuable upon such conversion are registered for resale under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), then the notes will automatically convert into common shares at the conversion price. The notes are unsecured and rank senior to the Company's other indebtedness.
 - The notes were sold along with warrants to purchase common shares of the Company at an exercise price of \$10.55 for a five-year term. Each investor received warrants sufficient to purchase such number of common shares equal to the principal amount of notes such investor purchased divided by the conversion price of the notes. Each investor will receive an additional 50% of warrants with identical terms upon the closing of a Qualified Offering, as described above. The exercise price of the warrants is subject to adjustment upon the completion of a Qualified Offering to the lower of (i) the then existing exercise price, (ii) the exercise price of any common share purchase warrants issued in the Qualified Offering or (iii) if no common share purchase warrants are issued in the Qualified Offering, the closing price of the common shares on the Canadian Securities Exchange (as converted into U.S. dollars) immediately prior to the pricing news release of the Qualified Offering.
- On August 19, 2024, the Company announced the United States Patent and Trademark Office (USPTO) has issued a Notice of Allowance for patent application No. 18/463,157, entitled "Solid Forms of ALPHA-1062 Gluconate," which includes claims covering an additional novel crystalline solid form of ZUNVEYL and complements existing patents that the Company holds for ZUNVEYL.
- On August 13, 2024, the Company announced its decision to temporarily delay its planned capital raise and uplisting to the NASDAQ Capital Market due to current challenging market conditions.
- On August 12, 2024 the Company announced its financial results for the second quarter and six months ended June 2024 and provided a business update.
- On July 26, 2024, the Company received approval by the FDA of the Company's NDA for ZUNVEYL delayed release oral tablet formulation indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults. The Company will now focus on the development of production and commercial sales of ZUNVEYL oral tablet formulation.

- On June 7, 2024 the Company announced that its resale registration statement on Form S-1 registering the resale of up to 1,707,060 common shares of the Company from time to time by the selling stockholders named therein was brought effective by the staff of the SEC.
 - On May 14, 2024 the Company announced its first quarter of 2024 financial results and provided a corporate update.
 - On April 3, 2024 the Company announced its fourth quarter and full year 2023 financial results and provided a business update.
 - On February 22, 2024, the Company announced that it filed a new composition-of-matter patent application (U.S. 18/434,155, filed February 6, 2024) that seeks to secure broad protection for its lead asset, ALPHA-1062. The present composition-of-matter patent application was filed for approval with the USPTO and may be extended to pursue protection throughout the world. On September 25, 2024, the Company received a notice of allowance in relation to the application. The patent will secure composition-of-matter protection for an oral formulation of ZUNVEYL into 2044, adding to other patent protection that currently protects ZUNVEYL through 2042 in US (USP 11,795,176) and 2041 in other territories around the world (claiming priority to WO2014016430). The filing was based on novel and unexpected findings in the clinical trial work that the Company completed and further demonstrates the uniqueness of ALPHA-1062.
 - On January 19, 2024, the Company completed its fifth and final closing of the Q2 2023 PP by issuing 678,630 units at a price of \$5.50 for total gross proceeds of \$3,732,469 ("Q2 2023 PP Tranche 5"). Each unit consists of one Common Share and one whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until January 19, 2027. The gross proceeds of the offering received to date are \$8.45 million, which includes shares of the fully subscribed 30% overallotment. In connection with the closing of Q2 2023 PP Tranche 5, the Company paid cash commissions of \$342,320 and issued 41,493 agents warrants to Spartan Capital Securities, LLC ("Spartan"). Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until January 19, 2027. The Company also paid a consulting fee of \$320,000 and issued 582,331 common shares to Spartan pursuant to a consulting agreement. The Company also paid to certain finders aggregate cash commission of \$48,858, being 6% of the gross proceeds raised under the offering from investors introduced to the Company by such finders.
 - During December 2023 and January 2024, the Company obtained individual shareholders' consent and changed the exercise price from CAD to USD on the following outstanding warrants.
 - On February 16, 2023, the Company issued 670,609 warrants at \$9.75 CAD per share, during December 2023, 452,710 warrants and in January 2024, 40,000 warrants had the price exchanged to USD, the new USD price per share is \$7.225.
 - March 15, 2023, the Company issued 278,177 warrants at \$9.75 CAD per share, during December 2023, 18,383 warrants and in January 2024, 212,282 warrants had the price exchanged to USD, the new USD price per share is \$7.075.
- The Company used the exchange rate on the date of the warrant grant to determine the new USD price per share.
- On December 22, 2023, the Company announced that it has completed a fourth closing pursuant to its brokered private placement of units of the Company. Pursuant to the fourth closing, the Company issued 365,661 units of the Company at a price of \$5.50 per unit for gross proceeds of \$2,011,138. Each unit consists of a common share and a warrant, with each warrant entitling the holder to purchase an additional common share at a price of \$7.75 for a period of three years. The gross proceeds of the offering received to date are \$4.7 million. The Company is continuing the offering of units on the same terms for up to an additional \$1.8 million.
 - In connection with the fourth closing, Spartan received cash compensation of \$238,515 and was issued 28,911 compensation warrants of the Company, which may be exercised on the same terms as the private placement warrants.
 - On December 7, 2023, the Company announced that the FDA accepted the Company's new drug application NDA for ZUNVEYL formerly ALPHA-1062 and has granted a PDUFA goal date of July 27, 2024. ZUNVEYL is a proprietary, patented, delayed release oral tablet formulation in development for the treatment of mild-to-moderate Alzheimer's disease.

- The Company continued to advance its development and commercialization activities for ZUNVEYL in mild-to-moderate Alzheimer's disease, including program development and clinical manufacturing for ALPHA-1062.
- The Company continued with items discussed at the IND meeting with the FDA on matters related to the potential IND and related preclinical activities for the research and development program for Cognitive Impairment with mTBI.
- The Company continued to pursue the out-licensing of its TBI indication of ALPHA -1062IN to a newly formed company which will be seeking funding, where the TBI indication can be further developed.

Company Information

We were incorporated on November 15, 2017 under the Business Corporations Act (British Columbia) ("BCBCA") under the name "Crystal Bridge Enterprises Inc." as a Canadian Capital Pool Company. A Canadian Capital Pool Company is a special purpose acquisition company organized for the purposes of completing acquisition transactions, known as "qualifying transactions," with operating companies for the purposes of taking the operating companies public in Canada. Qualifying transactions are subject to Canadian securities laws and exchange listing requirements. We completed our qualifying transaction with Alpha Cognition Canada Inc. on March 18, 2021, and changed our name to Alpha Cognition Inc. As a result of the qualifying transaction, Alpha Cognition Canada Inc. became the Company's wholly-owned subsidiary. As of May 1, 2023, the Company's common shares commenced trading on the CSE under the symbol "ACOG", previously the Company's shares were traded on the TSX Venture Exchange ("TSX-V") until April 28, 2023, when the Company had them delisted. As of November 12, 2024, the Company's common shares commenced trading on the Nasdaq Capital Market under the symbol "ACOG". The Company's shares were voluntarily delisted from the CSE on December 17, 2024. The Company's shares also trade on the Over-The-Counter Markets ("OTC") under the trading symbol "ACOGF".

Organizational Structure

We own 100% of the Alpha Cognition Canada Inc., a British Columbia corporation, and Alpha Cognition Canada Inc. owns 100% of Alpha Cognition USA Inc., a Texas corporation.

Additional Information

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with additional information or information different from that contained in this prospectus filed with the SEC. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, the common shares and pre-funded warrants only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this document, regardless of the time of delivery of this prospectus or any sale of the common shares and pre-funded warrants. Our business, financial condition, results of operations, and prospects may have changed since the date hereof.

Contact Information

Our principal executive offices are located at 1200 – 750 West Pender Street, Vancouver, British Columbia V6C 2T8 and our telephone number is 858-344-4375. Our offices in the United States are located at 20073 Fiddler's Green, Frisco, Texas 75036. Our main corporate website is located at www.alphacognition.com. The information on our website is not incorporated by reference into this prospectus.

NASDAQ Listing and Reverse Stock Split

On November 12, 2024, our common shares began trading on the Nasdaq Capital Market under the symbol "ACOG".

On November 5, 2024, we completed a reverse stock split of our common shares with a stock split ratio of 1-for-25 ("Reverse Stock Split"). The Reverse Stock Split is intended to allow us to meet the minimum share price requirement of the Nasdaq Capital Market.

Except as otherwise indicated, all references to our common shares, share data, per share data and related information depict the effect of the Reverse Stock Split as if it had occurred at the beginning of the earliest period presented. The Reverse Stock Split combined each twenty five shares of our outstanding common shares into one common

share, without any change in the par value per share which will remain no par value, and the Reverse Stock Split correspondingly adjusted, among other things, the number of common shares issuable upon exercise of outstanding options and warrants and the exercise price of such options and warrants and shares issuable upon conversion of preferred stock and other convertible securities. No fractional shares will be issued in connection with the Reverse Stock Split, and any fractional shares resulting from the Reverse Stock Split were rounded to the nearest whole share.

Summary Risk Factors

Our business is subject to a number of risks of which you should be aware before making a decision to invest in our common stock. These risks are more fully described in the section entitled “Risk Factors” immediately following this prospectus summary. These risks include, among others, the following:

Risks Related to Our Financial Position

- We are a commercial development stage biopharmaceutical company in the early stages of commercial development of our one product approved for commercial sale and have incurred significant losses since our inception. We expect to incur significant losses for the foreseeable future and our costs may increase substantially in the foreseeable future.
- Our ability to generate revenue and achieve profitability depends significantly on our ability to achieve commercial success with ZUNVEYL formerly known as ALPHA-1062 oral tablet formulation, our one FDA approved product and continued development and commercialization of our other product candidates, if approved.
- We have not completed an Alzheimer's disease patient tolerability study for ZUNVEYL and have no history of commercializing products, which may make it difficult for an investor to evaluate the success of our business to date and to assess our future viability.
- We will need substantial additional capital to meet our financial obligations and to pursue our business objectives, including the commercialization of ZUNVEYL oral tablet formulation. If we are unable to raise capital when needed, we could be forced to delay, reduce and/or eliminate one or more of our research and drug development programs or future commercialization efforts.
- We expect to be exposed to fluctuations in currency exchange rates, which could adversely affect our results of operations.

Risks Related to Our Business Development

- Our business is heavily dependent on the successful commercialization of ZUNVEYL oral tablet formulation, our only FDA approved product, and the development and commercialization of any future product candidates that we may develop or acquire.
- We may not successfully expand our pipeline of product candidates. If we are not successful in identifying, developing, in-licensing, acquiring or/and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.
- We may encounter substantial delays in our preclinical studies and clinical trials or may not be able to conduct or complete our preclinical studies or clinical trials on the timelines we expect, if at all.
- Use of our therapeutic candidates could be associated with side effects, adverse events or other properties or safety risks, which could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon a therapeutic candidate, limit the commercial profile of an approved label or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.
- Interim “top-line” and preliminary data from studies or trials that we announce or publish from time to time may change as more data becomes available and are subject to audit and verification procedures that could result in material changes in the final data.

- We have conducted all of our clinical trials to date outside of the United States, and in the future plan to conduct clinical trials for product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials.
- If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our current or future product candidates.

Risks Related to Our Industry

- Research and development of pharmaceuticals is lengthy, expensive and inherently risky. We cannot give any assurance that any of our product candidates will receive regulatory approval.
- Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.
- Failure to comply with health and data protection laws and regulations could lead to government enforcement actions and civil or criminal penalties, private litigation or adverse publicity and could negatively affect our operating results and business.
- Even if the product candidates that we develop receive regulatory approval in the United States or another jurisdiction, they may never receive approval in other jurisdictions, which would limit market opportunities for our product candidates and adversely affect our business.
- We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours, which may negatively impact our ability to successfully market or commercialize any product candidates we may develop and ultimately harm our financial condition.

Risks Related to Commercialization and Manufacturing

- ZUNVEYL oral tablet formulation may fail to achieve the broad degree of adoption and use by physicians, patients, hospitals, healthcare payors and others in the medical community necessary for commercial success.
- The market opportunities for ZUNVEYL oral tablet formulation may be smaller than we anticipate.
- We rely on third-party suppliers to manufacture our product candidates, and we intend to rely on third parties to produce commercial supplies of ZUNVEYL and any other approved product. The loss of these suppliers, or their failure to comply with applicable regulatory requirements or to provide us with sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business, financial condition, results of operations and prospects.
- We are subject to certain supply chain risks inherent in manufacturing our lead product, ZUNVEYL, and future products with respect to Taiwan. Risks including periodic foreign economic downturns and political instability, which may adversely affect the Company's ability to obtain materials and conduct business in Taiwan.
- Our product candidates have never been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale. In particular, we will need to develop a larger scale manufacturing process that is more efficient and cost-effective to commercialize our potential products, which may not be successful.
- The successful commercialization of our product candidates will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage, reimbursement levels and pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those drugs and decrease our ability to generate revenue.

- We currently have no sales organization. If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell our product candidates, if approved, effectively in the United States and foreign jurisdictions or generate product revenue.

Risks Related to Our Intellectual Property

- Our success depends on our ability to obtain and maintain patent protection for our technology and product candidates including our lead product, ALPHA-1062. If such protection is not obtained, the scope of the patent protection obtained is not sufficiently broad, or we lose such protection, we may not be able to compete effectively in our markets.
- The validity, scope and enforceability of any patents listed in the Orange Book that cover our product candidates including our lead product, ZUNVEYL can be challenged by third parties.
- Third-party claims or litigation alleging infringement of patents or other proprietary rights, or seeking to invalidate patents or other proprietary rights, may delay or prevent the development and commercialization of any of our product candidates including our lead product, ALPHA-1062.
- We may become involved in lawsuits to protect or enforce our patents or our other intellectual property rights, which could be expensive, time-consuming and unsuccessful. Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.
- Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed, resulting in harm to our business and our competitor position.
- We may be subject to claims that our employees, consultants, independent contractors or we have wrongfully used or disclosed confidential information of their former employers or other third parties.
- Any trademarks we have obtained or may obtain may be infringed or successfully challenged, resulting in harm to our business.
- If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.
- Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

Risks Related to Government Regulation

- The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, expensive, time consuming and inherently unpredictable.
- ZUNVEYL oral tablet formulation and any of our other products that receive regulatory approval will remain subject to regulatory scrutiny.
- Healthcare legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates.
- Our business operations and current and future relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.

Risks Related to Employee Matters and Growth Management

- We will need to increase the size of our organization, and we may experience difficulties in managing growth.
- If we fail to attract and retain senior management and key scientific personnel, our business may be materially and adversely affected.

- Our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors, may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have an adverse effect on our results of operations.
- If we are unable to establish sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to successfully sell or market our product candidates that obtain regulatory approval.

Risks Related to Our Common Shares and this Offering

- Our stock price may be volatile, and you may not be able to resell common shares at or above the price you paid.
- An active, liquid and orderly market for our common shares may not develop, and you may not be able to resell your common shares at or above the public offering price.
- We are an “emerging growth company” and a “smaller reporting company” and, as a result of the reduced disclosure and governance requirements applicable to emerging growth companies and smaller reporting companies, our common stock may be less attractive to investors.
- Risks related to the Company being a “passive foreign investment company” under United States tax laws.
- If we sell common shares in future financings, stockholders may experience immediate dilution and, as a result, our stock price may decline.
- Concentration of ownership of our voting securities, including common shares and Class B Preferred Series A Shares, among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.
- Sales of a substantial number of shares of our common shares in the public market could cause our stock price to fall.
- We do not currently intend to pay dividends on our common stock, and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock;
- The Company has outstanding warrants denominated in both Canadian and U.S. Dollars. The foreign exchange risk associated with the variable of the Canadian Dollar denominated warrant and the Company's resulting U.S. Dollar denominated functional currency could result in a significant risk of loss at the date of valuing the risk and cause the Company to incur a significant non-cash derivative liability depending on the exchange rate and share price volatility, share price, risk-free interest rate, and remaining life of the Canadian Dollar denominated warrants.

General Risk Factors

- Unfavorable global economic or political conditions could adversely affect our business, financial condition or results of operations.
- We will incur significant costs as a result of operating as a public company, and our management will devote substantial time to new compliance initiatives. We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act of 2002, which could result in sanctions or other penalties that could materially and adversely affect our business, financial condition, results of operations and prospects.

Our business will be subject to the risks of climate change, natural catastrophic events, world events, and man-made problems such as power disruptions or terrorism.

THE OFFERING	
Issuer	Alpha Cognition Inc.
Common Shares Offered by the Selling Stockholders	Up to 1,447,666 common shares
Common Shares Outstanding	16,019,788 common shares
Use of Proceeds	We will not receive any proceeds from the sale of the common shares being offered for sale by the selling stockholders.
Plan of Distribution	The selling stockholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. Registration of the common stock covered by this prospectus does not mean, however, that such shares necessarily will be offered or sold. See the section entitled " <i>Plan of Distribution</i> ."
Dividend Policy	We have paid no dividends on the common shares to date, and we do not expect to pay dividends on our common shares in the foreseeable future.
Listed and Trading Symbol	Our common shares are currently traded on the Nasdaq under the symbol "ACOG" and, prior to November 12, 2024, were quoted for trading on the OTCQB under the symbol "ACOGF." Our common shares were previously traded on the CSE, but were voluntarily delisted from the CSE on December 17, 2024.
Transfer Agent and Registrar	Computershare Investor Services Inc.
Risk Factors	You should carefully read and consider the information set forth under the heading " <i>Risk Factors</i> " and all other information set forth in this prospectus before deciding to invest in our common shares, pre-funded warrants, and warrants.
Tax Considerations	Please read " <i>Material Canadian Federal Income Tax Considerations</i> " and " <i>Certain Material United States Federal Income Tax Considerations</i> ."
Reverse Stock Split	On November 5, 2024, we completed the Reverse Stock Split of the outstanding common shares in a ratio of 1-for-25, i.e., each twenty five outstanding common shares were combined into one common share. The reverse stock split was approved by our Board of Directors. Except as otherwise indicated, all references to our common shares, share data, per share data and related information depict the Reverse Stock Split in a ratio of 1-for-25 as if it had occurred at the beginning of the earliest period presented.
<p>The number of shares of our common stock to be outstanding is based on 16,019,788 common shares outstanding as of December 31, 2024 and excludes as of such date:</p> <ul style="list-style-type: none"> • 3,635,962 common shares issuable upon exercise of outstanding warrants with an average weighted exercise price of \$7.17; • 316,655 common shares issuable upon conversion of Class B Preferred Series A Shares; • 965,975 common shares underlying options granted under our equity plans, exercisable at an average weighted exercise price of \$4.45 per share; and • 265,642 common shares underlying performance options granted under our equity plans, exercisable at an average weighted exercise price of \$0.25 per share. <p>Unless otherwise indicated, all information in this prospectus assumes no exercise of the underwriters' option to purchase additional securities from us and that no investor elects to purchase pre-funded warrants in lieu of common shares.</p>	

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth a summary of the historical audited consolidated financial data of Alpha Cognition as at and for the fiscal years ended December 31, 2023 and 2022 and the unaudited consolidated condensed financial data as at and for the periods ended September 30, 2024 and 2023. The historical summary consolidated financial data set forth in the following tables has been derived from Alpha Cognition's consolidated financial statements included elsewhere in this prospectus. In our opinion, the unaudited interim consolidated financial statements have been prepared on a basis consistent with our audited consolidated financial statements and, in our opinion, contain all adjustments, consisting only of normal and recurring adjustments, necessary for a fair presentation of such interim financial statements. You should read this data together with Alpha Cognition's consolidated financial statements and the related notes appearing elsewhere in this prospectus and the information included under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations." Alpha Cognition's historical results are not necessarily indicative of our future results.

Condensed Consolidated Statements of Operations and Comprehensive Loss: (expressed in United States Dollars)

	Nine months ended September 30,		Year ended December 31,	
	2024	2023	2023	2022
Total operating expenses	\$ 9,320,513	\$ 7,518,042	\$ 9,938,094	\$ 13,559,829
Net operating loss	(9,320,513)	(7,518,042)	(9,938,094)	(13,559,829)
Total other income (expense)	342,384	(512,214)	(3,825,564)	1,486,569
Net Loss	(8,978,129)	(8,030,256)	(13,763,658)	(12,073,260)
Currency translation adjustment	—	(19,573)	(19,573)	16,806
Comprehensive loss	\$ (8,978,129)	\$ (8,049,829)	\$ (13,783,231)	\$ (12,056,454)
Net loss per share, basic and diluted	\$ (1.51)	\$ (2.23)	\$ (3.65)	\$ (4.44)
Weighted average shares to compute net loss per share, basic and diluted	5,928,460	3,599,266	3,774,219	2,718,888

Selected Consolidated Balance Sheet Data (expressed in United States Dollars)

	September 30, 2024	December 31,	
		2023	2022
Cash and cash equivalents	\$ 3,666,389	\$ 1,494,573	\$ 2,083,696
Total current assets	\$ 4,514,332	\$ 1,918,439	\$ 2,332,741
Total assets	\$ 5,028,072	\$ 2,452,170	\$ 2,950,951
Current liabilities	\$ 3,005,836	\$ 2,615,993	\$ 4,056,844
Total long-term liabilities	\$ 4,941,867	\$ 4,539,872	\$ 214,284
Total stockholders' deficiency	\$ (2,919,631)	\$ (4,703,695)	\$ (1,320,177)
Total liabilities and stockholder's deficiency	\$ 5,028,072	\$ 2,452,170	\$ 2,950,951
Working capital (deficiency)	\$ 1,508,496	\$ (697,554)	\$ (1,724,103)

RISK FACTORS

Investing in our securities involves a high degree of risk. Prospective investors should carefully consider the risks described below, together with all of the other information included or referred to in this prospectus, before purchasing our securities. The risks set out below are not the only risks we face. Additional risks and uncertainties not presently known to us or not presently deemed material by us might also impair our operations and performance. If any of these risks actually occurs, our business, financial condition or results of operations may be materially adversely affected. In such case, the trading price of our common shares could decline and investors in our securities could lose all or part of their investment.

Risks Related to Our Financial Condition

We are a commercial development stage biopharmaceutical company in the early stages of commercial development of our one product approved for commercial sale and have incurred significant losses since our inception. We expect to incur significant losses for the foreseeable future and our costs may increase substantially in the foreseeable future.

Since our inception, we have incurred significant net losses, and we expect to continue to incur significant expenses and operating losses for the foreseeable future. Our net losses were approximately \$9.0 million and \$8.0 million for the nine months ended September 30, 2024, and 2023, respectively and approximately \$13.8 million and \$12.1 million for the years ended December 31, 2023, and 2022, respectively. As of September 30, 2024, we had an accumulated deficit of approximately \$71 million. We have only one product, ZUNVEYL formerly known as ALPHA-1062, approved for planned commercialization and have never generated any revenue from product sales.

We have devoted substantially all our financial resources and efforts to the development of our product candidates, including conducting preclinical studies and clinical trials. We expect to continue to incur significant expenses and operating losses over the next several years. We expect that it could be several years, if ever, before we have a commercialized product. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially for the foreseeable future as we:

- establish a commercialization infrastructure and scale up external manufacturing and distribution capabilities to commercialize ZUNVEYL oral tabulation formulation formerly known as ALPHA-1062 and any other product candidates for which we may obtain regulatory approval;
- conduct our ongoing and planned clinical trials of ALPHA -1062, as well as initiate and complete additional clinical trials;
- continue our clinical validation of ALPHA -1062 for moderate-to-severe Alzheimer's disease and explore the potential of ALPHA-1062IN related to mTBI;
- adapt our regulatory compliance efforts to incorporate requirements applicable to marketed products;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, manufacturing and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts;
- incur additional legal, accounting and other expenses in operating as a public company; and
- scale up our clinical and regulatory capabilities.

There is substantial doubt about our ability to continue as a going concern.

Due to our ongoing net losses, there is substantial doubt about our ability to continue as a going concern. As a result, management has included disclosures in Note 1 of our financial statements and our independent registered public accounting firm has included an explanatory paragraph in its report on our financial statements for the fiscal year ended December 31, 2023, with respect to this uncertainty. Our future viability as an ongoing business is dependent on our ability to generate cash from our operating activities and to raise additional capital to finance our operations.

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There is no assurance that we will succeed in obtaining sufficient funding on terms acceptable to us to fund continuing operations, if at all. The perception that we might be unable to continue as a going concern may also make it more difficult to obtain financing for the continuation of our operations on terms that are favorable to us, or at all, and could result in the loss of confidence by investors and employees. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty. If we are unable to continue as a going concern, we may have to liquidate our assets and may receive less than the value at which those assets are carried on our financial statements, and it is likely that our investors will lose all or a part of their investment.

Our ability to generate revenue and achieve profitability depends significantly on our ability to achieve commercial success with ZUNVEYL oral tablet formulation, our one FDA approved product, and continued development and commercialization of our other product candidates, if approved.

To date, we have not generated any revenue from the commercialization of our product candidates. We have only one product, ZUNVEYL oral tablets, approved for commercialization. To generate revenue and become and remain profitable, we must succeed in the commercialization of ZUNVEYL and developing and eventually commercializing our other product candidates. This will require us to be successful in a range of challenging activities, including commercial manufacturing, marketing and sales of ZUNVEYL, completing preclinical testing and clinical trials of our other product candidates, obtaining regulatory approval of our other product candidates, and manufacturing, marketing and selling any other product candidates for which we may obtain regulatory approval, as well as discovering and developing additional product candidates. Outside of our commercial development activities for ZUNVEYL, we are only in the preliminary stages of most of these activities. We may never succeed in these activities and, even if we do, may never generate any revenue or revenue that is significant enough to achieve profitability. Even if we achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our Company and could impair our ability to raise capital, expand our business, maintain our development efforts, obtain product approvals, diversify our offerings or continue our operations. A decline in the value of our Company could also cause you to lose all or part of your investment.

We have a limited operating history and have no history of commercializing products, which may make it difficult for an investor to evaluate the success of our business to date and to assess our future viability.

We commenced operations in 2014, and our operations to date have been largely focused on developing our clinical and preclinical product candidates, primarily ALPHA-1062. To date, we have successfully obtained regulatory approval for only one product, ZUNVEYL oral tablets, and have not demonstrated our ability to manufacture a product on a commercial scale, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing products.

We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. We may also need to transition from a company with a research focus to a company capable of supporting commercial activities. Our inability to adequately address these risks and difficulties or successfully make such a transition could adversely affect our business, financial condition, results of operations and growth prospects.

We will need substantial capital to meet our financial obligations and to pursue our business objectives, including the commercialization of ZUNVEYL oral tablet formulation. If we are unable to raise capital when needed, we could be forced to delay, reduce and/or eliminate one or more of our research and drug development programs or future commercialization efforts.

Our operations have required substantial amounts of capital since inception, and we expect our expenses to increase significantly in the foreseeable future. Developing commercial manufacturing, marketing and sales is expensive and uncertain which could take a long time to complete. We may not achieve commercial success with ZUNVEYL. Similarly, identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. We expect to continue to incur significant expenses and operating losses over the next several years as we complete our commercialization activities for ZUNVEYL.

and our ongoing clinical trials of our other product candidates, initiate future clinical trials of our other product candidates, prepare for commercialization activities of our other product candidates and advance any of our other product candidates we may develop or otherwise acquire. In addition, our product candidates, if approved, may not achieve commercial success. Our revenue, if any, will be derived from sales of ZUNVEYL following our commercial development activities and our other products that we do not expect to be commercially available for the foreseeable future, if at all. If we obtain marketing approval for any other product candidates that we develop or otherwise acquire, we expect to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing. We also expect an increase in our expenses associated with creating additional infrastructure to support operations as a public company.

As of December 31, 2023, we had \$1.4 million in unrestricted cash and cash equivalents and have not generated positive cash flows from operations. Based on our current business plans, we believe our existing cash and cash equivalents, and the net capital raised in October 2024 of \$4.1 million and November 2024 of approximately \$46 million and December 2024 of approximately \$2.5 million, will be sufficient for us to fund our ongoing operating expenses, pre-NDA approval commercialization expenses, and capital expenditures requirements through at least the next 12 months. We may need to raise additional capital to fund our operations and commercial plans after 12 months. Full commercial launch of ZUNVEYL is expected to require substantial capital to continue our commercialization efforts and bring the product to market in the US. We have based these estimates on assumptions that may prove to be incorrect or require adjustment as a result of business decisions, and we could utilize our available capital resources sooner than we currently expect.

Our future capital requirements will depend on many factors, including, but not limited to:

- the scope, progress, costs and results of our ongoing support and commercialization of ZUNVEYL, including manufacturing, distribution, marketing and sales, obtaining favorable insurance coverage and reimbursement decisions from governmental and third-party payors, as well as the associated costs, including any unforeseen costs we may incur as a result of additional preclinical study or clinical trials that may be required, or other delays;
- the scope, progress, costs and results of preclinical development, laboratory testing and clinical trials for any future product candidates we may decide to pursue;
- the extent to which we develop, in-license or acquire other product candidates and technologies;
- the costs and timing of process development and manufacturing scale-up activities associated with our product candidates and other programs we advance them through preclinical and clinical development;
- the number and development requirements of other product candidates that we may pursue;
- the extent to which we acquire or in-license other product candidates and technologies;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our other product candidates for which we receive marketing approval;
- the effect of competing products that may limit market penetration of our products;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- our ability to establish collaborations to commercialize ZUNVEYL or any of our other product candidates outside the United States;
- the timing, receipt and amount of sales of, or milestone payments related to or royalties on, our current or future product candidates, if any;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;

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- the extent to which we acquire or invest in businesses, products, or technologies; and
- the additional costs we may incur as a result of operating as a public company, including our efforts to enhance operational systems and hire additional personnel, including enhanced internal controls over financial reporting.

A change in the outcome of any of these or other factors with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate.

We are proceeding with our commercial launch of our ZUNVEYL oral tablet product, where we expect to raise substantial additional capital to continue our commercialization efforts and bring the product to market in the US and continue development of our product candidates. We expect to incur significant commercialization expenses related to product manufacturing, sales, marketing, distribution, and continued R&D.

We may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop our product candidates.

Additional funds may not be available on a timely basis, on favorable terms, or at all, and such funds, if raised, may not be sufficient to enable us to continue to implement our long-term business strategy. Further, our ability to raise additional capital may be adversely impacted by recent volatility in the equity markets in the United States and worldwide. Our failure to raise capital as and when needed or on acceptable terms would have a negative impact on our financial condition and our ability to pursue our business strategy, and we may have to delay, reduce the scope of, suspend or eliminate one or more of our research-stage programs, clinical trials or future commercialization efforts.

Our business could be adversely affected by the current COVID-19 pandemic or future variants or pandemics due to delays in certain business functions and operations where we rely on consultants and third parties, and in patient enrollment delays for our clinical trials.

Our clinical trials may in the future be affected by the current COVID-19 pandemic or future variants or pandemics. For example, the current COVID-19 pandemic or future variants or pandemics may impact patient enrollment in our ongoing and future clinical trials of ZUNVEYL and future products. In particular, some sites may in the future pause enrollment to focus on, and direct resources to, the current COVID-19 pandemic or future variants or pandemics, while at other sites, patients may choose not to enroll or continue participating in the clinical trial as a result of the pandemic. In addition, patient visits to medical providers in the United States have slowed as a result of the current COVID-19 pandemic or future variants or pandemics. Further, according to the Centers for Disease Control and Prevention, people who have serious chronic medical conditions are at higher risk of getting very sick from the current COVID-19 pandemic or future variants or pandemics. As a result, potential patients in our ongoing and future clinical trials of ZUNVEYL may choose to not enroll, not participate in follow-up clinical visits or drop out of the trial as a precaution against contracting COVID-19. Further, some patients may not be able or willing to comply with clinical trial protocols if quarantines impede patient movement or interrupts healthcare services.

We are unable to predict with confidence the duration of such patient enrollment delays and difficulties. If patient enrollment is delayed for an extended period of time, our ongoing or future clinical trials could be delayed or otherwise adversely affected. Similarly, our ability to recruit and retain principal investigators and site staff who, as healthcare providers, may have heightened exposure to the current COVID-19 pandemic or future variants or pandemics, may be adversely impacted.

Ongoing or planned clinical trials may also be impacted by interruptions or delays in the operations of the FDA and comparable foreign regulatory authorities. For example, we may make certain adjustments to the operation of our trials in an effort to ensure the monitoring and safety of patients and minimize risks to trial integrity during the pandemic in accordance with the guidance issued by the FDA and may need to continue to make further adjustments in the future. We have also initiated our clinical trial protocols to enable remote visits to mitigate any potential impacts as a result of the current COVID-19 pandemic or future variants or pandemics. Many of these adjustments are new and untested, may not be effective, may affect the integrity of data collected, and may have unforeseen effects on the progress and completion of our clinical trials and the findings from such clinical trials.

In addition, we may encounter a shortage in supplies of, or in delays in shipping, our study drug or other components of the clinical trial vital for successful conduct of the trial. Further, the successful conduct of our ongoing and future clinical trials depends on retrieving laboratory, imaging and other data from patients. Any failure by the vendors with which we work with to send us such data could impair the progress of such clinical trials. These events could delay our clinical trials, increase the cost of completing our clinical trials and negatively impact the integrity, reliability or robustness of the data from our clinical trials.

Furthermore, quarantines, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to the current COVID-19 pandemic or future variants or pandemics or other infectious diseases, could impact personnel at our study sites or third-party manufacturing facilities upon which we rely, or the availability or cost of materials, which could disrupt the supply chain for our drug and combination therapy candidates. To the extent our suppliers and service providers are unable to comply with their obligations under our agreements with them or they are otherwise unable to deliver or are delayed in delivering goods and services to us due to the current COVID-19 pandemic or future variants or pandemics, our ability to continue meeting clinical supply demand for our product candidates or otherwise advancing development of our product candidates may become impaired.

The current COVID-19 pandemic or future variants or pandemics and actions taken to reduce its spread continue to rapidly evolve. The extent to which the current COVID-19 pandemic or future variants or pandemics may impede the development of our product candidates, reduce the productivity of our employees, disrupt our supply chains, delay our clinical trials, reduce our access to capital or limit our business development activities, will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

To the extent of the current COVID-19 pandemic or future variants or pandemics adversely affects our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described in this "Risk Factors" section.

We expect to be exposed to fluctuations in currency exchange rates, which could adversely affect our results of operations.

We incur expenses in U.S. dollars, Canadian dollars, and EUROS but our financial statements are denominated in U.S. dollars. Accordingly, we face exposure to adverse movements in currency exchange rates. Our foreign operations will be exposed to foreign exchange rate fluctuations as the financial results are translated from the local currency into U.S. dollars upon consolidation. Specifically, the U.S. dollar cost of our operations in Canada, API manufacturing in Taiwan and conducting clinical trials in India is influenced by any movements in the currency exchange rate. Such movements in the currency exchange rate may have a negative effect on our financial results. If the U.S. dollar weakens against foreign currencies, the translation of these foreign currency denominated transactions will result in increased revenue, operating expenses and net income. Similarly, if the U.S. dollar strengthens against foreign currencies, the translation of these foreign currency denominated transactions will result in decreased revenue, operating expenses and net income. As exchange rates vary, sales and other operating results, when translated, may differ materially from our or the capital market's expectations.

Risks Related to Our Business Development

Our business is heavily dependent on the successful commercialization of ZUNVEYL oral tablet formulation, our only FDA approved product, and the development and commercialization of any future product candidates that we may develop or acquire.

The NDA for ZUNVEYL oral tablets was approved by the FDA on July 26, 2024, but all our other product candidates are in the pre-clinical stage. The success of our business, including our ability to finance our Company and generate revenue in the future, will primarily depend on the successful commercialization of ZUNVEYL, our only FDA approved product, and the development, regulatory approval and commercialization of our product candidates. We cannot be certain that ZUNVEYL can be successfully commercialized or that our other product candidates will receive regulatory approval or be successfully commercialized even if we receive regulatory approval.

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The clinical and commercial success of ZUNVEYL and any future product candidates that we may develop or acquire will depend on a number of factors, including the following:

- successfully commercializing ZUNVEYL, either independently or with marketing service providers;
- the effectiveness of our sales and marketing strategy and operations, and obtaining market acceptance of ZUNVEYL, including garnering market share from existing and future treatment alternatives;
- maintaining compliance with all regulatory requirements applicable to ZUNVEYL and our commercial activities, including the post-marketing requirements and post-marketing commitments required by the FDA;
- the continued acceptability of the safety profile of ZUNVEYL and the occurrence of any unexpected side effects, adverse reactions or misuse, including potential business impact such as the need to withdraw the product (either voluntarily or as mandated by the FDA), loss of support by the advocacy communities or loss of positive corporate reputation resulting in related unfavorable media coverage in these areas;
- our ability to raise any additional required capital on acceptable terms, or at all;
- our ability to complete an IND enabling studies and successfully submit INDs or comparable applications;
- initiation and timely completion of our preclinical studies and clinical trials, which may be significantly slower or cost more than we currently anticipate and will depend substantially upon the performance of third-party contractors;
- delays or difficulties in enrolling and retaining patients in our clinical trials;
- whether we are required by the FDA, or similar foreign regulatory agencies to conduct additional clinical trials or other studies beyond those planned to support the approval and commercialization of our product candidates or any future product candidates;
- acceptance of our proposed indications and primary endpoint assessments relating to the proposed indications of our product candidates by the FDA and similar foreign regulatory authorities;
- our ability to demonstrate to the satisfaction of the FDA and similar foreign regulatory authorities the safety, efficacy and acceptable risk to benefit profile of our product candidates or any future product candidates;
- the prevalence, duration and severity of potential side effects or other safety issues experienced with our product candidates or future approved products, if any;
- achieving and maintaining, and, where applicable, ensuring that our third -party contractors achieve and maintain, compliance with our contractual obligations and with all regulatory requirements applicable to our product candidates or any future product candidates or approved products, if any;
- the ability of third parties with whom we contract to manufacture adequate clinical trial and commercial supplies of our product candidates or any future product candidates remain in good standing with regulatory agencies and develop, validate and maintain commercially viable manufacturing processes that are compliant with current good manufacturing practices, or cGMPs;
- the convenience of our treatment or dosing regimen;
- the timely receipt of necessary marketing approvals from the FDA and similar foreign regulatory authorities;
- acceptance by physicians, payors and patients of the benefits, safety and efficacy of our product candidates or any future product candidates, if approved, including relative to alternative and competing treatments;
- the willingness of physicians, operators of clinics and patients to utilize or adopt any of our product candidates or any future product candidates, if approved;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;

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- our ability to expand our products, including ZUNVEYL into multiple indications;
- the COVID-19 pandemic, which may result in clinical site closures, delays to patient enrollment, patients discontinuing their treatment or follow up visits or changes to trial protocols;
- our ability to successfully develop a commercial strategy and thereafter commercialize our other product candidates or any future product candidates in the United States and internationally, if approved for marketing, reimbursement, sale and distribution in such countries and territories, whether alone or in collaboration with others;
- patient demand for our product candidates, if approved, including patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- the actual market-size, ability to identify patients and the demographics of patients eligible for our product candidates, which may be different than expected;
- a continued acceptable safety profile following any marketing approval;
- our ability to compete with other therapies;
- our ability to establish and enforce intellectual property rights in and to our product candidates or any future product candidates; and
- our ability to avoid third-party patent interference, intellectual property challenges or intellectual property infringement claims.

These factors, many of which are beyond our control, could cause us to experience significant delays or an inability to obtain future regulatory approvals or commercialize our product candidates. Even if regulatory approvals are obtained, we may never be able to successfully commercialize any of our product candidates. Accordingly, we cannot provide assurances that we will be able to generate sufficient revenue through the sale of our product candidates or any future product candidates to continue our business or achieve profitability.

We may not successfully expand our pipeline of product candidates. If we are not successful in identifying, developing, in-licensing, acquiring or/and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.

Although a substantial amount of our effort will focus on the continued development and potential approval of our current product candidates, a key element of our strategy is to identify, develop and commercialize a portfolio of products that help the cognitive and functional symptoms of mild-to-moderate Alzheimer's disease. A component of our strategy is to evaluate our product candidates in multiple indications, such as mild-to-moderate Alzheimer's disease, moderate-to-severe Alzheimer's disease, and TBI. However, we have not yet evaluated ALPHA-1062 or ALPHA-0602 in all of these patient populations and we may find that while we have seen promising results in one neurodegenerative disease, that effect is not replicated across other indications with promising similarities. Even if we successfully identify additional product candidates, we may still fail to yield additional product candidates for development and commercialization for many reasons, including the following:

- the research methodology used may not be successful in identifying potential product candidates;
- competitors may develop alternatives that render our additional product candidates obsolete;
- additional product candidates we develop may be covered by third parties' patents or other exclusive rights;
- an additional product candidate may be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- an additional product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- an additional product candidate may not be accepted as safe and effective by physicians and patients.

We therefore cannot provide any assurance that we will be able to successfully identify, in-license or acquire additional product candidates, advance any of these additional product candidates through the development process, successfully commercialize any such additional product candidates, if approved, or assemble sufficient resources to identify, acquire, develop or, if approved, commercialize additional product candidates. If we are unable to successfully identify, acquire, develop and commercialize additional product candidates, our commercial opportunities may be limited.

We have initially concentrated our research and development efforts on the treatment of Alzheimer's Disease, a disease that has seen limited success in drug development.

Efforts by biopharmaceutical and pharmaceutical companies in treating Alzheimer's disease have seen limited success in drug development. Biogen's Aduhelm, a monoclonal antibody administered via infusion, received accelerated approval from the FDA on June 7, 2021, but Biogen has announced that it will discontinue marketing Aduhelm by the end of 2024. Adlarity, transdermal formulation of donepezil from the makers of Corium, was the most recently FDA approved symptomatic treatment in 8 years, in March 2022. We cannot be certain that our oral, small-molecule approach will lead to the development of further approvable or marketable products. Since 2003, over 500 clinical studies in Alzheimer's have been completed and only Aduhelm, Adlarity and now our product ZUNVEYL have been approved by the FDA, compared to higher success rates for all other drug candidates.

ZUNVEYL remains subject to regulatory oversight.

Even though we obtained regulatory approval for ZUNVEYL, our lead product, it will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping and submission of safety and other post-market information. FDA has required that we conduct further root cause investigation into observe high variability of the dissolution data for ZUNVEYL oral tablets and develop new dissolution methods and acceptance criteria and to report to FDA by February 28, 2025. ZUNVEYL also remains subject to a post-approval safety monitoring program, limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing and surveillance to monitor the quality, safety and efficacy of the product. For example, the holder of an approved NDA is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA also must submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, product manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities. If we, or a regulatory authority, discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured or disagrees with the promotion, marketing or labeling of that product, a regulatory authority may impose restrictions relative to that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements of ZUNVEYL or any future product candidate, a regulatory authority may take enforcement actions, such as issuing warnings, fines, or even revoking approval, which could result in delays, financial penalties, reputational damage, and potential legal liabilities for our Company.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize ZUNVEYL and adversely affect our business, financial condition, results of operations and prospects.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. 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 may have obtained and we may not achieve or sustain profitability, which would materially and adversely affect our business, financial condition, results of operations and prospects.

For our other product candidates, we may encounter substantial delays in our preclinical studies, clinical trials and obtaining NDA approval or may not be able to conduct or complete our preclinical studies or clinical trials or receive NDA approval on the timelines we expect, if at all.

Clinical trials are expensive and can take many years to complete, and the outcome is inherently uncertain. The historical failure rate for product candidates in our industry is high. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical trials can occur at any stage and our future clinical trials may not be successful. Clinical trials can be delayed or terminated for a variety of reasons. Further, even once completed the process to receive a NDA can be delayed or unsuccessful.

The timing and success of obtaining NDA approval can be affected by many factors including:

- we may experience general administrative delays in the FDA review and approval process;
- our clinical trials may fail to show efficacy and/or safety sufficient for approval, or the results of such trials may be interpreted differently by the FDA and may not be accepted by the FDA upon review;
- the population studied in the clinical trial may not be accepted by the FDA as sufficiently broad or representative to assure safety in the full population for which we seek approval;
- we may be required to conduct costly and time consuming additional preclinical studies or clinical trials;
- we may be subject to unexpected limitations on how we may promote any approved products;
- approval may be granted only for indications that are significantly more limited than those sought by us;
- approval may include significant restrictions on end -to-end supply chain management and use;
- we may experience delays or be unable to demonstrate to the satisfaction of the FDA that the applicable product candidate is safe, pure and potent, or effective as for its intended uses; and
- we may experience delays or be unable to demonstrate to the satisfaction of the FDA that the applicable product candidate's risk-benefit ratio for its proposed indication is acceptable.

The timing and success of clinical trials can be affected by many factors including:

- the FDA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical trials;
- delays in obtaining, or failure to obtain, regulatory authorization to commence a trial;
- imposition of a temporary or permanent clinical hold by the FDA, an institutional review board (IRB) or comparable foreign regulatory authorities;
- reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- identifying, recruiting and training suitable clinical investigators;
- obtaining IRB approval at each trial site;
- new safety findings that present unreasonable risk to clinical trial participants;
- a negative finding from an inspection of our clinical trial operations or study sites;
- recruiting an adequate number of suitable patients to participate in a trial;
- having subjects complete a trial or return for post -treatment follow-up;
- clinical sites deviating from trial protocol or dropping out of a trial;
- addressing subject safety concerns that arise during the course of a trial;

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- adding a sufficient number of clinical trial sites; or
- obtaining sufficient supply of product candidates for use in preclinical studies or clinical trials from third-party suppliers.

We may experience numerous adverse or unforeseen events during, or as a result of, preclinical studies and clinical trials which could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- we may receive feedback from regulatory authorities that requires us to modify the design of our clinical trials or require that we submit additional data or information before allowing a clinical trial to be initiated or continue;
- clinical studies of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements, fail to maintain adequate quality controls or be unable to provide us with sufficient product supply to conduct and complete preclinical studies or clinical trials of our product candidates in a timely manner, or at all;
- we or our investigators might have to suspend or terminate clinical trials of our product candidates for various reasons, including non-compliance with regulatory requirements, a finding that our product candidates have undesirable side effects or other unexpected characteristics or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the quality of our product candidates or other materials necessary to conduct preclinical studies or clinical trials of our product candidates may be insufficient or inadequate;
- regulators may revise the requirements for approving our product candidates or such requirements may not be as we anticipate; and
- any future collaborators may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for us.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only moderately positive or if there are safety concerns, we may:

- incur unplanned costs;
- be delayed in obtaining marketing approval for our product candidates or not obtain marketing approval at all;
- obtain marketing approval in some countries and not in others;
- obtain marketing approval for indications or patient populations that are not as broad as intended or desired;
- obtain marketing approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and the results of our clinical trials may not satisfy the requirements of the FDA or other comparable foreign regulatory authorities.

We will be required to demonstrate with substantial evidence through well-controlled clinical trials that our product candidates are safe and effective for use in a diverse population before we can seek marketing approvals for their commercial sale. Success in preclinical studies and early-stage clinical trials does not mean that future clinical trials will be successful. For instance, we do not know whether ALPHA-1062 will perform in future clinical trials as ALPHA-1062 has performed in preclinical studies or earlier clinical trials. Product candidates in clinical trials may fail to demonstrate sufficient safety and efficacy to the satisfaction of the FDA and other comparable foreign regulatory authorities despite having progressed through preclinical studies. Regulatory authorities may also limit the scope of later-stage trials until we have demonstrated satisfactory safety, which could delay regulatory approval, limit the size of the patient population to which we may market our product candidates, or prevent regulatory approval.

In some instances, there can be significant variability in safety and efficacy results between different clinical trials of the same product candidates due to numerous factors, including changes in trial protocols, differences in size and type of the patient populations, differences in and adherence to the dose and dosing regimen and other trial protocols and the rate of dropout among clinical trial participants. Patients treated with our product candidates may also be undergoing other therapies and may be using other approved products or investigational new drugs, which can cause side effects or adverse events that are unrelated to our product candidates. As a result, assessments of efficacy can vary widely for a particular patient, and from patient to patient and site to site within a clinical trial. This subjectivity can increase the uncertainty of, and adversely impact, our clinical trial outcomes.

We do not know whether any clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety sufficient to obtain approval to market any of our product candidates.

We rely on third parties in the conduct of all of our clinical trials. If these third parties do not successfully carry out their contractual duties, fail to comply with applicable regulatory requirements or meet expected deadlines, we may be unable to obtain regulatory approval for our product candidates.

We currently do not have the ability to independently conduct clinical trials that comply with the regulatory requirements known as good laboratory practice ("GLP") requirements or good clinical practice ("GCP") requirements, respectively. The FDA and regulatory authorities in other jurisdictions require us to comply with GCP requirements for conducting, monitoring, recording and reporting the results of clinical trials, in order to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs, to conduct GLP-compliant preclinical studies and GCP-compliant clinical trials on our product candidates properly and on time. While we have agreements governing their activities, we control only certain aspects of their activities and have limited influence over their actual performance. The third parties with whom we contract for execution of our GLP-compliant preclinical studies and our GCP-compliant clinical trials play a significant role in the conduct of these studies and the subsequent collection and analysis of data. These third parties are not our employees and, except for restrictions imposed by our contracts with such third parties, we have limited ability to control the amount or timing of resources that they devote to our programs. Although we rely on these third parties to conduct our GLP-compliant preclinical studies and GCP-compliant clinical trials, we remain responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with its investigational plan and protocol and applicable laws and regulations, and our reliance on the CROs does not relieve us of our regulatory responsibilities.

Many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting preclinical studies, clinical trials or other drug development activities that could harm our competitive position. If the third parties conducting our preclinical studies or our clinical trials do not adequately perform their contractual duties or obligations, experience significant business challenges, disruptions or failures, do not meet expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our protocols or to GLPs or GCPs, or for any other reason, we may need to enter into new arrangements with alternative third parties. This could be difficult, costly or impossible, and our preclinical studies or clinical trials may need to be extended,

delayed, terminated or repeated. As a result, we may not be able to obtain regulatory approval in a timely fashion, or at all, for the applicable product candidate, our business, financial results and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

Use of our therapeutic candidates could be associated with side effects, adverse events or other properties or safety risks, which could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon a therapeutic candidate, limit the commercial profile of an approved label or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.

Adverse events or other undesirable side effects caused by our product candidates or related to procedures conducted as part of the clinical trials could cause us 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 comparable foreign regulatory authorities. Results of our planned clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. If unacceptable side effects arise in the development of our product candidates, we, the FDA, the IRBs at the institutions in which our studies are conducted or the Data Safety Monitoring Board, or DSMB, could suspend or terminate our clinical trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Treatment-related side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our product candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in patient injury or death. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects.

In addition, our patient tolerability study and other clinical trials may only include a limited number of subjects and limited duration of exposure to our product candidates. As a result, our product candidates may cause unforeseen safety events when evaluated in larger patient populations. Further, clinical trials may not be sufficient to determine the effect and safety consequences of taking our product candidates over a multi-year period.

If following marketing approval of ZUNVEYL (which was received on July 26, 2024) or of any of our future product candidates, we or others later identify undesirable and unforeseen side effects caused by such product, a number of potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may suspend, limit or withdraw approvals of such product, or seek an injunction against its manufacture or distribution;
- we may be required to conduct additional clinical trials or post -approval studies;
- we may be required to recall a product or change the way such product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof;
- regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required to implement a Risk Evaluation and Mitigation Strategy, or REMS, or create a Medication Guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers and/or other elements to assure safe use;
- we could be sued and held liable for harm caused to patients;
- we may be subject to fines, injunctions or the imposition of criminal penalties;
- the product may become less competitive; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and result in the loss of significant revenues to us, which would materially and adversely affect our business, financial condition, results of operations and prospects.

Interim “top-line” and preliminary data from studies or trials that we announce or publish from time to time may change as more data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim “top -line” or preliminary data from preclinical studies or clinical trials. Interim data are subject to the risk that one or more of the outcomes may materially change as more data becomes available. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data when we publish such data. As a result, the “top-line” results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results once additional data have been received and fully evaluated. Preliminary or “top-line” data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Additionally, interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data becomes available. Adverse differences between preliminary or interim data and final data could significantly harm our business, financial condition, results of operations and prospects.

Further, others, including regulatory agencies, may not accept or agree with our 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 or product and our Company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure. Any information we determine not to disclose may ultimately be deemed significant by you or others with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product candidate or our business. If the top-line data that we report differ from final results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, product candidates may be harmed, which could significantly harm our business, financial condition, results of operations and prospects.

We have conducted, and in the future plan to conduct, clinical trials for product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials.

We have conducted clinical trials of our product candidates outside the United States, and plan to continue to do so in the future. For example, we initially conducted our bioavailability and bioequivalence pivotal clinical trials of ALPHA-1062 in collaboration with Vimta Labs, Inc in Hyderabad, India. In addition, the Phase 1 single and multiple ascending dose studies of ALPHA-1062 in healthy volunteers were conducted at the Centre for Human Disease Research (CHDR) in the Netherlands. The acceptance of future study data from clinical trials conducted outside the United States or another jurisdiction by the FDA, any comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless:

- the data are applicable to the U.S. population and U.S. medical practice;
- the trials were performed pursuant to GCP requirements; and
- if necessary, the FDA is able to validate the data through an on -site inspection.

Many foreign regulatory authorities have similar requirements. In addition, foreign trials are subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from future trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data,

it would result in the need for additional trials, which would be costly and time -consuming and delay aspects of our business plan, and which may result in product candidates that we may develop not receiving approval or clearance for commercialization in the applicable jurisdiction.

We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may have been more profitable or for which there could have been a greater likelihood of success.

Because we have limited financial and management resources, we must focus on development programs and product candidates that we identify for specific diseases. As such, currently we are primarily focused on the commercialization and further development of ZUNVEYL oral tablets. As a result, we may forego or delay the pursuit of opportunities with other product candidates. For example, we plan to out-license ALPHA-1062IN for applications in treating mild traumatic brain injury to a private entity formed by us for the purpose of raising private capital and developing the asset. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future development programs and product candidates for specific diseases may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we 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 us to retain sole development and commercialization rights to such product candidate.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our current or future product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and breach of warranty. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our current or future product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- regulatory investigations, product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue; and
- the inability to commercialize our current or any future product candidates.

If we are unable to obtain and maintain sufficient product liability insurance at an acceptable cost and scope of coverage to protect against potential product liability claims, the commercialization of our current or any future product candidates we develop could be inhibited or prevented. We currently carry product liability insurance covering our clinical trials. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions and deductibles, and we

may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient funds to pay such amounts. Moreover, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. Following the marketing approval of ZUNVEYL or if and when we obtain approval for marketing any of our future product candidates, we intend to expand our insurance coverage to include the sale of such product candidate; however, we may be unable to obtain this liability insurance on commercially reasonable terms or at all.

Significant disruptions of our information technology systems, breaches of data security and other incidents could materially adversely affect our business, results of operations and financial condition.

We collect and maintain information in digital and other forms that is necessary to conduct our business, and we are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, store and transmit large amounts of confidential information, including intellectual property, proprietary business information and personal information. It is critical that we do so in a secure manner to maintain the privacy, security, confidentiality and integrity of such confidential information. We have established physical, electronic and organizational measures designed to safeguard and secure our systems to prevent a data compromise, and rely on commercially available systems, software, tools and monitoring to provide security for our information technology systems and the processing, transmission and storage of digital information. We have also outsourced elements of our information technology infrastructure, and as a result a number of third-party vendors may have access to our confidential information. Our internal information technology systems and infrastructure, and those of any future collaborators and our contractors, consultants, vendors and other third parties on which we rely, are vulnerable to damage or unauthorized access or use resulting from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the Internet, denial or degradation of service attacks, ransomware, hacking, phishing and other social engineering attacks, attachments to emails, persons inside our organization or persons with access to systems inside our organization.

The risk of a security breach or disruption, particularly through cyber -attacks or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. The prevalent use of mobile devices that access confidential information also increases the risk of lost or stolen devices, security incidents and data security breaches, which could lead to the loss of confidential information or other intellectual property. As a result of the COVID-19 pandemic, we may face increased risks of a security breach or disruption due to our reliance on internet technology and the number of our employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. The costs to us to investigate, mitigate and remediate security incidents, breaches, disruptions, network security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and while we have implemented security measures to protect our data security and information technology systems, our efforts to address these problems may not be successful, and these problems could result in unexpected interruptions, delays, cessation of service, negative publicity and other harm to our business and our competitive position. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Any security compromise affecting us, our partners or our industry, whether real or perceived, could harm our reputation, erode confidence in the effectiveness of our security measures and lead to regulatory scrutiny. Moreover, if a computer security breach affects our systems or results in the unauthorized access to or unauthorized use, disclosure, release or other processing of personally identifiable information or clinical trial data, it may be necessary to notify individuals, governmental authorities, supervisory bodies, the media and other parties pursuant to privacy and security laws, and our reputation could be materially damaged. We would also be exposed to a risk of loss, governmental investigations or enforcement, or litigation and potential liability, which could materially adversely affect our business, results of operations and financial condition.

Risk related to Our Industry

Research and development of pharmaceuticals is a lengthy and inherently risky. We cannot give any assurance that our future product candidates will receive regulatory approval.

Our ZUNVEYL oral formulation for mild-to-moderate dementia of the Alzheimer's type in adults (Alzheimer's disease) is our only product that has FDA approval. All our other product candidates are in the pre-clinical stage of development. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for and then successfully commercialize our product candidates, and we may experience delays or fail to do so for many reasons, including the following:

- our product candidates may not successfully complete preclinical studies or clinical trials;
- receipt of feedback from regulatory authorities that requires us to modify the design of our clinical trials;
- clinical trial observations or results that require us to modify the design of our clinical trials;
- the number of patients required for clinical trials being larger than anticipated, enrollment in these clinical trials being slower than anticipated or participants dropping out of these clinical trials at a higher rate than anticipated;
- the suspension or termination of our clinical trials for various reasons, including non-compliance with regulatory requirements or a finding that our product candidates have undesirable side effects or other unexpected characteristics or risks;
- negative or inconclusive clinical trial results that may require us to conduct additional clinical trials or abandon certain drug development programs;
- the cost of clinical trials of our product candidates being greater than anticipated;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it does not meet applicable regulatory criteria;
- any changes to our manufacturing process that may be necessary or desired;
- third-party contractors not performing data collection or analysis in a timely or accurate manner;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other government or regulatory authorities for violations of regulatory requirements, in which case we may need to find a substitute contractor, and we may not be able to use some or all of the data produced by such contractors in support of our marketing applications;
- our competitors may develop therapeutics that render our product candidates obsolete or less attractive;
- the market for a product candidate may change so that the continued development of that product candidate is no longer reasonable or commercially attractive;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- if a product candidate obtains regulatory approval, we may be unable to establish sales and marketing capabilities, or successfully market such approved product candidate; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

If any of these events occur, we may be forced to abandon our development efforts for a product candidate or candidates, which would have a material adverse effect on our business and could potentially cause us to cease operations. Failure of a product candidate may occur at any stage of preclinical or clinical development, and we may never succeed in developing marketable products or generating product revenue.

We may not be successful in our efforts to further develop our current and future product candidates. Each of our product candidates will require significant clinical development, management of preclinical, clinical and manufacturing activities, regulatory approval, adequate manufacturing supply, a commercial organization and significant marketing efforts before we generate any revenue from product sales, if at all. Any clinical studies that we may conduct may not be acceptable to the FDA or other regulatory authorities or demonstrate the efficacy and safety necessary to obtain regulatory approval to market our product candidates. If the results of our ongoing or future clinical studies are inconclusive with respect to the efficacy of our product candidates, if we do not meet the clinical endpoints with statistical significance or if there are safety concerns or adverse events associated with our product candidates, we may be prevented or delayed in obtaining marketing approval for our product candidates.

In addition, to obtain regulatory approval in countries outside the United States, we must comply with numerous and varying regulatory requirements of such other countries regarding safety, efficacy, chemistry, manufacturing and controls, clinical trials, commercial sales, pricing and distribution of our product candidates. We may also rely on collaborators or partners to conduct the required activities to support an application for regulatory approval and to seek approval for one or more of our product candidates. We cannot be sure that any such collaborators or partners will conduct these activities successfully or do so within the timeframe we desire. Even if we or any future collaborators or partners are successful in obtaining approval in one jurisdiction, we cannot ensure that we will obtain approval in any other jurisdictions. If we are unable to obtain approval for our product candidates in multiple jurisdictions, our revenue and results of operations could be negatively affected.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and/or approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies 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 new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. On March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Failure to comply with health and data protection laws and regulations could lead to government enforcement actions and civil or criminal penalties, private litigation or adverse publicity and could negatively affect our operating results and business.

We are subject to or affected by federal, state and foreign data protection laws and regulations which address privacy and data security. In the United States, numerous federal and state laws and regulations, including the U.S. federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, or HITECH, state data breach notification laws, state health information privacy laws and federal and state consumer protection laws, including Section 5 of the Federal Trade Commission Act, which govern the collection, use, disclosure and protection of health-related and other personal information, may apply to our operations and the operations of any future collaborators. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, that are subject to privacy and security requirements under HIPAA, as amended by HITECH, and other privacy and data security laws. Depending on the facts and circumstances, we could be subject to significant administrative, civil and criminal penalties if we obtain, use or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Further, various states have implemented similar privacy laws and regulations. For example, California also recently enacted the California Consumer Privacy Act of 2018, or CCPA. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA also provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA went into effect on January 1, 2020 and grants the California Attorney General the power to bring enforcement actions for violations beginning July 1, 2020. The CCPA has been amended from time to time, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted. As currently written, the CCPA may impact our business activities and as a result may increase our compliance costs and potential liability. Many similar privacy laws have been proposed at the federal level and in other states.

Foreign data protection laws, including Regulation 2016/679, known as the General Data Protection Regulation, or GDPR, may also apply to health-related and other personal information data subjects in the EU or the United Kingdom, or UK. The GDPR went into effect on May 25, 2018. Companies that must comply with the GDPR face increased compliance obligations and risk, including robust regulatory enforcement of data protection requirements as well as potential fines for noncompliance of up to €20 million or 4% of annual global revenue of the noncompliance company, whichever is greater. The GDPR imposes numerous requirements for the collection, use, storage and disclosure of personal information of EU or UK data subjects, including requirements relating to providing notice to and obtaining consent from data subjects, personal data breach notification, cross-border transfers of personal information, and honoring and providing for the rights of EU or UK individuals in relation to their personal information, including the right to access, correct and delete their data.

Compliance with U.S. and foreign data protection laws and regulations could require us to take on more onerous obligations in our contracts, require us to engage in costly compliance exercises, restrict our ability to collect, use and disclose data, or in some cases, impact our or our partners' or suppliers' ability to operate in certain jurisdictions. Failure to comply with U.S. and foreign data protection laws and regulations could result in government investigations and/or enforcement actions, fines, civil or criminal penalties, private litigation or adverse publicity and could negatively affect our operating results and business.

Moreover, clinical trial subjects about whom we or any of our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend and could result in adverse publicity that could materially and adversely affect our business, financial condition, results of operations and prospects.

Even if the product candidates that we develop receive regulatory approval in the United States or another jurisdiction, they may never receive approval in other jurisdictions, which would limit market opportunities for our product candidates and adversely affect our business.

Approval of a product candidate in the United States by the FDA or by the requisite regulatory agencies in any other jurisdiction does not ensure approval of such product candidate by regulatory authorities in other countries or jurisdictions. The approval process varies among countries and may limit our or any future collaborators' ability to develop, manufacture, promote and sell product candidates internationally. Failure to obtain marketing approval in international jurisdictions would prevent the product candidates from being marketed outside of the jurisdictions in which regulatory approvals have been received. In order to market and sell product candidates in the European Union, or EU, and many other jurisdictions, we and any future collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and may involve additional preclinical studies or clinical trials both before and after approval. In many countries, any product candidate for human use must be approved for reimbursement before it can be approved for sale in that country. In some cases, the intended price for such product is also subject to approval. Further, while regulatory approval of a product candidate in one country does not ensure approval in any other country, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory approval process in others. If we or any future collaborators fail to comply with the regulatory requirements in international markets or to obtain all required marketing approvals, the target market for a particular potential product will be reduced, which would limit our ability to realize the full market potential for the product and adversely affect our business.

We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may develop therapies that are safer, more advanced or more effective than ours, which may negatively impact our ability to successfully market or commercialize any product candidates we may develop and ultimately harm our financial condition.

The development and commercialization of new drug products is highly competitive. Moreover, the neurodegenerative field is characterized by strong and increasing competition, and a strong emphasis on intellectual property. We may face competition with respect to any of our product candidates that we seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

There are a number of large pharmaceutical and biotechnology companies that are currently in market or pursuing the development of product candidates for the treatment of the diseases and disorders for which we have research programs, including Alzheimer's disease, mTBI, and Amyotrophic Lateral Sclerosis. Current generic competitors in the Alzheimer's disease market include donepezil, rivastigmine, galantamine, and memantine. Branded competitors include Namzaric® by maker Abbvie and newly approved Adlarity® by maker Corium. Alzheimer's disease companies developing therapeutics for similar indications include large companies with significant financial resources, such as Biogen, Eli Lilly, Corium, Taurz, Vasopharm. Neuren Pharmaceuticals, Abliva, and AB Science. In the TBI market, there are no current acute or chronic treatments approved to date. Companies currently in clinical trials for TBI include Vasopharm, SanBio/Sumitomo, Ostuka/Avanir Pharmaceuticals, Biogen, and Cellvation.

Many of our current or potential competitors, either alone or with their strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of mild-to-moderate Alzheimer's diseases, which could give such products significant regulatory and market timing advantages over any of our product candidates. Our competitors also may obtain FDA, EMA or other regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA for indications our product candidates are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, products or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing any product candidates we may develop against competitors.

In addition, we could face litigation or other proceedings with respect to the scope, ownership, validity and/or enforceability of our patents relating to our competitors' products and our competitors may allege that our products infringe, misappropriate or otherwise violate their intellectual property. The availability of our competitors' products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize. See the section entitled "*Risks Related to Our Intellectual Property*." The successful commercialization of our product candidates will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage, reimbursement levels and pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

Risks Related to Commercialization and Manufacturing

ZUNVEYL oral tablet formulation may fail to achieve the broad degree of adoption and use by physicians, patients, hospitals, healthcare payors and others in the medical community necessary for commercial success.

ZUNVEYL may fail to gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. ZUNVEYL and most of our product candidates target mechanisms for which there are limited or no currently approved products, which may result in slower adoption by physicians, patients and payors. If ZUNVEYL or our other product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the clinical indications for which the product is approved and patient demand for approved products that treat those indications;
- the safety and efficacy of our product as compared to other available therapies;
- the availability of coverage and adequate reimbursement from governmental healthcare plans or third party payors for any of our product candidates that may be approved;
- acceptance by physicians, operators of clinics and patients of the product as a safe and effective treatment;
- physician and patient willingness to adopt a new therapy over other available therapies to treat approved indications;
- overcoming any biases physicians or patients may have toward particular therapies for the treatment of approved indications;
- proper training and administration of our product candidates by physicians and medical staff;
- public misperception regarding the use of our therapies, if approved for commercial sale;
- patient satisfaction with the results and administration of our product candidates and overall treatment experience, including, for example, the convenience of any dosing regimen;
- the cost of treatment with our product candidates in relation to alternative treatments and reimbursement levels, if any, and willingness to pay for the product, if approved, on the part of insurance companies and other third-party payors, physicians and patients;
- the revenue and profitability that our products may offer a physician as compared to alternative therapies;
- limitations or warnings contained in the FDA -approved labeling for our products;
- any FDA requirement to undertake a REMS;
- the effectiveness of our sales, marketing and distribution efforts;
- adverse publicity about our products or favorable publicity about competitive products; and
- potential product liability claims.

We cannot assure you that our current or future product candidates, if approved, will achieve broad market acceptance among physicians, patients, healthcare payors and others in the medical community. Even following the approval of ZUNVEYL or if we receive regulatory approval to market any of our future product candidates, we cannot assure you that any such product candidate will be more effective than other commercially available alternatives or successfully commercialized. Any approval we may obtain could be for indications or patient populations that are not as broad as intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We may also be required to perform additional or unanticipated clinical trials to obtain approval or be subject to additional post-marketing testing requirements to maintain approval. In addition, regulatory authorities may withdraw their approval of a product or impose restrictions on its distribution, such as in the form of a REMS. Any failure by our product candidates that obtain regulatory approval to achieve market acceptance or commercial success would adversely affect our reputation, ability to raise additional capital, financial condition, results of operations and business prospects.

The market opportunities for ZUNVEYL may be smaller than we anticipate.

We have received FDA approval for ZUNVEYL for mild -to-moderate dementia of the Alzheimer's type in adults (Alzheimer's disease). Our estimates of market potential have been derived from a variety of sources, including scientific literature, patient foundations and market research and may prove to be incorrect. Even if we obtain significant market share for ZUNVEYL, the potential target populations for mild-to-moderate Alzheimer's disease may be too small to consistently generate revenue, and we may never achieve profitability without obtaining marketing approval for additional indications.

We rely on third-party suppliers to manufacture our product candidates, and we intend to rely on third parties to produce commercial supplies of any approved product. The loss of these suppliers, or their failure to comply with applicable regulatory requirements or to provide us with sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business, financial condition, results of operations and prospects.

We do not currently have nor do we plan to build or acquire the infrastructure or capability internally to manufacture supplies of our product candidates or the materials necessary to produce our product candidates for use in the conduct of our preclinical studies or clinical trials, and we lack the internal resources and the capability to manufacture any of our product candidates on a preclinical, clinical or commercial scale. The facilities used by our contract manufacturers to manufacture our product candidates are subject to various regulatory requirements and may be subject to the inspection of the FDA or other regulatory authorities. We do not control the manufacturing processes of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or comparable regulatory authorities in foreign jurisdictions, we may not be able to rely on their manufacturing facilities for the manufacture of our product candidates. In addition, we have limited control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority finds these facilities inadequate for the manufacture of our product candidates or if such facilities are subject to enforcement action in the future or are otherwise inadequate, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain future regulatory approvals for or market our product candidates.

We currently rely on third parties at key stages in our supply chain. For instance, the supply chains for our lead product candidate involves several manufacturers that specialize in specific operations of the manufacturing process, specifically, raw materials manufacturing, drug substance manufacturing and drug product manufacturing. We have a direct relationship with a manufacturer in Taiwan for our lead candidate, ALPHA-1062. As a result, the supply chain for the manufacturing of our product candidates is complicated, and we expect the logistical challenges associated with our supply chain to grow more complex as our product candidates are further developed.

We do not have any control over the process or timing of the acquisition or manufacture of materials by our manufacturers. We generally do not begin preclinical or clinical trials unless we believe we have access to a sufficient supply of a product candidate to complete such study. In addition, any significant delay in, or quality control problems with respect to, the supply of a product candidate, or the raw material components thereof, for an ongoing study could considerably delay completion of our preclinical or clinical trials, product testing and potential regulatory approval of our product candidates.

We have not yet engaged all manufacturers for the commercial supply of our product candidates. Although we intend to enter into such agreements prior to commercial launch of any of our product candidates, we may be unable to enter into any such agreement or do so on commercially reasonable terms, which could have a material adverse impact upon our business. Moreover, if there is a disruption to one or more of our third-party manufacturers' or suppliers' relevant operations, or if we are unable to enter into arrangements for the commercial supply of our product candidates, we will have no other means of producing our product candidates until they restore the affected facilities or we or they procure alternative manufacturing facilities or sources of supply. Our ability to progress our preclinical and clinical programs could be materially and adversely impacted if any of the third-party suppliers upon which we rely were to experience a significant business challenge, disruption or failure due to issues such as financial difficulties or bankruptcy, issues relating to other customers such as regulatory or quality compliance issues, or other financial, legal, regulatory or reputational issues. Additionally, any damage to or destruction of our third-party manufacturers' or suppliers' facilities or equipment may significantly impair our ability to manufacture our product candidates on a timely basis.

In addition, to manufacture our product candidates in the quantities which we believe would be required to meet anticipated market demand, our third-party manufacturers would likely need to increase manufacturing capacity and we may need to secure alternative sources of commercial supply, which could involve significant challenges and may require additional regulatory approvals. In addition, the development of commercial-scale manufacturing capabilities may require us and our third-party manufacturers to invest substantial additional funds and hire and retain the technical personnel who have the necessary manufacturing experience. Neither we nor our third-party manufacturers may successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all. If our manufacturers or we are unable to purchase the raw materials necessary for the manufacture of our product candidates on acceptable terms, at sufficient quality levels or in adequate quantities, if at all, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of such product candidates, if approved.

We are subject to certain supply chain risks inherent in manufacturing our lead product, ZUNVEYL, and future products with respect to Taiwan. Risks including periodic foreign economic downturns and political instability, which may adversely affect the Company's ability to obtain materials and conduct business in Taiwan.

Our sole manufacturing location for ZUNVEYL is located in Taiwan. There are risks inherent in manufacturing internationally, including the following: different regulatory environments; difficulties in enforcing agreements and collecting receivables through certain foreign legal systems; fluctuations in foreign currency exchange rates; tax rates in certain foreign countries that may exceed those in the United States and foreign earnings that may be subject to withholding requirements; the imposition of tariffs, exchange controls, or other trade restrictions; general economic and political conditions in countries where we operate or where our customers reside; government control of capital transactions, including the borrowing of funds for operations or the expatriation of cash; potential adverse tax consequences; security concerns and potential business interruption risks associated with political or social unrest in foreign countries where our facilities or assets are located; difficulties associated with managing a large organization spread throughout various countries; difficulties in enforcing intellectual property rights and weaker intellectual property rights protection in some countries; required compliance with a variety of foreign laws and regulations; and differing customer preferences. The factors described above may have a material adverse effect on our business, financial condition, and results of operations.

Foreign economic downturns may affect our results of manufacturing in the future. Additionally, other facts may have a material adverse effect on the Company's business, financial condition and results of operations, including:

- international economic and political changes;
- the imposition of governmental controls or changes in government regulations, including tax laws, regulations, and treaties;
- changes in, or impositions of, legislative or regulatory requirements regarding the pharmaceutical industry;
- compliance with U.S. and international laws involving international operations, including the Foreign Corrupt Practices Act and export control laws;
- restrictions on transfers of funds and assets between jurisdictions; and
- China-Taiwan geo-political instability.

Our Taiwanese partners are critical to our supply chain. Accordingly, our business, financial condition and results of operations may be affected by changes in governmental policies, taxation, inflation or interest rates in Taiwan and by social instability and diplomatic and social developments in or affecting Taiwan which are outside of our control. Since 1949, Taiwan and the Chinese mainland have been separately governed. The PRC claims that it is the only legitimate government in China, including Taiwan and mainland China, and that Taiwan is part of China. Although significant economic and cultural relations have been established between Taiwan and mainland China in the past few years, such as the adoption of the Economic Cooperation Framework Agreement and memorandum regarding cross-strait financial supervision, we cannot assure you that relations between Taiwan and mainland China will not become strained again. For example, the PRC government has refused to renounce the use of military force to gain control over Taiwan and, in March 2005, passed an Anti-Secession Law that authorized non-peaceful means and other necessary measures should Taiwan move to gain independence from the PRC. Past developments in relations between Taiwan and mainland China have on occasion depressed the market prices of the securities of companies doing business in Taiwan. Such initiatives

and actions are commonly viewed as having a detrimental effect to reunification efforts between Taiwan and mainland China. Relations between Taiwan and mainland China and other factors affecting military, political or economic conditions in Taiwan could materially and adversely affect our financial condition and results of operations, as well as the market price and the liquidity of our ordinary shares.

As the Company continues to manufacture in Taiwan, our success will depend in part, on our ability to anticipate and effectively manage these risks. The impact of any one or more of these factors could materially adversely affect our business, financial condition and results of operations.

If a situation arises that prohibits us from manufacturing in Taiwan now or in the future, we do believe we would be able to find replacement third-party manufacturer in another country. The Company has begun sourcing from manufacturers at different geographical regions to mitigate the situation, however this could deviate from our current timelines and cost structure. We may be forced to either temporarily or permanently discontinue the manufacturing and sale of our products which could expose us to legal liability, loss of reputation, and risk of loss or reduced profit.

Our product candidates have never been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale. In particular, we will need to develop a larger scale manufacturing process that is more efficient and cost-effective to commercialize our potential products, which may not be successful.

Our product candidates have never been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, lot consistency and timely availability of raw materials. There is no assurance that our third-party manufacturers will be successful in establishing a larger-scale commercial manufacturing process for our product candidates which achieves our objectives for manufacturing capacity and cost of goods. In addition, there is no assurance that our third-party manufacturers will be able to manufacture our product candidates to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of such products or to meet potential future demand. Our failure to properly or adequately scale up manufacturing for commercial scale would adversely affect our business, results of operations and financial condition.

The manufacture of drugs is complex, and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide adequate supply of our product candidates for clinical trials or our products for patients, could be delayed or prevented.

Manufacturing drugs, especially in large quantities, is complex and may require the use of innovative technologies. Each lot of an approved drug product must undergo thorough testing for identity, strength, quality, purity and potency. Manufacturing drugs requires facilities specifically designed for and validated for this purpose, as well as sophisticated quality assurance and quality control procedures. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures or product recalls. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable quality and efficacy of the products before and after such changes. If our third-party manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization as a result of these challenges, or otherwise, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

The successful commercialization of ZUNVEYL and our other product candidates which may obtain approval will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage, reimbursement levels and pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those drugs and decrease our ability to generate revenue.

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 our product candidates, if approved. Our ability to achieve acceptable levels of coverage and reimbursement for products by governmental authorities, private health insurers and other organizations will have an effect on our ability to successfully commercialize our product candidates. Even if we obtain coverage for our product candidates by a third-party payor, the resulting reimbursement payment rates may not be adequate or may

require co-payments that patients find unacceptably high. We cannot be sure that coverage and reimbursement in the United States, the European Union or elsewhere will be available for our product candidates or any product that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future.

Third-party payors increasingly are challenging prices charged for biopharmaceutical products and services, and many third-party payors may refuse to provide coverage and reimbursement for particular drugs or biologics when an equivalent generic drug, biosimilar or a less expensive therapy is available. It is possible that a third-party payor may consider our product candidates as substitutable and only offer to reimburse patients for the cost of the less expensive product. Even if we show improved efficacy or improved convenience of administration with our product candidates, pricing of existing third-party therapeutics may limit the amounts we will be able to charge for our product candidates. These payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed products at levels that are too low to enable us to realize an appropriate return on our investment in our product candidates. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our product candidates and may not be able to obtain a satisfactory financial return on our investment in the development of product candidates.

There is significant uncertainty related to the insurance coverage and reimbursement of newly -approved products. In the United States, third-party payors, and governmental healthcare plans, such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs and biologics will be covered. The Medicare and Medicaid programs increasingly are used as models in the United States for how private payors and other governmental payors develop their coverage and reimbursement policies for drugs and biologics. Some third-party payors may require pre-approval of coverage for new or innovative devices or drug therapies before they will reimburse healthcare providers who use such therapies. We cannot predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our product candidates.

No uniform policy for coverage and reimbursement for products exists among third -party payors in the United States. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Furthermore, rules and regulations regarding reimbursement change frequently, in some cases on short notice, and we believe that changes in these rules and regulations are likely.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe and other foreign jurisdictions have and will continue to put pressure on the pricing and usage of our product candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medical products, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amounts that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our product candidates may be reduced compared with the United States and may be insufficient to generate commercially-reasonable revenue and profits.

Moreover, increasing efforts by governmental and third -party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products, and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of our product candidates due to the trend toward managed health care, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and biologics and surgical procedures and other treatments, has become intense. As a result, increasingly high barriers are being erected to the entry of new products.

We currently have no sales organization. If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell ZUNVEYL or our other product candidates, if approved, effectively in the United States and foreign jurisdictions or generate product revenue.

We currently do not have a marketing or sales organization. In order to commercialize ZUNVEYL and our other product candidates, which may obtain approval, in the United States and foreign jurisdictions, we must build our marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If any of our product candidates receive regulatory approval, we expect to establish a sales organization with technical expertise and supporting distribution capabilities to commercialize each such product candidate, which will be expensive and time consuming. We have no prior experience in the marketing, sale and distribution of biopharmaceutical products, and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and 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. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. We may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our product candidates. If we are not successful in commercializing our product candidates or any future product candidates, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

Risks Related to Our Intellectual Property

Our success depends on our ability to obtain and maintain patent protection for our technology and product candidates including our lead product, ZUNVEYL formerly known as ALPHA-1062. If such protection is not obtained, the scope of the patent protection obtained is not sufficiently broad, or we lose such protection, we may not be able to compete effectively in our markets.

We rely, and will continue to rely, upon a combination of patents, trademarks, trade secret protection and confidentiality agreements with employees, consultants, collaborators, advisors and other third parties to protect the intellectual property related to our current and future drug development programs and product candidates. Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our technology and product candidates. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our current and future drug development programs and product candidates, successfully defend our intellectual property rights against third-party challenges and successfully enforce our intellectual property rights to prevent third-party infringement. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner.

It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may choose not to seek patent protection for certain innovations or products and may choose not to pursue patent protection in certain jurisdictions, and under the laws of certain jurisdictions, patents or other intellectual property rights may be unavailable or limited in scope and, in any event, any patent protection we obtain may be limited. As a result, some of our product candidates are not, and in the future may not be, protected by patents. We generally apply for patents in those countries where we intend to make, have made, use, offer for sale, or sell products and where we assess the risk of infringement to justify the cost of seeking patent protection. However, we do not seek protection in all countries where we intend to sell products and we may not accurately predict all the countries where patent protection would ultimately be desirable. If we fail to timely file a patent application in any such country, we may be precluded from doing so at a later date. The patent applications that we own may fail to result in issued patents with claims that cover any of our product candidates in the United States or in other foreign countries. We may also inadvertently make statements to regulatory agencies during the regulatory approval process that may be inconsistent with positions that have been taken during prosecution of our patents, which may result in such patents being narrowed, invalidated or held unenforceable, and vice versa that may affect the regulatory approval process.

The patents and patent applications that we own may fail to result in issued patents with claims that protect any of our product candidates in the United States or in other foreign countries. We cannot guarantee any current or future patents will provide us with any meaningful protection or competitive advantage. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found, which can prevent a patent from issuing from a pending patent application, or be used to invalidate a patent. The examination process may require us to narrow our claims, which may limit the scope of patent protection that we may obtain. Even if patents do successfully issue based on our patent applications, and even if such patents cover our product candidates, uses of our product candidates, or other aspects related to our product candidates, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated or held unenforceable, any of which could limit our ability to prevent competitors and other third parties from developing and marketing similar products or limit the length of terms of patent protection we may have for our products and technologies. Other companies may also design around technologies we have patented or developed. Any successful opposition to these patents or any other patents owned by us in the future could deprive us of rights necessary for the successful commercialization of any of our product candidates, if approved. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced. If any of our patents are challenged, invalidated, circumvented by third parties or otherwise limited or expire prior to the commercialization of our products, and if we do not own or have exclusive rights to other enforceable patents protecting our products or other technologies, competitors and other third parties could market products and use processes that are substantially similar to, or superior to, ours and our business would suffer.

If the patent applications we hold with respect to our development programs and product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for any of our product candidates, it could dissuade companies from collaborating with us to develop product candidates, and threaten our ability to commercialize, future products. Our pending applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Any such outcome could harm our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has in recent years been the subject of much litigation. The standards that the USPTO and its foreign counterparts use to grant patents are not always applied predictably or uniformly. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. For example, European patent law restricts the patentability of methods of treatment of the human body more than U.S. law does. Publications of discoveries in scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or product candidates, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Patent reform legislation in the United States, including the Leahy-Smith America Invents Act, or the Leahy-Smith Act, could increase those uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. The Leahy-Smith Act was signed into law on September 16, 2011 and includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. After March 15, 2013, under the Leahy-Smith Act, the United States transitioned to a first inventor to file system in which, assuming that the other statutory requirements are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. The Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications, our ability to obtain future patents, and the enforcement or defense of our issued patents, all of which could harm our business, financial condition, results of operations and prospects.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in opposition, derivation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging our owned patent rights. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products.

Moreover, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after the earliest filed application in a family. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. We note that certain of our U.S. patents directed toward ZUNVEYL and ALPHA-0602 are set to expire in 2026. In relation to these particular expiring patents we have other patents which we believe are sufficient to cover our patent protection needs in relation to ZUNVEYL and ALPHA-0602. However, we may be wrong in this assessment or face unforeseen difficulties in relation to our patent coverage which could adversely impact the Company.

Without patent protection for our current or future product candidates, we may be open to competition from generic versions of such products. 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 candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

We may not be able to protect our intellectual property rights throughout the world, which may harm our business.

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. The requirements for patentability may differ in certain countries, particularly developing countries, and the breadth of patent claims allowed can be inconsistent. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

We do not have patent rights in certain foreign countries in which a market may exist. Moreover, in foreign jurisdictions where we do have patent rights, proceedings to enforce such rights could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, and our patent applications at risk of not issuing. Additionally, such proceedings could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Thus, we may not be able to stop a competitor from marketing and selling in foreign countries products and services that are the same as or similar to our products and services, and our competitive position in the international market would be harmed.

Many countries, including European Union countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under specified circumstances to grant licenses to third parties. In those countries, we may have limited remedies if patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop.

If we do not obtain protection under the Hatch-Waxman Amendments by obtaining data exclusivity, our business may be harmed.

Our commercial success will largely depend on our ability to obtain market exclusivity in the United States and other countries with respect to our drug candidates and their target indications. Depending upon the timing, duration and specifics of FDA marketing approval of our drug candidates, certain of our product candidates may be eligible for marketing exclusivity. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity, or NCE. A drug is an NCE if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. If market exclusivity is granted for an NCE, during the exclusivity period, the FDA may not accept for review or approve an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed in the FDA's publication *Approved Drug Products with Therapeutic Equivalence Evaluations*, which we refer to as the Orange Book, with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages, dosage forms or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and prohibits the FDA from approving an ANDA, or a 505(b)(2) NDA submitted by another company with overlapping conditions associated with the new clinical investigations for the three-year period. Clinical investigation exclusivity does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of an NDA for the same drug. However, an applicant submitting an NDA would be required to 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.

If we are unable to obtain such marketing exclusivity for our product candidates, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to obtain approval of competing products and launch their product earlier than might otherwise be the case.

We did not receive any FDA exclusivity associated with the approval of our NDA 218549 for ZUNVEYL.

The validity, scope and enforceability of any patents listed in the Orange Book that cover our product candidates including our lead product ZUNVEYL can be challenged by third parties.

If a product candidate is approved by the FDA, one or more third parties may challenge the current patents, or patents that may issue in the future, within our portfolio which could result in the invalidation of, or render unenforceable, some or all of the relevant patent claims or a finding of non-infringement. For example, if a third party files an application under Section 505(b)(2) or an ANDA for a generic drug containing any of our product candidates, and relies in whole or in part on studies conducted by or for us, the third party will be required to certify to the FDA that either: (1) there is no patent information listed in the Orange Book with respect to our NDA for the applicable approved drug candidate; (2) the patents listed in the Orange Book have expired; (3) the listed patents have not expired, but will expire on a particular date and approval is sought after patent expiration; or (4) the listed patents are invalid or will not be infringed by the manufacture, use or sale of the third party's generic drug. A certification that the new drug will not

infringe the Orange Book-listed patents for the applicable approved drug candidate, or that such patents are invalid, is called a paragraph IV certification. If the third party submits a paragraph IV certification to the FDA, a notice of the paragraph IV certification must also be sent to us once the third party's ANDA is accepted for filing by the FDA. We may then initiate a lawsuit to defend the patents identified in the notice. The filing of a patent infringement lawsuit within 45 days of receipt of the notice automatically prevents the FDA from approving the third party's ANDA until the earliest of 30 months or the date on which the patent expires, the lawsuit is settled, or the court reaches a decision in the infringement lawsuit in favor of the third party. If we do not file a patent infringement lawsuit within the required 45-day period, the third party's ANDA will not be subject to the 30-month stay of FDA approval.

Moreover, a third party may challenge the current patents, or patents that may issue in the future, within our portfolio which could result in the invalidation of some or all of the patents that might otherwise be eligible for listing in the Orange Book for one of our products. If a third party successfully challenges all of the patents that might otherwise be eligible for listing in the Orange Book for one of our products, we will not be entitled to the 30-month stay of FDA approval upon the filing of an ANDA for a generic drug containing any of our product candidates, and relies in whole or in part on studies conducted by or for us.

Litigation or other proceedings to enforce or defend intellectual property rights are often very complex in nature, may be very expensive and time-consuming, may divert our management's attention from our core business, and may result in unfavorable results that could limit our ability to prevent third parties from competing with our drug candidates.

One of our patent listings in the Orange Book has an inadvertent inaccuracy which may subject us to administrative proceedings before the FDA or litigation claims.

Our listing in the Orange Book for USP 9763953 is inadvertently inaccurate in that it currently states that the patent expires on May 16, 2027 when the patent actually expires on December 1, 2026. While we have submitted for a correction on this inaccuracy, which we expect to occur in the next publication of the Orange Book, the inaccuracy could subject us to administrative proceedings before the FDA, litigation claims against us for an inaccurate listing and could potentially give rise to penalties for the Company for perjury.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for noncompliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and other foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While 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 patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on our international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering any of our product candidates, our competitors might be able to enter the market earlier than anticipated, which would harm our business.

We may need to license intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

The issuance of a patent does not give us the right to practice the patented invention. A third party may hold intellectual property, including patent rights that are important or necessary to the development of our product candidates. Third parties may also have blocking patents that could prevent us from marketing our products or practicing our own patented technology. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our drug candidates, in which case we would be required to obtain a license from these third parties on commercially reasonable terms. Such a license may not be available, or it may not be available on commercially reasonable terms, in which case our business would be harmed.

The risks described elsewhere pertaining to our intellectual property rights also apply to any intellectual property rights that we may in-license, and any failure by us or our potential licensors to obtain, maintain, defend and enforce these rights could harm our business. In some cases we may not have control over the prosecution, maintenance or enforcement of the patents that we may license, and may not have sufficient ability to provide input into the patent prosecution, maintenance and defense process with respect to such patents, and our potential licensors may fail to take the steps that we believe are necessary or desirable in order to obtain, maintain, defend and enforce the licensed patents.

Third-party claims or litigation alleging infringement of patents or other proprietary rights, or seeking to invalidate patents or other proprietary rights, may delay or prevent the development and commercialization of any of our product candidates including our lead product, ZUNVEYL.

Our commercial success depends in part on our avoiding infringement and other violations of the patents and proprietary rights of third parties. However, while certain research, development and commercialization activities may be protected by the safe harbor provision of the Hatch Waxman Act, other activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, derivation and administrative law proceedings, *inter partes* review and post-grant review before the USPTO, as well as oppositions and similar processes in foreign jurisdictions. Numerous United States and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our collaborators are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as we gain greater visibility and market exposure as a public company, the risk increases that our product candidates or other business activities may be subject to claims of infringement of the patent and other proprietary rights of third parties. Third parties may assert that we are infringing their patents or employing their proprietary technology without authorization.

There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire. Similarly, if any third-party patent was to be held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patent may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all. In addition, we may be subject to claims that we are infringing other intellectual property rights, such as trademarks or copyrights, or misappropriating the trade secrets of others, and to the extent that our employees, consultants or contractors use intellectual property or proprietary information owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful infringement or other intellectual property claim against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our affected products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

Some of our competitors may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. In addition, intellectual property litigation, regardless of its outcome, may cause negative publicity, adversely impact prospective customers, cause product shipment delays, or prohibit us from manufacturing, marketing or otherwise commercializing our products, services and technology. Any uncertainties resulting from the initiation and continuation of any litigation could adversely impact our ability to raise additional funds or otherwise harm our business, results of operation, financial condition or cash flows. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments, which could adversely impact the price of our common shares and warrants. If securities analysts or investors perceive these results to be negative, it could adversely impact the price of our common shares and warrants. The occurrence of any of these events may harm our business, results of operation, financial condition or cash flows.

We cannot provide any assurances that third-party patents do not exist which might be enforced against our drugs or product candidates, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties or other forms of compensation to third parties.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might harm our ability to develop and market our products.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is or may be relevant to or necessary for the commercialization of our product candidates in any jurisdiction. Patent applications in the United States and elsewhere are not published until approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. In addition, U.S. patent applications filed before November 29, 2000 and certain U.S. patent applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Therefore, patent applications covering our products could have been filed by others without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our products.

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, and our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

If we fail to identify and correctly interpret relevant patents, we may be subject to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of our products that are held to be infringing. We might, if possible, also be forced to redesign products or services so that we no longer infringe the third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

We may become involved in lawsuits to protect or enforce our patents or our other intellectual property rights, which could be expensive, time consuming and unsuccessful. Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.

Competitors may infringe or otherwise violate our patents or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file legal claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. As a result, we cannot predict with certainty how much protection, if any, will be given to our

patents if we attempt to enforce them and they are challenged in court. Further, even if we prevail against an infringer in U.S. district court, there is always the risk that the infringer will file an appeal and the district court judgment will be overturned at the appeals court and/or that an adverse decision will be issued by the appeals court relating to the validity or enforceability of our patents. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not being issued. The initiation of a claim against a third party may also cause the third party to bring counter claims against us such as claims asserting that our patents are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of written description or statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as ex parte reexaminations, *inter partes* review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on our current or future product candidates.

We may not be able to detect or prevent misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Our business could be harmed if in litigation the prevailing party does not offer us a license on commercially reasonable terms. Any litigation or other proceedings to enforce our intellectual property rights may fail, and even if successful, may result in substantial costs and distract our management and other employees.

Even if we establish infringement, the 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 our confidential information could be compromised by disclosure during this type of litigation. There could also 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 harm the price of our common shares and warrants.

Because of the expense and uncertainty of litigation, we may conclude that even if a third party is infringing our issued patent, any patents that may be issued as a result of our pending or future patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of our Company or our shareholders. In such cases, we may decide that the more prudent course of action is to simply monitor the situation or seek some other non-litigious action or solution.

Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our common shares to decline.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our existing products, programs or intellectual property could be diminished. Accordingly, the market price of our common shares may decline. Such announcements could also harm our reputation or the market for our future products, which could have a material adverse effect on our business.

Derivation proceedings may be necessary to determine priority of inventions, and an unfavorable outcome may require us to cease using the related technology or to attempt to license rights from the prevailing party.

Derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensor. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with such proceedings

could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring our product candidates to market.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities and have a harmful effect on the success of our business.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our 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, and if securities analysts or investors perceive these results to be negative, it could adversely impact the price of our common shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials and internal research programs. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace, including compromising our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development collaborations that would help us commercialize ZUNVEYL or our future product candidates, if approved.

Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our product including our lead product, ZUNVEYL.

The United States has recently enacted and implemented wide-ranging patent reform legislation. In addition, patent reform legislation may pass in the future that could lead to additional uncertainties and increased costs surrounding the prosecution, enforcement and defense of our patents and pending patent applications. The United States Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on actions by the United States Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we own or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions or changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we own or that we may obtain in the future. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by United States and foreign legislative bodies. Those changes may materially affect our patents or patent applications and our ability to obtain additional patent protection in the future. The United States federal government retains certain rights in inventions produced with its financial assistance under the Bayh-Dole Act. The federal government retains a "nonexclusive, nontransferable, irrevocable, paid -up license" for its own benefit. The Bayh-Dole Act also provides federal agencies with "march -in rights." March-in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a "nonexclusive, partially exclusive, or exclusive license" to a "responsible applicant or applicants." If the patent owner refuses to do so, the government may grant the license itself.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclose, resulting in harm to our business and competitive position.

Because we expect to rely on third parties to manufacture our product candidates, and we expect to continue to collaborate with third parties on the development of our product candidates, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to beginning research or disclosing proprietary information.

These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Any disclosure, either intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third-party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market. Further, adequate remedies may not exist in the event of unauthorized use or disclosure. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may harm our business and results of operations.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. Policing unauthorized use of our intellectual property is difficult, expensive and time-consuming, and we may be unable to determine the extent of any unauthorized use. Moreover, enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

We may be subject to claims that our employees, consultants, independent contractors or we have wrongfully used or disclosed confidential information of their former employers or other third parties.

We do and may employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, competitors or potential competitors. Although we seek to protect our ownership of intellectual property rights by ensuring that our agreements with our employees, collaborators and other third parties with whom we do business include provisions requiring such parties to assign rights in inventions to us and to not use the confidential information of their former employer, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or product candidates. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees. Moreover, any such litigation or the threat thereof may harm our reputation, our ability to form strategic alliances or sublicense our rights to collaborators, engage with scientific advisors or hire employees or consultants, each of which would harm our business, results of operations and financial condition.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

As is common in the pharmaceutical industry, in addition to our employees, we engage the services of consultants to assist us in the development of our product candidates. Many of these consultants, and many of our employees, were previously employed at, or may have previously provided or may be currently providing consulting services to, other pharmaceutical companies including our competitors or potential competitors. We may become subject to claims that we, our employees or a consultant inadvertently or otherwise used or disclosed trade secrets or other information proprietary to their former employers or their former or current clients. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team and other employees.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our ownership of our patents, trade secrets or other intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

Any trademarks we have obtained or may obtain may be infringed or successfully challenged, resulting in harm to our business.

We expect to rely on trademarks as one means to distinguish any of our drug candidates that are approved for marketing from the products of our competitors. Once we select new trademarks and apply to register them, our trademark applications may not be approved. Third parties may oppose or attempt to cancel our trademark applications or trademarks, or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our drugs, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Our competitors may infringe our trademarks and we may not have adequate resources to enforce our trademarks. If we attempt to enforce our trademarks and assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Our intellectual property agreements with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology.

Certain provisions in our intellectual property agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement, either of which could harm our business, financial condition, results of operations and prospects. As a consequence of these and other factors, our patent applications may fail to result in issued patents with claims that cover our product candidates in the United States or in other countries. Such a loss of patent protection could harm our business.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

Once granted, patents may remain open to invalidity challenges including opposition, interference, re-examination, post-grant review, *inter partes* review, nullification or derivation action in court or before patent offices or similar proceedings for a given period after allowance or grant, during which time third parties can raise objections against such grant. In the course of such proceedings, which may continue for a protracted period of time, the patent owner may be compelled to limit the scope of the allowed or granted claims thus attacked, or may lose the allowed or granted claims altogether.

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In addition, the degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, provide a barrier to entry against our competitors or potential competitors, or permit us to maintain our competitive advantage. Moreover, if a third party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative:

- others may be able to make product that is similar to product candidates we intend to commercialize that is not covered by the patents that we own;
- we, or any collaborators might not have been the first to make or reduce to practice the inventions covered by the issued patents or pending patent applications that we own;
- we or any collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights, and then use the information learned from such activities to develop competitive products for sale in our major commercial markets; and we may not develop additional proprietary technologies that are patentable;
- third parties performing manufacturing or testing for us using our products or technologies could use the intellectual property of others without obtaining a proper license;
- parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights over that intellectual property;
- we may not develop additional proprietary technologies that are patentable;
- we may not be able to obtain and maintain necessary licenses on commercially reasonable terms, or at all; and
- the patents of others may harm our business.

Should any of these events occur, they could significantly harm our business and results of operations.

We have not yet registered our trademarks in certain jurisdictions. Failure to secure those registrations could adversely affect our business.

None of our trademarks are registered with the U.S. Patent and Trademark Office or any such foreign office. If we are unable to secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would, which could adversely affect our business. Any trademark applications we have filed for our product or product candidates or may file in the future are not guaranteed to be allowed for registration, and even if they are, we may fail to maintain or enforce such registered trademarks. During trademark registration proceedings in any jurisdiction, we may receive rejections. We are given an opportunity to respond to those rejections, but we may not be able to overcome such rejections. In addition, in the USPTO and in comparable agencies in many other jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings.

Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our business, financial condition, results of operations and growth prospects.

Risks Related to Government Regulation

The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable.

Rigorous preclinical testing and clinical trials and an extensive regulatory approval process must be successfully completed in the United States and in many foreign jurisdictions before a new drug can be approved for marketing. Obtaining approval by the FDA and other comparable foreign regulatory authorities is costly, unpredictable, typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the type, complexity and novelty of the product candidates involved. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other data. Even if we eventually complete clinical testing and receive approval for our product candidates, the FDA and other comparable foreign regulatory authorities may approve our product candidates for a more limited indication or a narrower patient population than we originally requested or may impose other prescribing limitations or warnings that limit the product's commercial potential. We have only submitted for regulatory approval of our lead product and have not submitted any of our other product candidates. We have not obtained regulatory approval for any product candidate other than ZUNVEYL for mild-to-moderate dementia of the Alzheimer's type in adults (Alzheimer's disease), and it is possible that none of our other product candidates will ever obtain regulatory approval. Further, development of our product candidates and/or regulatory approval may be delayed for reasons beyond our control. We cannot provide any assurance that any product candidates we may develop will progress through required clinical testing and obtain the regulatory approvals necessary for us to begin selling them.

We have conducted and completed only a limited number of pivotal clinical trials, have limited experience in managing the regulatory approval process with the FDA and have not received approval for any of our product candidates from the FDA or any other regulatory authority. Applications for our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or other comparable foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials;
- the FDA or other comparable foreign regulatory authorities may determine that our product candidates are not safe and effective, are only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- the FDA or other comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- we may be unable to demonstrate to the FDA or other comparable foreign regulatory authorities that our product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA or other comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or other comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations and prospects. Any delay or failure in seeking or obtaining required approvals would have a material and adverse effect on our ability to generate revenue from any particular product candidates we are developing and for which we are seeking approval. Furthermore, any regulatory approval to market a drug may be subject to significant limitations on the approved uses or indications for which we may market, promote and advertise the drug or the labeling or other restrictions. In addition, the FDA has the authority to require a Risk Evaluation and Mitigation Strategy (REMS) plan as part of approving an NDA, or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug. These requirements or restrictions might include limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. These limitations and restrictions may significantly limit the size of the market for the drug and affect reimbursement by third-party payors.

We are also subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries, and generally includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval.

The FDA and other comparable foreign regulatory authorities may not accept data from trials conducted in locations outside of their jurisdiction.

Our ongoing clinical trials are being undertaken in the United States. We may choose to conduct additional clinical trials internationally. The acceptance of study data by the FDA or other comparable foreign regulatory authority from clinical trials conducted outside of their respective jurisdictions may be subject to certain conditions. In cases where data from United States clinical trials are intended to serve as the basis for marketing approval in the foreign countries outside the United States, the standards for clinical trials and approval may be different. There can be no assurance that any United States or foreign regulatory authority would accept data from trials conducted outside of its applicable jurisdiction. If the FDA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

Even following our regulatory approval of ZUNVEYL or for a future product candidate, our products will remain subject to regulatory scrutiny.

ZUNVEYL, as well as any of our future product candidates if approved, will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMPs and adherence to commitments made in any approved marketing application. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

We will have to comply with requirements concerning advertising and promotion for any future products. Promotional communications with respect to prescription drugs and biologics are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. We may not promote products for indications or uses for which they do not have approval. The holder of an approved application must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

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If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approval;
- suspend any of our clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- impose restrictions on our operations, including closing our contract manufacturers' facilities; or
- seize or detain products, or require a product recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from any future products. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our Company and our operating results will be adversely affected.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.

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. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and reimbursement of the product candidate in those countries. However, a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical 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.

Obtaining foreign regulatory approvals and establishing and maintaining compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we or any future collaborator fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our potential product candidates will be harmed.

Where appropriate, we plan to secure approval from the FDA or comparable foreign regulatory authorities through the use of accelerated registration pathways. If we are unable to obtain such approval, we may be required to conduct additional preclinical studies or clinical trials beyond those that we contemplate, which could increase the expense of obtaining, and delay the receipt of, necessary marketing approvals. Even if we receive accelerated approval from the FDA, if our confirmatory trials do not verify clinical benefit, or if we do not comply with rigorous post-marketing requirements, the FDA may seek to withdraw accelerated approval.

Where possible, we plan to pursue accelerated development strategies in areas of high unmet need. We may seek an accelerated approval pathway for our one or more of our product candidates. Under the accelerated approval provisions in the Federal Food, Drug, and Cosmetic Act, and the FDA's implementing regulations, the FDA may grant accelerated approval to a product candidate designed to treat a serious or life-threatening condition that provides meaningful therapeutic benefit over available therapies upon a determination that the product candidate has an effect on a surrogate

endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as irreversible morbidity or mortality. 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. An intermediate clinical endpoint is a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit. The accelerated approval pathway may be used in cases in which the advantage of a new drug over available therapy may not be a direct therapeutic advantage, but is a clinically important improvement from a patient and public health perspective. If granted, accelerated approval is usually contingent on the sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. If such post-approval studies fail to confirm the drug's clinical benefit, the FDA may withdraw its approval of the drug.

Prior to seeking such accelerated approval, we will seek feedback from the FDA and will otherwise evaluate our ability to seek and receive such accelerated approval. There can be no assurance that after our evaluation of the feedback and other factors we will decide to pursue or submit an NDA for accelerated approval or any other form of expedited development, review or approval. Similarly, there can be no assurance that after subsequent FDA feedback we will continue to pursue or apply for accelerated approval or any other form of expedited development, review or approval, even if we initially decide to do so. Furthermore, if we decide to submit an application for accelerated approval or under another expedited regulatory designation (e.g., breakthrough therapy designation), there can be no assurance that such submission or application will be accepted or that any expedited development, review or approval will be granted on a timely basis, or at all. The FDA or other comparable foreign regulatory authorities could also require us to conduct further studies prior to considering our application or granting approval of any type. A failure to obtain accelerated approval or any other form of expedited development, review or approval for our product candidate would result in a longer time period to commercialization of such product candidate, could increase the cost of development of such product candidate and could harm our competitive position in the marketplace.

Healthcare legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates.

We operate in a highly regulated industry. The commercial potential for our approved products, if any, could be affected by changes in healthcare spending and policy in the United States and abroad. New laws, regulations or judicial decisions or new interpretations of existing laws, regulations or decisions, related to healthcare availability, the method of delivery or payment for healthcare products and services could adversely affect our business, operations and financial condition. The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that may affect our ability to profitably sell our product and product candidates, if approved. The United States government, state legislatures and foreign governments also have shown significant interest in implementing cost-containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs and biologics.

The Affordable Care Act was intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. There have been significant ongoing administrative, executive and legislative efforts to modify or eliminate the Affordable Care Act. For example, the Tax Act enacted on December 22, 2017 repealed the shared responsibility payment for individuals who fail to maintain minimum essential coverage under section 5000A of the Internal Revenue Code, commonly referred to as the individual mandate. The Trump administration issued executive orders which sought to reduce burdens associated with the Affordable Care Act and modified how it was implemented. Other legislative changes have been proposed and adopted since passage of the Affordable Care Act. The Affordable Care Act has also been subject to challenges in the courts. On December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. On December 18, 2019, the Fifth Circuit U.S. Court of Appeals held that the individual mandate is unconstitutional and remanded the case to the Texas District Court to reconsider its earlier invalidation of the entire Affordable Care Act. An appeal was taken to the U.S. Supreme Court which heard oral arguments in the case on November 10, 2020.

On June 17, 2021, the Supreme Court ruled that the plaintiffs lacked standing to challenge the law as they had not alleged personal injury traceable to the allegedly unlawful conduct. As a result, the Supreme Court did not rule on the constitutionality of the ACA or any of its provisions.

Further changes to and under the Affordable Care Act remain possible, although the new Biden administration has signaled that it plans to build on the Affordable Care Act and expand the number of people who are eligible for subsidies under it. President Biden indicated that he intends to use executive orders to undo changes to the Affordable Care Act made by the Trump administration and would advocate for legislation to build on the Affordable Care Act. It is unknown what form any such changes or any law proposed to replace the Affordable Care Act would take, and how or whether it may affect our business in the future. We expect that changes to the Affordable Care Act, the Medicare and Medicaid programs, changes allowing the federal government to directly negotiate drug and biologic prices 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.

The Budget Control Act of 2011 has resulted in reductions in spending on certain government programs, including aggregate reductions to Medicare payments to healthcare providers of up to 2.0% per fiscal year. These reductions have been extended until 2030 unless additional Congressional action is taken.

Any reduction in reimbursement from Medicare, Medicaid, or other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain and maintain profitability of our product and product candidates, if approved.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we or any related third parties are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or any related third parties are not able to maintain regulatory compliance, ZUNVEYL or any future product candidates may lose any marketing approval that may have been obtained and we may not achieve or sustain profitability, which would materially affect our business, financial condition and results of operations.

Our business operations and current and future relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute our product candidates, if approved. Such laws include, without limitation:

- the U.S. federal civil and criminal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under U.S. federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. federal false claims laws, including the False Claims Act, which can be enforced through whistleblower actions, and civil monetary penalties laws, which, among other things, impose criminal and civil penalties against individuals or entities for knowingly presenting, or causing to be presented, to the U.S. federal government, claims for payment or approval that are false or fraudulent, knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

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- HIPAA, which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, 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; similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the HITECH and its implementing regulations, which also imposes certain obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information without appropriate authorization by covered entities, such as health plans, healthcare clearinghouses and healthcare providers, as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- the U.S. Physician Payments Sunshine Act and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the government information related to certain payments and other transfers of value to physicians, as defined by such law, and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members. Effective January 1, 2023, the U.S. federal physician transparency reporting requirements extended to include transfers of value made during the previous year to certain non-physician providers such as physician assistants and nurse practitioners;
- analogous U.S. state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state and local laws that require the registration of pharmaceutical sales representatives; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; and state laws governing the privacy, security and disposal of personal information and health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts;
- the U.S. Foreign Corrupt Practices Act of 1977, as amended, which prohibits, among other things, U.S. companies and their employees and agents from authorizing, promising, offering or providing, directly or indirectly, corrupt or improper payments or anything else of value to foreign government officials, employees of public international organizations and foreign government owned or affiliated entities, candidates for foreign political office and foreign political parties or officials thereof; and
- similar data protection and healthcare laws and regulations in the European Union and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers and laws governing the privacy and security of personal data, including the GDPR, which imposes obligations and restrictions on the collection and use of personal data relating to individuals located in the European Union and European Economic Area (including with regard to health data).

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, such as Medicare and Medicaid or similar programs in other

countries or jurisdictions, disgorgement, imprisonment, contractual damages, reputational harm, diminished profits and the curtailment or restructuring of our operations. Further, defending against any such actions can be costly and time-consuming and may require significant personnel resources. Even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

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 our business may rely, which could negatively impact our 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, 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 U.S. Securities and Exchange Commission (SEC) and other government agencies on which our 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 new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, in recent years, including in 2018 and 2019, the U.S. government shut down several times and certain regulatory agencies, such as the FDA and the SEC, had to furlough critical employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover us for costs and expenses, we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of hazardous and flammable materials, including chemicals and biological materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or commercialization efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could impair our ability to compete in domestic and international markets. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as

amended, or FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors and other collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties to sell our products outside the United States, to conduct clinical trials and/or to obtain necessary permits, licenses, patent registrations and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

Risks Related to Employee Matters and Growth Management

We will need to increase the size of our organization, and we may experience difficulties in managing growth.

As of December 31, 2024, we had 3 full-time employees and 2 part-time contractors in total. We will need to continue to expand our managerial, operational, finance and other resources in order to manage our operations and clinical trials, continue our development activities and commercialize ZUNVEYL, our lead product candidate, or any future product candidates. Our management and personnel, systems and facilities currently in place may not be adequate to support this future growth. Our need to effectively execute our growth strategy requires that we:

- manage our clinical trials effectively;
- identify, recruit, retain, incentivize and integrate additional employees, including personnel focused on research and development and, sales;
- manage our internal development and operational efforts effectively while carrying out our contractual obligations to third parties; and
- continue to improve our operational, financial and management controls, reports systems and procedures.

Our future financial performance and our ability to develop, manufacture and commercialize ZUNVEYL and our product candidates, if approved, will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert financial and other resources, and a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time, to managing these growth activities.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize ZUNVEYL and our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

Our officers also serving as officers of Alpha Seven may give rise to a conflict of interest which may adversely impact the Company's interests.

Our Chief Executive Officer, Michael McFadden, and our Chief Operating Officer, Lauren D'Angelo, both serve as officers of Alpha Seven, a corporation in which we are expected to initially own approximately 86% of the issued and outstanding shares of common stock upon completion of the ALPHA 1062 out-licensing (see "*Prospectus Summary — Our Business — Future TBI Out-License*"). This could give rise to a conflict of interest in which our interests are different than those of Alpha Seven or in which the interests of our officers in relation to Alpha Seven are different than the interests of the Company and its stockholders. In such cases, if we are unable to effectively manage the conflict of interest through the oversight of our Board of Directors, our interests in Alpha Seven may be adversely impacted.

Our success is dependent on our ability to attract and retain highly qualified management and other clinical and scientific personnel.

Our success depends in part on our continued ability to attract, recruit, retain, manage, and motivate highly qualified management, clinical, and scientific personnel, and we face significant competition for experienced personnel. We are highly dependent upon our senior management, particularly our Chief Executive Officer, Michal McFadden, as well as our senior scientists and other members of our management team. The loss of services of any of these individuals could delay or prevent the successful development of our product pipeline, initiation or completion of our clinical trials and preclinical studies, regulatory approvals or the commercialization of ZUNVEYL or any future product candidates. Although we have executed employment agreements or offer letters with each member of our senior management team, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected. We do not currently maintain "key person" life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not have adequate compensation for the loss of the services of these individuals.

In addition, employment candidates and existing employees often consider the value of the stock awards they receive in connection with their employment. If the perceived benefits of our stock awards decline, either because we are a public company or for other reasons, it may harm our ability to recruit and retain highly skilled employees. Our employees may be more likely to leave us if the shares they own have significantly appreciated in value relative to the original purchase prices of the shares, or if the exercise prices of the options that they hold are significantly below the market price of our common stock.

Competition for qualified personnel in the biopharmaceutical field is intense due to the limited number of individuals who possess the skills and experience required by our industry. We will need to expand and effectively manage our managerial, operational, financial and other resources in order to successfully pursue our clinical development and commercialization efforts. We may not be successful in maintaining our unique company culture and continuing to attract or retain qualified management, clinical, and scientific personnel in the future due to the intense competition for qualified personnel among biopharmaceutical, biotechnology and other businesses. Our industry has experienced a high rate of turnover of management personnel in recent years. We may not be able to attract and retain quality personnel on acceptable terms, or at all. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output. If we are not able to attract, integrate, retain and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy.

Our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors, may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have an adverse effect on our results of operations.

We are exposed to the risk that our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or other unauthorized activities that violate the laws and regulations of the FDA and other similar regulatory bodies, including those laws that require the reporting of true, complete and accurate information to such regulatory bodies; manufacturing standards; U.S. federal and state healthcare fraud and abuse, data privacy laws and other similar non-U.S. laws; or laws that require the true, complete and accurate reporting of financial information or data. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of clinical trials, the creation of fraudulent data in our preclinical studies or clinical trials, or illegal misappropriation of product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. In addition, we are subject to the risk that a person or government could allege such fraud

or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and financial results, including, without limitation, the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid and other U.S. healthcare programs, other sanctions, imprisonment, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

If we are unable to establish sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to successfully sell or market our product candidates that obtain regulatory approval.

We currently do not have and have never had a marketing or sales team. In order to commercialize any product candidates, if approved, we must build marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services for each of the territories in which we may have approval to sell or market our product candidates. We may not be successful in accomplishing these required tasks.

Establishing an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates will be expensive and time-consuming and will require significant attention of our executive officers to manage. Any failure or delay in the development of our internal sales, marketing and distribution capabilities could adversely impact the commercialization of any of our product candidates that we obtain approval to market, if we do not have arrangements in place with third parties to provide such services, which is our preferred marketing and sales strategy, on our behalf. Alternatively, if we choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems, we will be required to negotiate and enter into arrangements with such third parties relating to the proposed collaboration and such arrangements may prove to be less profitable than commercializing the product on our own. If we are unable to enter into such arrangements when needed, on acceptable terms, or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval, or any such commercialization may experience delays or limitations. If we are unable to successfully commercialize our approved product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer, and we may incur significant additional losses.

We may explore strategic collaborations that may never materialize or may fail.

We may attempt to broaden the global reach of our platform by selectively collaborating with leading therapeutic companies and other organizations. As a result, we may periodically explore a variety of possible additional strategic collaborations in an effort to gain access to additional product candidates or resources. At the current time, we cannot predict what form such a strategic collaboration might take. In the event we do form such collaborations, we intend to retain significant economic and commercial rights to our programs in key geographic areas that are core to our long-term strategy. We are likely to face significant competition in seeking appropriate strategic collaborators, and strategic collaborations can be complicated and time consuming to negotiate and document. We may not be able to negotiate strategic collaborations on acceptable terms, or at all. We are unable to predict when, if ever, we will enter into any additional strategic collaborations because of the numerous risks and uncertainties associated with establishing them.

We may seek to grow our business through acquisitions of complementary businesses, and the failure to manage acquisitions, or the failure to integrate them with our existing business, could harm our financial condition and operating results.

From time to time, we may consider opportunities to acquire other companies, products or technologies that may enhance our product portfolio, manufacturing capabilities, expand the breadth of our markets or customer base, or advance our business strategies. Potential acquisitions involve numerous risks, including: problems assimilating the acquired service offerings, products or technologies; issues maintaining uniform standards, procedures, quality control and policies; unanticipated costs associated with acquisitions; diversion of management's attention from our existing

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business; risks associated with entering new markets in which we have limited or no experience; increased legal and accounting costs relating to the acquisitions or compliance with regulatory matters; and unanticipated or undisclosed liabilities of any target.

We have no current commitments with respect to any acquisition. We do not know if we will be able to identify acquisitions we deem suitable, whether we will be able to successfully complete any such acquisitions on favorable terms or at all, or whether we will be able to successfully integrate any acquired service offerings, products or technologies. Our potential inability to integrate any business, products or technologies effectively may adversely affect our business, results of operations and financial condition.

We will incur increased costs and demands upon management as a result of being a public company in the United States.

As a public company listed in the United States, we will incur significant additional legal, accounting and other expenses that we did not incur as a private company or a public company in Canada, including the cost of director and officer liability insurance. These additional costs could negatively affect our financial results. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the SEC, may increase legal and financial compliance costs and make some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain some types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management.

Risks Related to Our Common Shares, Pre-Funded Warrants and this Offering

Our stock price may be volatile and you may not be able to resell common shares at or above the price you paid.

The trading price of our common shares following this offering could be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In particular, the trading prices for biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic and world events. These factors include those discussed in this "Risk Factors" section of this prospectus and others such as:

- results from, and any delays in, our current and future clinical trials with ZUNVEYL or any other future clinical development programs, including any delays related to the COVID-19 pandemic;
- announcements of the regulatory approval of ZUNVEYL or approval or disapproval for any future product candidates;
- failure or discontinuation of any of our research and development programs;
- the termination of any future collaborations or license agreements;
- delays in the commercialization of ZUNVEYL or any future product candidates;
- public misperception regarding the use of our product candidates;
- acquisitions and sales of new products or product candidates, technologies or businesses;
- manufacturing and supply issues related to our product candidates for clinical trials or future product candidates for commercialization;
- quarterly variations in our results of operations or those of our competitors;

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- changes in coverage and recommendations by securities analysts;
- announcements by us or our competitors of new products or product candidates, significant contracts, commercial relationships, acquisitions or capital commitments;
- developments with respect to intellectual property rights;
- our commencement of, or involvement in, litigation;
- changes in financial estimates or guidance;
- any major changes in our board of directors or management;
- new legislation or regulation in the United States relating to the sale or pricing of pharmaceuticals;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- product liability claims or other litigation or public concern about the safety of our product candidates;
- market conditions in the biopharmaceutical sectors;
- general economic conditions in the United States and abroad; and
- other events or factors, including those resulting from pandemics, natural disasters, war, including the ongoing conflict in Ukraine, acts of terrorism or responses to these events.

In addition, the stock markets in general, and the markets for biopharmaceutical stocks in particular, have experienced extreme volatility that may have been unrelated to the operating performance of the Company. These broad market fluctuations may adversely affect the trading price or liquidity of our common shares.

An active, liquid and orderly market for our common shares may not develop, and you may not be able to resell your common shares at or above the public offering price.

There has been limited trading of our common shares on the OTCQB and CSE exchanges. Although our common shares are now listed on the Nasdaq Capital Market an active trading market may not develop or, if it is developed, may not be sustained. The lack of an active market may impair your ability to sell your common shares at the time you wish to sell them or at a price that you consider reasonable. An inactive market may also impair our ability to raise capital by selling shares and may impair our ability to acquire other product candidates, businesses or technologies using our shares as consideration.

We are an “emerging growth company” and a “smaller reporting company” and, as a result of the reduced disclosure and governance requirements applicable to emerging growth companies and smaller reporting companies, our common stock may be less attractive to investors.

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- not being required to hold a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following June 7, 2029, (b) in which we have total annual gross revenue of at least \$1.235 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

Under Section 107(b) of the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. Even after we no longer qualify as an emerging growth company, we may, under certain circumstances, still qualify as a “smaller reporting company,” which would allow us to take advantage of many of the same exemptions from disclosure requirements, including reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

We believe that we may be a “passive foreign investment company”, which may have adverse U.S. federal income tax consequences for U.S. investors.

We believe we were a “passive foreign investment company” (a “PFIC”) within the meaning of Section 1297 of the U.S. Internal Revenue Code of 1986, as amended (the “Code”) for our most recently completed taxable year and based on current business plans and financial expectations, we expect to be a PFIC for our current taxable year and may be a PFIC in subsequent tax years. If we are a PFIC for any year during a U.S. taxpayer's holding period of common shares or pre-funded warrants, then such U.S. taxpayer generally will be required to treat any gain realized upon a disposition of the common shares or pre-funded warrants, as applicable, or any so-called “excess distribution” received on its common shares or pre-funded warrants, as applicable, as ordinary income, and to pay an interest charge on a portion of such gain or distribution. In certain circumstances, the sum of the tax and the interest charge may exceed the total amount of proceeds realized on the disposition, or the amount of excess distribution received, by the U.S. taxpayer. Subject to certain limitations, these tax consequences may be mitigated if a U.S. taxpayer makes a timely and effective QEF Election (as defined below) or a Mark-to-Market Election (as defined below). In addition, U.S. taxpayers should be aware that there can be no assurances that we will satisfy the record keeping requirements that apply to a QEF (as defined below), or that we will supply U.S. taxpayers with information that such U.S. taxpayers are required to report under the QEF rules, in the event that we are a PFIC. Thus, U.S. Holders may not be able to make a QEF Election. A U.S. taxpayer who makes a Mark-to-Market Election with respect to the common shares generally must include as ordinary income each year the excess of the fair market value of the common shares over the taxpayer's basis therein. A Mark-to-Market Election will generally not be available with respect to the pre-funded warrants. Each potential investor who is a U.S. taxpayer should review the discussion below under the heading “*Certain Material U.S. Federal Income Tax Considerations — Passive Foreign Investment Company Rules*” in its entirety and should consult its own tax advisor regarding the tax consequences of the PFIC rules and the acquisition, ownership, and disposition of the common shares and pre-funded warrants.

Proposed legislation in the U.S. Congress, including changes in U.S. tax law, may adversely impact us and the value of the Common Shares and Pre-Funded Warrants.

Changes to U.S. tax laws (which changes may have retroactive application) could adversely affect us or holders of the common shares or pre-funded warrants. In recent years, many changes to U.S. federal income tax laws have been proposed and made, and additional changes to U.S. federal income tax laws are likely to continue to occur in the future.

The U.S. Congress is currently considering numerous items of legislation which may be enacted prospectively or with retroactive effect, which legislation could adversely impact our financial performance and the value of the common shares or pre-funded warrants. Additionally, states in which we operate or own assets may impose new or increased taxes. If enacted, most of the proposals would be effective for the current or later years. The proposed legislation remains subject to change, and its impact on us and purchasers of the common shares or pre-funded warrants is uncertain.

In addition, the Inflation Reduction Act of 2022 includes provisions that impact the U.S. federal income taxation of corporations. Among other items, this legislation includes provisions that impose a minimum tax on the book income of certain large corporations and an excise tax on certain corporate stock repurchases that are imposed on the

Corporation repurchasing such stock. It remains unclear in certain respects how this legislation will be implemented by the U.S. Department of the Treasury and we cannot predict how this legislation or any future changes in tax laws might affect us or purchasers of the common shares or pre-funded warrants.

It may be difficult to enforce judgments or bring actions outside the United States against us and certain of our directors.

We are a Canadian corporation and certain of our officers and directors are neither citizens nor residents of the United States. A substantial part of the assets of several of these persons, are located outside the United States. As a result, it may be difficult or impossible for an investor:

- to enforce in courts outside the United States judgments obtained in United States courts based upon the civil liability provisions of United States federal securities laws against these persons and the Company; or
- to bring in courts outside the United States an original action to enforce liabilities based upon United States federal securities laws against these persons and the Company.

If we sell shares of our common stock in future financings, stockholders may experience immediate dilution and, as a result, our stock price may decline.

Because we expect our expenses to increase significantly in the foreseeable future and because, based on our current business plans, our existing cash, cash equivalents and marketable securities, will be insufficient for us to fund our planned operating and capital expenditures beyond the date that is just several months after the date of this prospectus, we may from time to time issue additional shares of common stock. These issuances may be at a discount from the current trading price of our common stock. As a result, our stockholders would experience immediate dilution upon the purchase of any shares of our common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. If we issue common stock or securities convertible into common stock, our common stockholders will experience additional dilution and, as a result, our stock price may decline.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Our executive officers, directors and current beneficial owners of 5% or more of our common stock and their respective affiliates are expected to beneficially own approximately 19.3% of our outstanding common stock following the sale of all common shares offered under this prospectus. As a result, these persons, acting together, would be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors, any merger, consolidation, sale of all or substantially all of our assets, or other significant corporate transactions.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the current market price of our common stock and have held their shares for a longer period, they may be more interested in selling our Company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their common shares by means of ordinary brokerage transactions in the open market pursuant to effective resale registration statements and Rule 144 promulgated under the Securities Act, subject to certain limitations. On April 4, 2024, we filed a resale registration statement on Form S-1 with the SEC for the resale of up to 1,707,061 shares of common stock by the selling stockholders named therein which the SEC brought effective on June 7, 2024. On October 14, 2024, we filed a resale registration statement on Form S-1 with the SEC for the resale of up to 904,753 shares of common stock issuable upon the conversion of notes and exercise of warrants issued in our recent bridge financing for resale by the

selling stockholders named therein, which was declared effective by the SEC on October 23, 2024. On October 15, 2024 we filed a registration statement on Form S-8 registering the issuance of up to 1,206,844 common shares upon the exercise of options and vesting of awards under our equity compensation plans. We have ongoing registration obligations under the registration rights granted in our past unit financings and in our recent note and warrant financing. Further, pursuant to Rule 144, non-affiliate stockholders may sell freely after six months, subject only to the current public information requirement. Affiliates may sell after six months, subject to the Rule 144 volume, manner of sale (for equity securities), current public information, and notice requirements. Of the approximately 16,019,788 shares of our common stock outstanding as of December 31, 2024, approximately 13,517,953 shares are tradable without restriction. Given the limited trading of our common shares, resale of even a small number of common shares pursuant to Rule 144 or an effective registration statement may adversely affect the market price of our common shares.

Sales of a substantial number of shares of our common shares in the public market could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common shares in the public market after any legal restrictions on resale discussed in this prospectus lapse, the trading price of our common shares could decline. As of December 31, 2024, we have 16,019,788 common shares outstanding and 316,655 common shares issuable upon conversion of our Class B Series A Preferred Shares, 3,635,962 common shares issuable upon exercise of warrants at a weighted average exercise price of \$7.17, 965,975 common shares issuable upon exercise of options with a weighted average exercise price of \$4.45, and 265,642 common shares issuable upon exercise of performance options with a weighted average exercise price of \$0.25. Of these shares, all of the common shares resold by selling stockholders in this offering will be freely tradable, without restriction, in the public market.

The lock-up agreements pertaining to our recent public offering will expire 120 days from November 13, 2024 (or 60 days in the case of investors in the Company's September 2024 bridge financing and certain other investors). Based upon the number of shares outstanding as of December 31, 2024, approximately 824,111 shares (5.1%) are held by directors and executive officers and will be subject to lock-up agreements. The Underwriter may, however, in their sole discretion, permit our officers, directors and other stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements.

In addition, we have filed post-effective amendments to maintain the registration statements for the resale of up to 2,611,852 common shares pursuant to existing registration rights, including, but not limited to, post-effective amendments following the Reverse Stock Split and the filing of our annual report on Form 10-K for the fiscal year ended December 31, 2024, and to register 542,913 additional common shares for resale pursuant to the registration rights granted in our recent bridge financing of notes and warrants. We may file one or more registration statements on Form S-8 under the Securities Act of 1933, as amended, or the Securities Act, to register the issuance of common shares subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans. Shares registered under these registration statements on Form S-1 and Form S-8 will be available for sale in the public market subject to any vesting arrangements and exercise of options and warrants.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

At December 31, 2023, the Company had, for Canadian tax purposes, non-capital losses aggregating approximately \$40.2 million. These losses are available to reduce taxable income earned by the Alpha Cognition Canada Inc. in future years and expire between 2035 and 2043. Additionally, as of December 31, 2023, the Company had, for United States of America tax purposes, non-capital losses aggregating approximately \$974,000. These losses are available to reduce taxable income earned by the Company's US subsidiary in future years and expire in 2043.

In general, under Section 382 of the U.S. Tax Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards ("NOLs") to offset future taxable income. Similarly, where control of a corporation has been acquired by a person or group of persons, subsection 111(5) of the Canadian Tax Act and equivalent provincial income tax legislation restrict the corporation's ability to carry forward non-capital losses from preceding taxation years. Our existing NOLs may be subject to

limitations arising from previous ownership changes. Future changes in our share ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the U.S. Tax Code or an acquisition of control for the purposes of subsection 111(5) of the Canadian Tax Act, and adversely affect our ability to utilize our NOLs in the future. There is also a risk that due to regulatory changes, such as suspensions on the use of NOLs, or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities. For these reasons, we may not be able to utilize a material portion of the NOLs reflected on our balance sheet, even if we attain profitability.

We do not currently intend to pay dividends on our common stock, and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

The Company has outstanding warrants denominated in both Canadian and U.S. Dollars. The foreign exchange risk associated with the variable of the Canadian Dollar denominated warrant and the Company's resulting U.S. Dollar denominated functional currency could result in a significant risk of loss at the date of valuing the risk and cause the Company to incur a significant non-cash derivative liability depending on the exchange rate and share price volatility, share price, risk-free interest rate, and remaining life of the Canadian Dollar denominated warrants.

As at the date of this filing, the Company has outstanding warrants denominated in both Canadian and U.S. Dollars. The Company's functional currency has changed from the Canadian Dollar to the U.S. Dollar. As a result, Canadian Dollar denominated warrants will cause the Company to assess the foreign exchange risk associated with the variable of the Canadian Dollar denominated warrant and the Company's resulting U.S. Dollar denominated functional currency.

This could result in a significant risk of loss at the date of valuing the risk and cause the Company to incur a significant non-cash derivative liability depending on the exchange rate and share price volatility, share price, risk-free interest rate, and remaining life of the Canadian Dollar denominated warrants.

General Risk Factors

Unfavorable global economic or political conditions could adversely affect our business, financial condition or results of operations.

Our business is susceptible to general conditions in the global economy and in the global financial markets. A global financial crisis or a global or regional political disruption could cause extreme volatility in the capital and credit markets. For example, the COVID-19 pandemic resulted in widespread unemployment, economic slowdown and extreme volatility in the capital markets. The Federal Reserve has raised interest rates multiple times in response to concerns about inflation and it may raise them again. Higher interest rates, coupled with reduced government spending and volatility in financial markets, may increase economic uncertainty and affect consumer spending. Similarly, the ongoing military conflict between Russia and Ukraine and increasing tensions between China

and Taiwan have created extreme volatility in the global capital markets and may have further global economic consequences, including disruptions of the global supply chain. Any such volatility and disruptions may adversely affect our business or the third parties on whom we rely. If the equity and credit markets deteriorate, including as a result of political unrest or war, it may make any necessary debt or equity financing more difficult to complete, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and share price and could require us to delay or abandon development or commercialization plans. In addition, there is a risk that one or more of our service providers, manufacturers or other partners would not survive or be able to meet their commitments to us under such circumstances, which could directly affect our ability to attain our operating goals on schedule and on budget. We have experienced and may in the future experience disruptions as a result of such macroeconomic conditions, including delays or difficulties in initiating or expanding clinical trials and manufacturing sufficient quantities of materials. Any one or a combination of these events could have a material and adverse effect on our results of operations and financial condition.

If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain US Based research coverage by securities and industry analysts. If no or few securities or industry analysts commence or continue coverage of us, the trading price for our stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our clinical trials and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

We may be subject to securities litigation, which is expensive and could divert our management's attention.

In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Regardless of the merits or the ultimate results of such litigation, securities litigation brought against us could result in substantial costs and divert our management's attention from other business concerns.

We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act of 2002, which could result in sanctions or other penalties that could materially and adversely affect our business, financial condition, results of operations and prospects.

We are subject to Section 404 and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Beginning with the second annual report that we will be required to file with the SEC, Section 404 requires an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting.

During the course of our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports. Furthermore, if we identify any material weaknesses, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting, which could materially and adversely affect our business, financial condition, results of operations and prospects, cause investors to lose confidence in our reported financial information and cause the trading price of our stock to fall. In addition, as a public company we will be required to file accurate

and timely quarterly and annual reports with the SEC under the Exchange Act. In order to report our results of operations and financial statements on an accurate and timely basis, we will depend in part on CROs and other third parties to provide timely and accurate notice of their costs to us. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from the Nasdaq or other adverse consequences that would materially and adversely affect our business, financial condition, results of operations and prospects.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit 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. We believe 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.

If enacted, the proposed “Made in America Tax Plan” would increase our U.S. federal corporate tax rate requiring us to pay more in U.S. federal taxes, thus reducing our net revenue.

On March 31, 2021, the current presidential administration proposed the “American Jobs Plan” to create domestic jobs, rebuild national infrastructure and increase American competitiveness. To fund its expected \$2 trillion cost, the administration also proposed the “Made in America Tax Plan,” which is intended to raise that amount or more over 15 years through several methods including higher income tax rates on corporations. If enacted, our U.S. federal corporate income tax rate would increase from 21% to 28%. Any increase in our U.S. federal corporate income tax rate would require us to pay more in U.S. federal taxes, thus reducing our net revenue.

Our business will be subject to the risks of climate change, natural catastrophic events, world events, and man-made problems such as power disruptions or terrorism.

A significant natural disaster, such as an earthquake, a fire, a flood, or significant power outage could have a material adverse impact on our business, results of operations and financial condition. Climate change or a natural disaster could affect our personnel, data centers, supply chain, manufacturing vendors, or logistics providers' ability to provide materials and perform services such as manufacturing products or assisting with shipments on a timely basis. In addition, climate change could result in an increase in the frequency or severity of natural disasters. Climate change or a natural disaster may also affect our ability to occur raw materials needed for manufacturing and production. Likewise, we could be subject to other man-made problems, including but not limited to power disruptions and terrorist acts. Although we will maintain incident management and disaster response plans, in the event of a major disruption caused by a natural disaster or man-made problem, we may be unable to continue its operations and may endure system interruptions, reputational harm, delays in our development activities, lengthy interruptions in service, breaches of data security and loss of critical data, and our insurance may not cover such events or may be insufficient to compensate it for the potentially significant losses we may incur. Acts of terrorism and other geo-political unrest could also cause disruptions in our business or the business of our supply chain, manufacturers, logistics providers, partners, or customers or the economy as a whole. Recently, Russia initiated significant military action against Ukraine. In response, the U.S. and certain other countries imposed significant sanctions and export controls against Russia, Belarus and certain individuals and entities connected to Russian or Belarusian political, business, and financial organizations, and the U.S. and certain other countries could impose further sanctions, trade restrictions, and other retaliatory actions should the conflict continue or worsen. It is not possible to predict the broader consequences of the conflict, including related geopolitical tensions, and the measures and retaliatory actions taken by the U.S. and other countries in respect

thereof as well as any counter measures or retaliatory actions by Russia or Belarus in response, including, for example, potential cyberattacks or the disruption of energy exports, is likely to cause regional instability, geopolitical shifts, and could materially adversely affect regional economies and the global economy. Additionally, geopolitical tensions and ongoing conflicts in the Middle East, particularly between Israel and Hamas and Israel and Hezbollah, may lead to global economic instability and fluctuating energy prices that could materially affect our business. It is not possible to predict the broader consequences of the conflicts in the Middle East, including related geopolitical tensions and the measures and actions taken by other countries in respect thereof, which could materially adversely affect global trade, currency exchange rates, regional economies, and the global economy. The situations in Ukraine and the Middle East remain uncertain, and while it is difficult to predict the impact of any of the foregoing, the conflicts and actions taken in response to the conflicts could increase our costs, disrupt our manufacturing and supply chain, reduce our sales and earnings, impair our ability to raise additional capital when needed on acceptable terms, if at all, or otherwise adversely affect our business, financial condition, and results of operations. Any disruption in the business of its supply chain, manufacturers, logistics providers, partners or customers that impacts sales at the end of a fiscal quarter could have a significant adverse impact on our financial results. All of the aforementioned risks may be further increased if disaster recovery plans prove to be inadequate. To the extent that any of the above should result in delays or cancellations of customer orders, or the delay in the manufacture, deployment, or shipment of our products, our business, financial condition, and results of operations would be adversely affected.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements concerning our business, operations and financial performance, as well as our plans, objectives and expectations for our business operations and financial performance and condition. All statements other than statements of historical facts included in this prospectus are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “positioned,” “potential,” “predict,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. In addition, statements that “we believe” or similar statements reflect our beliefs and opinions on the relevant subject.

Forward-looking statements may include, but are not limited to, statements with respect to:

- financial and other projections, future plans, objectives, performance, revenues, growth, profits or operating expense;
- the use of available funds;
- plans to research, develop, implement, adopt, market and sell new technology or products, including continued research, development and commercialization regarding the Company's products and proposed products;
- estimates and projections regarding the industry in which the Company operates or will operate, including the global pharmaceutical and biotechnology markets, and expectations relating to trends and the adoption of new products;
- requirements for additional capital and future financing options;
- plans to launch new products and identify qualified distribution partners;
- expansion and acceptance of the Company's products in different markets;
- manufacturing, license and distribution partnerships and agreements;
- plans to identify, pursue, negotiate and/or complete strategic acquisitions;
- marketing plans;
- the timing and possible outcome of regulatory and legislative matters, including, without limitation, planned FDA, EU and other regulatory approval processes;
- future plans, objectives or economic performance, or the assumption underlying any of the foregoing; and
- other expectations of the Company.

All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those expressed in, or implied by these, forward-looking statements and therefore, you should not unduly rely on such statements, including, but not limited to:

- risks related to early stage of development and significant history of losses;
- risks related to our ability to generate revenue and achieve profitability;
- risks related to our lack of history in commercializing products;
- risks related to our need for substantial additional capital;
- risks related to COVID-19 adversely affecting our business operations;
- risks related to fluctuations in currency exchange rates;

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- risks related to our reliance on the successful development, regulatory approval and commercialization of ZUNVEYL formerly known as ALPHA-1062;
- risks related to our ability to successfully expand our pipeline of product candidates;
- risks related to our focus on treatments for Alzheimer's disease;
- risks related to substantial delays in our preclinical and clinical trials;
- risks related to the outcome of preclinical testing and early clinical trials not being predictive of later clinical trials;
- risks related to our reliance on third -parties to conduct our clinical trials;
- risks related to use of our therapeutic candidates being associated with side effects, adverse events or other properties or safety risks;
- risks related to preliminary data from studies or trials we announce changing as more data becomes available and are subject to audit and verification processes;
- risks related to foreign jurisdictions not accepting the data from our trials in the United States;
- risks related to product liability;
- risks related to our information systems;
- risks related to research and development of pharmaceuticals being lengthy and inherently risky;
- risks related to disruptions at the FDA;
- risks related to our failure to comply with health and data protection laws;
- risks related to approval in foreign jurisdictions;
- risks related to competition in our industry;
- risks related to commercialization and manufacturing;
- risks related to our market opportunity being smaller than we anticipate;
- risks related to our reliance on third -party suppliers;
- risks related to supply chain risks;
- risks related to our products never having been manufactured on a commercial scale;
- risks related to the complexity of manufacturing drugs;
- risks related to the successful commercialization of our product being dependent on governmental authorities and health insurers establishing adequate coverage, reimbursement levels and pricing policies;
- risks related to our lack of a sales organization;
- risks related to our ability to obtain and maintain patent protection for our technology and product candidates;
- risks related to protecting our intellectual property rights throughout the world;
- risks related to obtaining protection under Hatch -Waxman Amendments;
- risks related to the validity, scope and enforcement of any patents listed in the Orange Book;
- risks related to maintaining our patent protections;
- risks related to our need to license intellectual property from third parties;

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- risks related to third party claims of infringement;
- risks related to our ability to identify third -party patents to avoid infringement;
- risks related to lawsuits to protect and enforce our patents;
- risks related to unfavorable publicity;
- risks related to intellectual property litigation using substantial resources and distracting personnel;
- risks related to changes in U.S. patent law;
- risks related to sharing our trade secrets;
- risks related to claims that our employees, consultants or independent contractors have wrongfully used confidential information of former employers;
- risks related to claims we wrongfully hired employees;
- risks related to claims challenging inventorship;
- risks related to trademarks;
- risks related to regulatory approval processes being lengthy, time consuming and unpredictable;
- risks related to our products remaining subject to regulatory scrutiny;
- risks related to obtaining and maintaining regulatory approval in multiple jurisdictions;
- risks related to using accelerated pathways to FDA approval;
- risks related to healthcare legislation including unfavorable pricing;
- risks related to our business exposing us to regulatory penalties;
- risks related to our ability to comply with environmental, health and safety laws and regulations;
- risks related to U.S. foreign export and import laws;
- risks related to our need to increase the size of our organization;
- risks related to our need to attract and retain management and key scientific personnel;
- risks related to our employees or contractors violating the law or engaging in misconduct;
- risks related to establishing sales and marketing personnel;
- risks related to exploring strategic collaborations;
- risks related to acquisitions and related integrations; and
- risks related to our common shares.

We have based these forward-looking statements largely on our current expectations, estimates, forecasts and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur at all. You should refer to the section entitled "Risk Factors" and elsewhere in this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Furthermore, if our forward-looking statements prove to

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be inaccurate, the inaccuracy may be material. Except as required by law, including applicable Canadian laws, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

CURRENCY PRESENTATION

Unless otherwise indicated, all references to monetary amounts in this Prospectus are denominated in United States (US) dollars. The consolidated financial statements of the Company incorporated herein by reference are reported in US dollars and are prepared in accordance with U.S. Generally Accepted Accounting Principles (U.S. GAAP). Unless otherwise indicated, all references to "\$" and "dollars" in this Prospectus refer to US dollars. References to "CAD\$" or "C\$" in this Prospectus refer to Canadian dollars. On December 24, 2024, the daily exchange rate for one United States dollar expressed in Canadian dollars, as quoted by the Bank of Canada, was US\$1.00 = C\$1.4386 (or C\$1.00 = US\$0.6951).

MARKET AND INDUSTRY DATA

This prospectus includes industry and market data that we obtained from periodic industry publications, third-party studies and surveys, filings of public companies in our industry, patient and disease advocacy educational sites and internal company surveys. These sources include government and industry sources. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable and reasonable. Although we believe the industry and market data to be reliable as of the date of this prospectus, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. In addition, we do not know all of the assumptions regarding general economic conditions or growth that were used in preparing the forecasts from the sources relied upon or cited herein. The projections, assumptions and estimates of the future performance of the markets in which we operate and our future performance are necessarily subject to uncertainty and risk due to a variety of factors, including those described in "Risk Factors" and "Special Note Regarding Forward-Looking Statements." These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

TRADEMARKS

"Alpha Cognition Inc.", our logo and other trademarks, trade names or service marks of Alpha Cognition Inc. appearing in this prospectus are the property of Alpha Cognition Inc. All other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their we, or their respective owners, will not assert, to the fullest extent possible under applicable law, such rights thereto.

MARKET INFORMATION AND DIVIDEND POLICY

Our common shares are currently traded on the Nasdaq under the symbol “ACOG”. On December 30, 2024, the last reported sale price of our common shares on the Nasdaq was \$5.64. Our common shares were previously traded on the CSE, but were voluntarily delisted on December 17, 2024. On November 5, 2024, we completed a reverse stock split of our common shares with a stock split ratio of 1 -for-25 (“Reverse Stock Split”).

Holders

As of December 31, 2024, we had approximately 250 registered holders of our common shares. This number does not include an indeterminate number of stockholders whose shares are held by brokers in street name through depositaries, including CDS & Co and CEDE & Co.

Dividends

We have paid no dividends on the common shares to date and we do not expect to pay dividends on our common shares in the foreseeable future. Investors in Alpha Cognition's securities cannot expect to receive a dividend in the foreseeable future, if at all. Any future declaration and payment of cash dividends or other distributions of capital will be at the discretion of our board of directors and will depend on our financial condition, earnings, cash needs, capital requirements (including requirements of our subsidiaries), contractual, legal, tax and regulatory restrictions, and any other factors that our board of directors deems relevant in making such a determination.

See “*Risks Related to our Common Shares and this Offering*” in Risk Factors.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the shares of our common stock being offered for sale by the selling stockholders.

BUSINESS

The following discussion should be read in conjunction with the accompanying financial statements, management's discussion and analysis and related notes included elsewhere in this prospectus.

Business Overview

The Company is a biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's disease ("Alzheimer's disease" or "AD"), for which there are limited or no treatment options. On July 26, 2024, the Company received approval by the FDA of the Company's New Drug Application (the "NDA") for ZUNVEYL™ (benzgalantamine) previously known as ALPHA-1062 ("ZUNVEYL" or "ALPHA-1062") a delayed release oral tablet formulation indicated for the treatment mild to moderate dementia of the Alzheimer's type in adults (Alzheimer's disease). The Company will now focus on the commercial manufacturing and sales of ZUNVEYL oral tablet formulation. The Company's commercial development program for ZUNVEYL is primarily focused on building a long term care commercial team that can focus on providing key points of differentiation, exploiting key issues with existing Acetylcholinesterase inhibitors ("AChEI") treatments, and seeking potential licensing partners for other additional indications and new formulations. The Company intends to target large volume nursing homes specializing in Alzheimer's, to leverage an account based sales team with demonstrated success in long-term care ("LTC"), in order to position ZUNVEYL with Medicare payors, and to work with strategic and clinical partnerships with consultant pharmacists and long term care pharmacies. The Company has five additional pre-clinical development programs: (1) ZUNVEYL in combination with memantine for the treatment of moderate-to-severe Alzheimer's disease, (2) ALPHA-1062 sublingual formulation, (3) ALPHA-1062 intranasal ("ALPHA-1062IN") formulation for the treatment of cognitive impairment with mild traumatic brain injury (mTBI; otherwise known as concussion), (4) ALPHA-0602, and (5) ALPHA-0702 & ALPHA-0802, the latter two programs also referred to as 'Progranulin' and 'Progranulin GEM's', respectively, for the treatment of neurodegenerative diseases including amyotrophic lateral sclerosis (ALS) or Lou Gehrig's disease and spinal muscular atrophy (SMA).

ZUNVEYL, is a patented next generation acetylcholinesterase inhibitor indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults. ZUNVEYL's active metabolite is differentiated from donepezil and rivastigmine in that it binds neuronal nicotinic receptors, most notably the alpha-7 subtype, which is known to have a positive effect on cognition. In addition to our approved oral formulation, ZUNVEYL is also in pre-clinical development (1) in combination with memantine to treat moderate to severe Alzheimer's disease, (2) alone as a with sublingual formulation for patients suffering from dysphagia, and (3) alone and referred to herein as "ALPHA-1062IN" that is intended to be out-licensed for pre-clinical development to study an intranasal formulation for cognitive impairment with mTBI.

Our other pre-clinical assets include ALPHA-0602 and ALPHA-0702 & ALPHA-0802 (Progranulin and Progranulin GEM's), which are expressed in several cell types in the central nervous system and in peripheral tissues, promotes cell survival, regulates certain inflammatory processes, and play a significant role in regulating lysosomal function and microglial responses to disease. Its intended use for the treatment of neurodegenerative diseases has been patented by the Company and ALPHA-0602 has been granted an Orphan Drug Designation for the treatment of ALS by the FDA. Orphan Drug Designation was provided for ALPHA-0602 by the Office of Orphan Drug Products, FDA on February 2020 based on the Federal Food Drug, and Cosmetic Act, whereby the ALPHA-0602 met the criteria designated in Section 526 of such Act. For a further description see the section entitled "*— Government Regulation — Orphan Drug Designation*". The Orphan Drug Designation allows for exclusivity provisions provided the drug is approved first for indication: treatment of amyotrophic lateral sclerosis ALPHA-0702 and ALPHA-0802 are Granulin Epithelin Motifs, ("GEMs"), derived from full length progranulin which have therapeutic potential across multiple neurodegenerative diseases. GEMs have been shown to be important in regulating cell growth, survival, repair, and inflammation. ALPHA-0702 and ALPHA-0802 are designed to deliver this result with potentially lower toxicity, and greater therapeutic effect than full length progranulin. As the assets are pre-clinical and do not add material value to the Company, the Company will not develop these assets further and instead will seek to out-license the assets to interested third parties. Given the early stage of discussion with third parties, the Company cannot assess value to a license agreement.

Alzheimer's Disease Mild-to-Moderate Stage Program

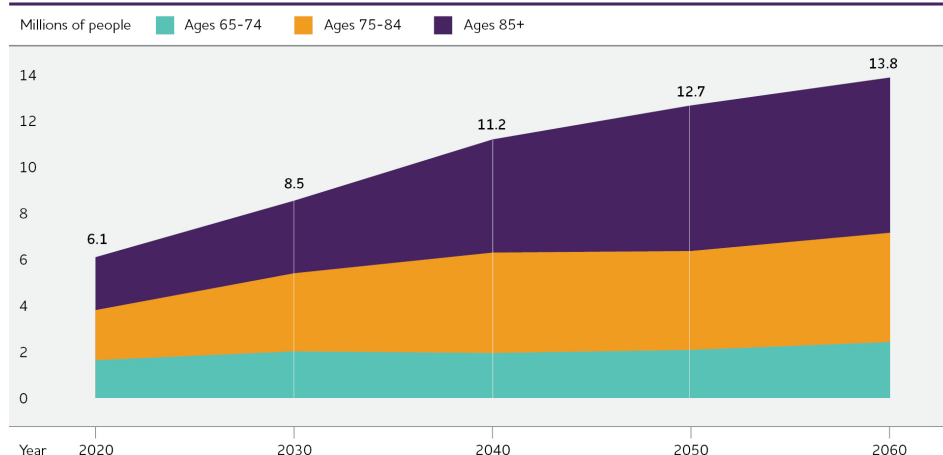
Disease and Market Overview

Alzheimer's disease is the most common form of dementia and affects a large portion of the elderly population, approximately 6.9 million people in the United States 65 years or older. Alzheimer's disease is a progressive disease of the brain which causes damage or destroys neurons in the section of the brain that controls cognition and functional ability, such as thinking, learning and memory.

The current and forecasted prevalence of Alzheimer's disease is a large societal and public health care crisis. More than 1 in 9 elderly people have Alzheimer's disease (age 65 or older), and of that group, 73% are actually 75+ years old with a majority (61%) being women. Alzheimer's disease was officially listed as the sixth-leading cause of death in the United States in 2019. In 2020 and 2021, when COVID - 19 became the third-leading cause of death, Alzheimer's disease was the seventh -leading cause of death; official counts for 2022 are still being compiled. Though the length of time varies for each person, on average patients 65+ years will live for average four to eight years after their Alzheimer's disease diagnosis. With the large baby boomer generation advancing in age and longer life expectancies, by 2025 Alzheimer's disease prevalence is forecasted to rise 7% to 7.2 million people, and the number will jump to 13.8 million in the United States by 2060. Alzheimer's disease is a significant societal and healthcare burden due to the large and growing at-risk patient population, physician perceived limited effectiveness of current treatments and a shortage of drug innovation.

Figure 5

Projected Number of People Age 65 and Older (Total and by Age) in the U.S. Population with Alzheimer's Dementia, 2020 to 2060



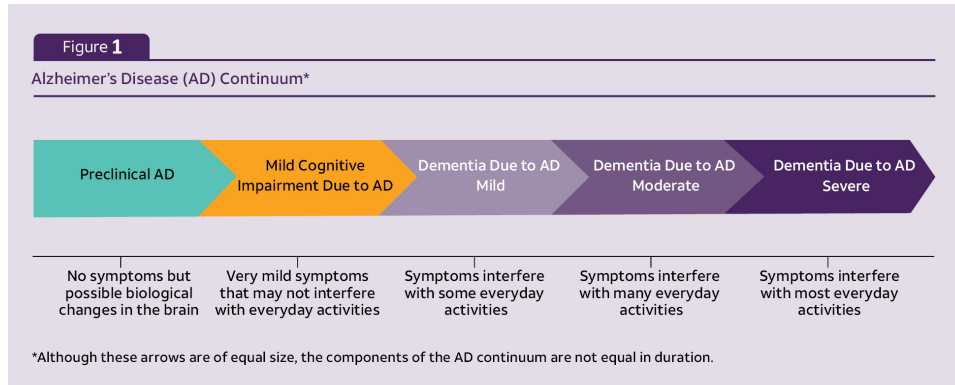
Adapted from Alzheimer's Facts and Figures, 2023, page 30

Symptoms

There are 5 main stages of severity on the Alzheimer's disease continuum, which are defined by brain changes and the resulting symptoms that affect a patient's daily life. These stages are preclinical Alzheimer's disease, mild cognitive impairment (MCI) caused by Alzheimer's disease, dementia due to mild Alzheimer's disease, dementia due to moderate Alzheimer's disease, and dementia due to severe Alzheimer's disease. Alzheimer's disease is believed to start causing changes in the brain upwards to 20 years prior to symptoms becoming noticeable. Within the brain, nerve cells become damaged and/or destroyed due to accumulation of beta-amyloid plaque clumps outside neurons, and the abnormal formation of tau tangles inside the neurons. As these brain changes become more prominent over the years, symptoms begin to occur and become noticeable. Common cognitive symptoms are memory loss, learning decline, challenges planning or solving problems, forming words/speaking and confusion with places or time. As symptoms become

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more severe, they affect daily activities, such as the ability going to the bathroom, eating and swallowing, drinking, and overall mobility. Alzheimer's disease progresses within each person differently. Depending on the individual risk factors, time of diagnosis, and other factors, the length of time a patient is within each stage of the continuum will vary greatly.



Alzheimer's disease symptoms affect the whole patient: mind, body and behavior/personality. The five main areas of symptoms are cognitive, psychological, physical, behavior, and other, which would include sleep disorder and rapid eye movement disorder.

Cognition	Psychological	Physical	Behavior	Other
Short term memory loss	Depression	Visual problems	Isolating/Withdrawal from work or social activities	Sleep disorder
Word-finding/communication difficulties	Mood disturbances	Writing	Disinhibition and impulsivity	Rapid eye movement disorder
Challenges planning – confusion with time and places	Apathy	Decreased ability to perform daily living activities: bathing, eating, drinking	Poor or decreased judgment	
Solving programs	Suspicion	Frequent falls		
Misplacing things	Anxious/fear			

Adapted from Porsteinsson 2021

An Alzheimer's disease patient's diagnosis journey usually begins with their primary care physicians, as they are the first to detect cognitive impairment. Once detected, 99% of primary care physicians will refer the patient to a dementia specialist. Neurologists/Psychiatrists prescribe 27% of all Alzheimer's disease Rx's and due to the large Alzheimer's disease afflicted population within LTC facilities, these physicians prescribe 36% of the total Rx's.

Alzheimer's disease caregivers carry a heavy burden

People suffering from Alzheimer's disease are not relegated only to the patients. Family members and caregivers are affected greatly and carry a huge burden due to this progressive disease. The vast majority (83%) of the 11 million unpaid Americans that provide care for Alzheimer's disease patients are doing so for a family member, usually a parent or parent-in-law. Two-thirds are women and the majority are under the age of 65 years old. These caregivers provide upwards to 18 billion hours of unpaid care, which equates to \$339.5 billion a year. While many believe they don't

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have the information or resources necessary to do their job as a caregiver well, they feel they have no choice but to take on this role, as cited in a 2014 Alzheimer's Association poll. In addition to providing help with daily activities, caregivers are also providing emotional, physical, communication, and financial support. As the disease progresses and the patient exhibits behavioral and functional changes that are more severe, the burden becomes larger and the overall stress increases. According to the Alzheimer's Association, caregivers report feeling high emotional stress, and experience financial and physical difficulties while caring for their loved one.

Table 11

Percentage of Dementia Caregivers Who Report Having a Chronic Health Condition Compared with Caregivers of People without Dementia or Non-Caregivers

Condition	Dementia Caregivers	Non-Dementia Caregivers	Non-Caregivers
Stroke	5.2	3.4	3.2
Coronary heart disease	8.3	7.2	6.6
Cardiovascular disease*	11.8	9.5	8.6
Diabetes	12.8	11.1	11.3
Cancer	14.3	13.3	11.5
Obesity	32.7	34.6	29.5

*Combination of coronary heart disease and stroke.

Table includes caregivers age 18 and older.

Created from data from the Behavioral Risk Factor Surveillance System survey⁴⁰⁹

Table includes caregivers age 18 and older

* Cardiovascular disease – combination of coronary heart disease and stroke

Adapted from Alzheimer's Association Facts & Figures 2023, Page 50

Long-term care homes and death rates

LTC facilities carry a substantial burden in the care of Alzheimer's disease patients. The costs of health care and long-term care for individuals with Alzheimer's disease or other dementias are substantial, and dementia is one of the costliest conditions to society. Researchers have estimated that approximately 75% of surviving Alzheimer's disease patients diagnosed at age 70 will reside in a nursing home by age 80, compared with only 4% of the general population. 36% of short -stay (less than 100 days) nursing home residents have Alzheimer's disease or other dementias, and 58% of long-stay (100 days or longer) residents have this condition. Due to this large and growing population, 15% of nursing homes have a special dementia care unit, which the Company anticipates will become more common place over the coming years as more baby boomers are admitted. When a patient has been admitted into a long-term care facility, their Alzheimer's disease symptoms are affecting daily activities and have caused general disability and overall decline in their health. The mental, emotional and physical stress on the caregiver and family members is extremely high. Some studies state distress remains unchanged or even increases after a relative is admitted to a residential care facility.


Alzheimer's disease was officially listed as the sixth -leading cause of death in the United States in 2019. In 2020 and 2021, when COVID-19 became the third-leading cause of death, Alzheimer's disease was the seventh-leading cause of death; official counts for 2022 are still being compiled. Alarming, deaths from Alzheimer's disease have more than doubled from 2000 to 2019, to 145.2%, while all other major causes of deaths have declined or remained the same, such as cancer, heart disease or stroke. Alzheimer's disease accounts for two-thirds of deaths in a nursing home, which is greater than cancer and any other condition. Due to the stress associated with caring for a loved one suffering from Alzheimer's disease, 72% of family caregivers experienced relief when the person with Alzheimer's disease or another dementia died.

ALPHA-1062 (now known as ZUNVEYL) Clinical Development

The original nasal formulation of ALPHA-1062 was used to conduct Phase I human studies, initially by Neurodyn Life Sciences Inc. ("NLS") a former related party through common shareholders, and subsequently, on completion of the ALPHA-1062 license agreement, by the Company. The Phase I human studies included a SAD Study followed by a MAD Study. These Phase I studies were designed to determine the safety of the drug, which was administered to healthy subjects, including elderly, at increasing doses of ALPHA-1062, initially one time in the SAD Study, and subsequently multiple times over a seven-day period in the MAD Study. These studies indicated that ALPHA-1062 formulations may have reduced gastrointestinal side effects (nausea, diarrhea, vomiting) as compared to one of the existing treatments; Razadyne (galantamine is the generic name).

Bioavailability and Bioequivalence Pivotal Trials: The Company completed two studies (fed and fasted) in Q2 2022 (from April to June) and a third in Q3 2022 (from July to August). All studies were completed in India with Vimta Labs, Inc., a clinical research organization with significant experience in running bioanalytical and bioequivalence studies. The studies were designed to demonstrate pharmacokinetic equivalence in healthy subjects compared to the reference listed drug galantamine hydrobromide immediate release (fed and fasted) and galantamine hydrobromide extended release, which are standard of care treatments for patients with mild to moderate Alzheimer's disease. The studies were designed in accordance with FDA 505(b)(2) guidance for industry. Primary endpoints of all studies were to evaluate bioavailability and bioequivalence by comparative measurements of peak plasma concentration (C_{max}), and area under the plasma concentration-time curve from time zero to infinity (AUC_{0-inf}). Secondary endpoints were to measure adverse events and safety outcomes. Topline results from the bioequivalence studies suggested that ALPHA-1062 achieved bioequivalent area-under-the-curve (fed and fasted) and peak exposures (fed) relative to galantamine hydrobromide immediate release and galantamine hydrobromide extended release. There were minimal adverse events (<3%) reported for ALPHA-1062 delayed release oral tablet formulation during these studies. With these bioavailability and bioequivalence pivotal study results, the Company filed an NDA for ALPHA-1062 delayed release oral tablet formulation for the treatment of mild to moderate dementia of the Alzheimer's type in adults during Q3 2023, with FDA approval for the U.S. market on July 26, 2024.

The following table summarizes the results of each of the two ZUNVEYL, formerly known as ALPHA-1062 delayed release oral tablet formulation, Pivotal Studies (fed and fasted) — Bioequivalence/Bioavailability ("BABE") Study vs. Immediate Release ("IR") (completed in June 2022) and an additional BABE Study vs. Extended Release ("ER") (completed in August 2022).

 Pivotal Trial Results Provided Data Enabling NDA Filing				
Bioequivalence Studies vs. Immediate Release				
PK Parameter	ALPHA-1062 Delayed Release 5mg (n=36)	Gal HBr Immediate Release 4mg (n=36)	% to Reference Drug 80-125%	Enabled NDA Filing
AUC _{0-inf} (μg x h/mL) Fasted State	306.8	321.5	95%	✓
C _{max} (ng/mL) Fasted State	30.7	40.5	76%	✓
AUC _{0-inf} (μg x h/mL) Fed State	286.7	329.9	87%	✓
C _{max} (ng/mL) Fed State	27.6	30.2	91%	✓
Bioequivalence Study vs. Extended Release				
PK Parameter	ALPHA-1062 Delayed Release 5mg (n=20)	Gal HBr Extended Release 8mg (n=20)	% to Reference Drug 80-125%	Enabled NDA Filing
AUC ₀₋₂₄ (μg x h/mL) Steady State	527.5	492.1	107%	✓
C _{max} (ng/mL) Steady State	41.7	32.8	127%	✓

- Data suggests **ALPHA-1062 AUC was bioequivalent to galantamine hydrobromide IR and ER¹**
- C_{max} for ALPHA-1062 is bracketed between IR and ER (lower than IR, higher than ER) providing data for NDA filing (scientific bridge)
- Minimal adverse events reported in these trials
- Enabled NDA filing** based on 505(b)(2) requirements

90% Confidence Interval (CI) acceptance criteria is 80-125% for the test/reference ratio¹

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BABE Study vs. Immediate Release

The primary objective of both the fed and fasted studies was to evaluate the relative bioavailability of a single-dose of ALPHA-1062 (or benzgalantamine) 5mg delayed release oral tablet formulation compared to galantamine hydrobromide tablet 4mg immediate release — the reference drug. Primary endpoints of these studies were to evaluate bioavailability and bioequivalence by comparative measurements of peak plasma concentration (C_{max}), and area under the plasma concentration-time curve from time zero to infinity (AUC_{0-inf}). Secondary endpoints were to measure adverse events and safety outcomes. Thirty - six healthy subjects were enrolled in each trial.

Two drug products are recognized to be bioequivalent if the 90% confidence interval of the ratio of geometric means of the primary pharmacokinetic (PK) responses (after log-transformation) is within the bioequivalence limits of 80% and 125%.

A secondary objective of the studies was to evaluate the safety and tolerability of single -dose administration of ALPHA-1062 5mg delayed release oral tablet formulation. The primary pharmacokinetic outcomes were AUC_{0-inf} or area under the curve, and C_{max}, the highest concentration of drug in the blood. The area under the curve represents the total exposure to the active drug galantamine over time after a single administration, and the C_{max} represents the highest peak exposure to galantamine.

Bioequivalence of ALPHA-1062 delayed release oral tablet formulation to galantamine hydrobromide appeared to be established in both the fed and fasted studies with the 90% confidence intervals for area under the curve falling within the 80%-125% bioequivalence range. The mean area under the curve ratio to reference drug for ALPHA-1062 delayed release oral tablet formulation was 95% (306.8) in the fasted study and 87% (286.7) in the fed study.

The average C_{max} ratio to reference drug for ALPHA -1062 delayed release oral tablet formulation was 76% (30.7) in the fasted study and 91% (27.6) in the fed study both C_{max} results being higher than the published C_{max} data for galantamine hydrobromide 8 mg extended release capsule. Bioequivalence of ALPHA-1062 delayed release oral tablet formulation appeared to be demonstrated based on overall drug exposure in both the fed and fasted states, and the C_{max} with ALPHA-1062's delayed release oral tablet formulation is expectedly lower than that of the immediate release formulation of galantamine, yet higher than the published data with galantamine extended release capsule. Bioequivalence of ALPHA-1062 delayed release oral tablet formulation appeared to be established on C_{max} compared to galantamine hydrobromide in the fed state. When the C_{max} of a proposed drug product falls between the reported C_{max} of two formulations of an approved reference product (immediate and extended release), this should allow for a scientific bridge to both formulations of the reference standard galantamine hydrobromide.

Single-dose administration of ALPHA-1062 delayed release oral tablet formulation was well tolerated with no adverse events reported.

BABE Study vs. Extended Release

During August 2022, the Company announced results from an additional bioequivalence study with ALPHA-1062. The Company elected to conduct this additional study which was designed to demonstrate pharmacokinetic (PK) equivalence between ALPHA-1062 5mg delayed release oral tablets and 8 mg galantamine hydrobromide extended release capsules, when dosed to steady state. Bioequivalence appeared to be established based on total drug exposure (AUC) and the C_{max} was expectedly higher than that of the extended release reference. These data, coupled with the bioavailability and bioequivalence pivotal data released in June, establishes bioequivalence to both formulations of galantamine hydrobromide, based on the approval of the FDA on July 26, 2024.

The study was a two-treatment, two-period, crossover study wherein 40 subjects were randomly assigned 1:1 to either treatment with ALPHA-1062 5mg delayed release oral tablet formulation twice daily, or galantamine hydrobromide 8mg ER capsules once daily, for 7 days. After a one -week washout period, subjects were then crossed over to the other treatment arm and dosed for 7 days. Primary endpoints of all studies were to evaluate at day seven bioavailability and bioequivalence by comparative measurements of peak plasma concentration of test and reference (C_{max}), and area under the plasma concentration-time curve from time zero to infinity (AUC₀₋₂₄). Secondary endpoints were to measure adverse events and safety outcomes.

Topline results suggested that in healthy adult volunteers treated to steady state, ALPHA -1062 delayed release oral tablet formulation was bioequivalent to galantamine hydrobromide extended release. In the pre-specified primary analysis, ALPHA -1062 delayed release oral tablet formulation achieved area - under-the-curve and peak exposures

(Cmax) of approximately 107% and 127%, respectively, compared to those generated by galantamine hydrobromide extended release. As expected, Cmax results for ALPHA-1062 delayed release oral tablet formulation is bracketed between galantamine hydrobromide immediate release and galantamine hydrobromide extended release (lower than immediate release, higher than extended release) providing the data set for the NDA filing. These data further describe the delayed release profile of ALPHA-1062 delayed release oral tablet formulation and supplements the NDA data set by characterizing the therapeutic and acceptable exposures compared to both the immediate release and extended release products.

Multiple dose administration of ALPHA-1062 delayed release oral tablet formulation was well tolerated with two adverse events reported, both of which were mild and transitory. No serious safety issues were observed in the study. During the second quarter of 2022, the Company met with FDA regarding the ALPHA-1062 program for mild-to-moderate Alzheimer's disease. The Company received feedback regarding the ALPHA-1062 RESOLVE trial, labeling, and manufacturing. Labeling and manufacturing guidance for stability of ALPHA-1062 delayed release oral tablet formulation was provided by FDA to support commercial strengths in commercially marketed product. The Company believes it has demonstrated the required stability endpoints for twelve months of long-term stability data in the three potential strengths of ALPHA-1062 delayed release oral tablet formulation. The RESOLVE trial was a trial designed to measure adverse events in an Alzheimer's population and provide label enabling data for ALPHA-1062 delayed release oral tablet formulation. It was not a required trial to complete in order to submit an NDA application for approval. Post second quarter meeting with FDA, the Company determined this trial would not be implemented and informed the FDA on this matter. As a result of the agency's feedback that the ALPHA-1062 RESOLVE trial was not required for the submission of an NDA, the Company filed its NDA for ALPHA-1062 delayed release oral tablet formulation in mild-to-moderate Alzheimer's disease in Q3 2023, allowing the Company to include additional CMC stability data in the NDA filing. See the section entitled "*Risk Factors — Risks Related to Government Regulation — The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable*".

Commercialization Strategy

ZUNVEYL Alzheimer's Disease Commercialization Strategy

During the second half of 2023 the Company started, in parallel with the Company's regulatory activities, taking steps to develop a commercialization team to launch ZUNVEYL in the U.S. The Company has completed sufficient planning to indicate that ZUNVEYL could be launched using a specialty sales force that will focus on LTC physicians in the U.S. LTC physicians who treat elderly patients that reside in nursing homes also make pharmacologic decisions in concert with the LTC treatment team. Our research has indicated that the acetylcholinesterase inhibitor (AChEI) prescription market in the U.S. from the LTC market is large, representing 36% of the over 11 million prescriptions filled in pharmacies each year. The AChEI class includes Aricept, Exelon, Exelon Patch, Razadyne, Adlarity, Namzaric, and generic versions of the AChEIs. Prescription data suggests that there is currently high turnover of patients treated with currently approved AChEI medications, with 30% of patients discontinuing treatment by month 4 and 55% discontinuing treatment within one year. The Company believes that patients who discontinue a first therapy will try a 2nd and 3rd line therapy. Patient willingness to try multiple therapeutics provides an opportunity for ZUNVEYL to take market share in the overall AChEI market. The sales force will message potential key points of label differentiation and exploit key issues with existing AChEI medications. The Company will attempt to secure product coverage with U.S. payors. Market research indicates that payors are likely to cover ZUNVEYL if the product is competitively priced.

Additionally, the Company intends to seek strategic partnerships to expand promotional efforts and physician promotional coverage. Since ZUNVEYL received FDA regulatory approval, the Company expects to seek distribution partners for major territories, identified as Europe, LATAM (Mexico, Central and South America), and Asia. Distributors often have a deep understanding of local market dynamics, including regulatory requirements, distribution channels, and consumer preferences. Partnering with a local distributor should allow the Company to leverage this expertise and navigate the complexities of entering a new market more effectively. FDA regulatory approval does not guarantee regulatory approval for distribution in other territories. We will need to seek and obtain regulatory approval through the processes in each of the above mentioned jurisdictions, which will take additional time and resource. Please see the section entitled "*Risk Factors — We have conducted, and in the future plan to conduct, clinical trials for product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials*". Additionally, the Company intends to seek approval for potential additional indications and product line extensions.

Potential ZUNVEYL coverage and reimbursement in the United States

The Company believes ZUNVEYL will have limited payor barriers based on current US access and reimbursement data of generic Alzheimer's disease symptomatic medications (e.g., acetylcholinesterase inhibitors, memantine) and branded Namzaric® which are widely accessible to most MA-covered lives. Donepezil and Namzaric® are mostly covered by health care plans.

Third party market research with pharmacy and medical directors, indicates that coverage of ZUNVEYL would be similar to Namzaric®. They forecast ZUNVEYL to be managed at a preferred or non-preferred branded tier, without Prior Authorization or step edits, depending on rebates, as long as it is competitively priced and differentiated from other products via its improved tolerability. Importantly, caregiver market research highlights cost is not an issue. They are willing to pay a premium for a product that is more efficacious with less side effects. This provides additional confidence to the Company that family members will request branded ZUNVEYL for their mild-to-moderate Alzheimer's disease patients, even at a higher cost than current generics.

Competitive Conditions and ZUNVEYL Positioning

Alzheimer's disease symptomatic treatments are currently limited and perceived to provide limited symptom improvement and cause difficult to manage tolerability side effects. Symptomatic treatments are designed to improve the ability to learn, remember key events and loved ones, and function normally with daily tasks like toileting, cooking, or home care. Each year greater than 2 million patients are on medication for the disease, which makes up half of the estimated number of people with Alzheimer's disease in the US. Approximately 70% of patients with mild Alzheimer's disease, 80% with moderate, and 75% with severe Alzheimer's disease are on drug-treatment. On average, it can take up to 2.5 months from diagnosis to treatment, but can take up to 2 years, and roughly 32% will never go on treatment. Patients are treated primarily with symptomatic medications to help the cognitive and functional symptoms of Alzheimer's disease. In addition to symptomatic treatments, patients will also be prescribed behavioral and psychiatric medications for depression, hallucinations, aggression and agitation.

There are five symptomatic drug treatments that have been approved by the FDA to date for mild to moderate dementia of the Alzheimer's type in adults, including ZUNVEYL.

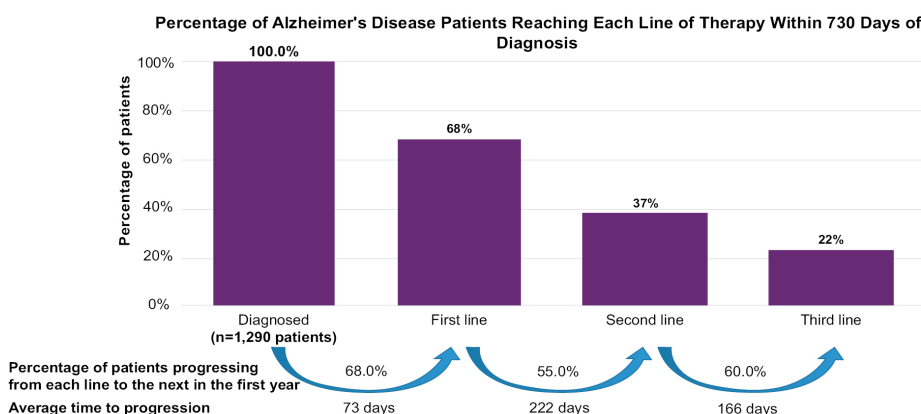
- (1) Donepezil (marketed under the brand name, Aricept by Eisai and Pfizer)
 - a. First-to-market, approved in 1996; generic
 - b. Acetylcholinesterase inhibitor drug class, oral QD medication
 - c. Indicated for mild-to-moderate and moderate-to-severe stages of Alzheimer's disease
- (2) Rivastigmine capsules and patch (marketed under the brand name Exelon/Exelon Patch by Novartis)
 - a. Approved in 2000; 2007 generic
 - b. Exelon capsules: Acetylcholinesterase inhibitor drug class, oral BID tablet and oral solution
 - c. Exelon Patch: Acetylcholinesterase inhibitor drug class, daily transdermal system
 - d. Indicated for mild-to-moderate and moderate-to-severe stages of Alzheimer's disease
- (3) Galantamine (marketed under the brand names Reminyl and Razadyne/Razadyn ER by Janssen)
 - a. Approved in 2001, 2004; generic
 - b. Acetylcholinesterase inhibitor drug class, oral BID medication
 - c. Indicated for mild-to-moderate stage of Alzheimer's disease
- (4) Donepezil transdermal system (marketed under the brand name Adlarity by Corium)
 - a. Approved in 2022, branded transdermal patch
 - b. Acetylcholinesterase inhibitor drug class, once-weekly transdermal system
 - c. Indicated for mild-to-moderate and moderate-to-severe stages of Alzheimer's disease

- (5) Benzgalantamine (marketed under the brand name ZUNVEYL by Alpha Cognition)
 - a. Approved in 2024, expected to be commercially available in Q1 or Q2 2025
 - b. Acetylcholinesterase inhibitor drug class, oral BID medication
 - c. Indicated for mild-to-moderate stage of Alzheimer's disease

The FDA approved Aducanumab (marketed under the branded name Adulhelm by Biogen) in 2021 and lecanemab (marketed under the branded name Leqembi by Eisai) for mild-to-moderate Alzheimer's disease. Adulhelm was the first disease modifying treatment (DMT), but due to several issues associated with the drug, including CMS restricting coverage, it was not easily accessible and was only covered for qualified clinical trial patients. Biogen has announced that it is discontinuing sale of Adulhelm by the end of 2024. Leqembi is indicated for the treatment of Alzheimer's disease. It is expected that coverage and utilization may be better for Leqembi than Adulhelm, but this will only be apparent after several quarters of commercialization. It is important to note that DMT agents will not be a competitor to the current standard of care, the AChEI class. DMTs will be used in combination with these medications, as they do not address the symptoms of the disease.

Alzheimer's disease is a highly genericized market with limited drug development innovation. As noted above, three out of the five approved symptomatic medications are generic and many have been in the market up to two decades. The acetylcholinesterase inhibitors drug class (i.e.: donepezil 70% market share, rivastigmine 4.86% market share, and galantamine 2.27% market share) are largely prescribed, with approximately 80% of the total Rx market share. N-methyl-D (NMDA) receptor agonists (memantine and branded Namzaric) are indicated for moderate-to-severe Alzheimer's disease and as such are used in later stages, and as combination therapy with acetylcholinesterase inhibitors. Due to the perceived limited efficacy and side effects of the acetylcholinesterase inhibitor medications, patients are often taking multiple therapies, ultimately increasing their drug burden. ~60% of patients are on combination therapy in hopes of increasing efficacy outcomes and mitigating side effects. Of note, 55% of patients progress to second line therapy, and 60% will progress further to a third line therapy. This further illustrates the unmet needs of current treatment options, but also the patient's willingness to keep trying medication until something works.

Treatment Initiation and Progression



Source: Decision Resources Group, 2021

The perceived limited efficacy or not enough efficacy improvement, and tolerability side effects, including gastrointestinal issues (nausea, diarrhea, and vomiting), insomnia, cause a substantial rate of treatment discontinuation. Some data and studies suggest that patients on acetylcholinesterase inhibitor medications, will discontinue treatment approximately 30% of the time within 4 months and 55% discontinue therapy within 12 months. Gastrointestinal issues are cited as a leading reason for discontinuing treatment, as reported in both physicians and caregiver market research. The high rates of gastrointestinal adverse effects are also included in the prescribing information for each

approved drug. The most common adverse events that are reported to lead to discontinuation of therapy were diarrhea, nausea, vomiting, dizziness and decreased appetite among acetylcholinesterase inhibitors. Prescribing habits within long-term care physicians, seem to be well entrenched, and overall, physicians report feeling dissatisfied and/or apathetic about their symptomatic treatment options. Caregivers also express dissatisfaction with the currently approved symptomatic treatments options.

Our solution: ZUNVEYL

There is a significant unmet need for better treatment options for patients suffering from Alzheimer's disease. The Company believes that ZUNVEYL is poised to be a next-generation treatment option. The Company believes that we can differentiate ZUNVEYL based on several potential advantages to Alzheimer's disease patients:

- Established efficacy of galantamine with cognitive and functional improvement results
- Clinical data published in *Neurology* in April 2021, supports significant risk reduction in risk of developing severe dementia and strongest effect on cognition
- Dual mechanism of action, enhancing the acetylcholine levels and nicotinic receptor sensitivity
- Enteric-coated tablet that bypass the GI as an inactive compound to potentially minimize GI side effects ((nausea, vomiting, and diarrhea))
- No incidence of insomnia in the FDA approved label for ZUNVEYL

According to primary market research conducted by and for the Company, including a report prepared by a third-party paid for by the Company in October 2021, we believe the market research confirms that based on the product attributes listed above, 88% of LTC prescribers are likely to prescribe ZUNVEYL, with a 29% preference share.

Alzheimer's Disease Moderate-To-Severe Stage Program

Disease and Market Overview

Our second program is a combination oral product of benzgalantamine and memantine for moderate -to-severe Alzheimer's disease. The product is in formulation and pre-clinical development. The Company believes combining ALPHA-1062 with previous FDA approved NMDA receptor memantine would provide differentiating efficacy and an attractive tolerability profile to patients within these advance stages. Moderate Alzheimer's disease and severe Alzheimer's disease affects a total of ~1.4M patients in the United States. In 2020, over 7 million Rx's were written for memantine-containing product. In the moderate stage of Alzheimer's disease symptoms becomes more intense, significantly affecting patients' everyday life. They have difficulties with communication and personality and behavioral changes present. The caregiver burden also increases during this stage, as many activities (dressing, bathing, bathroom) require assistance and management. In the severe stage of the disease, patients will experience more robust and debilitating symptoms. The complete deterioration of cognition and functional abilities require round-the-clock care, eating and drinking prove difficult, and they usually become bed bound. On average 40% of the final years of an Alzheimer's disease patients (ages 70 to 80 years old) will be spent in the severe stage and the nature of the symptoms leads to the vast majority being admitted into a LTC facility.

Increasing caregiver burden

The caregiver burden rises to new heights during these stages, and many describe it as "extremely stressful". The last 12 months of life, people with dementia relied on more hours of family care (64.5 hours per week), 59% of caregivers felt they were "on duty" 24 hours a day, and financial care costs increase. Once a decision is made to place the patient into a LTC facility, the stress of the caregiver isn't alleviated. In fact, many say the distress is unchanged or even increases.

Our Product and Approach to Treatment

The Company plans to develop ALPHA-1062+ memantine, to simplify the co-administration of these drugs by a patient or caregiver with the goal of increasing compliance and adherence to the prescribed regimen. We believe that ALPHA-1062 + memantine has the potential to be adopted by patients already taking Namzaric® or generic combination therapy as well as moderate to severely affected patients currently taking donepezil or memantine alone.

Following the approval for ALPHA-1062 now known as ZUNVEYL for the treatment of mild -to-moderate dementia of the Alzheimer's type in adults (Alzheimer's disease), we plan to progress the development of ALPHA-1062 + memantine through a streamlined 505(b)2 regulatory path. The product combination is currently in a pre-clinical stage of development and will require additional product development and pre-clinical studies to advance to an IND. Should the product advance ultimately to FDA approval, the Company believes ALPHA-1062 + memantine would have the potential to provide differentiating product characteristics including, 3 mechanisms of action and a minimal side effect profile for the treatment of moderate-to-severe dementia associated with Alzheimer's disease. The Company believes ALPHA-1062 & memantine will be absorbed through the gastrointestinal tract; ALPHA-1062 inertly with minimal gastrointestinal side effects and memantine with acceptable side effects when up-titrated. The combination therapy will act via 3 distinct mechanisms of action acetylcholinesterase inhibition, enhanced nicotinic receptor activity and sensitivity, and NMDA receptor antagonism. The Company believes ALPHA-1062 + memantine could capture a substantial market share due to physicians' established practice of prescribing combination therapies in later stages of Alzheimer's disease and patients' acceptance of multiple medications.

As long-term care settings predominate in the provision of care to moderately -to-severely affected patients, the Company will also raise awareness of the compelling results from the Swedish Dementia Registry that demonstrated that galantamine had the strongest effect on cognitive improvement and was the only drug to demonstrate a significant reduction in the risk of developing severe dementia, and a lower risk of death as compared to other evaluated acetylcholinesterase inhibitors.

Should both ALPHA-1062 and the combination therapy (ALPHA-1062+memantine) ultimately be approved for commercialization, the Company would be able to offer a solution that treats all the stages of Alzheimer's disease. The Company will plan to leverage the existing sales forces being established for the mild-to-moderate indication targeting LTC providers. These groups make up 36% of all Rx within the Alzheimer's disease market. The Company will promote awareness and educate on differentiating features of its marketed treatments. The sales force approach will consist of long-term care home materials, peer-to-peer learning programs, partnerships with Alzheimer's disease and long-term care societies and associations.

For caregivers, we plan to deploy a targeted multi-channel market campaign with the goal of motivating requests for ALPHA-1062 + memantine from their physician. Channels utilized will be focused on long-term care home, partnership with patient advocacy groups, public relation efforts, website education, and a focused media strategy.

Potential ALPHA-1062 coverage and reimbursement in the United States

US payers have granted branded Namzaric® wide access to most MA-covered lives and it is mostly covered on preferred tiers. The Company believes the ALPHA-1062 + memantine would be treated similarly. Since ZUNVEYL received approval for mild-to-moderate Alzheimer's disease, the payer team intends glean additional insights from their customers to determine commercial price and potential payer coverage by the payer community.

Intellectual Property

The Company has developed, filed, and exclusively licensed (from NLS) a significant intellectual property portfolio with respect to ZUNVEYL also known as ALPHA-1062 and ALPHA-1062IN, which is broadly described below.

ALPHA-1062 Patent Portfolio

The ALPHA-1062 patent portfolio is based on a therapeutic use (method of treatment) patent for ALPHA-1062, that covers treatment of a variety of neurological diseases with a cholinergic deficit, being memory deficits related to the cholinergic neurons, or brain disease with cognitive impairment. The Company's intellectual property strategy builds on this patent by avoiding traditional fast-release oral or transdermal routes for administering ALPHA-1062. Both routes would result in the premature cleavage of the pro-portion of the ALPHA 1062, in essence delivering the old

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drug (galantamine) with its attendant limitations. Delivery, polymorph, and formulation patents therefore expand on the original therapeutic use patent. The Company intends to patent all commercially relevant forms, formulations and routes/methods of ALPHA-1062 delivery in order to extend the effective patent protection lifetime. Effective patent protection of ALPHA-1062 and therapeutically relevant salts, polymorphs and/or formulations thereof may potentially be extended beyond 2042.

Blood Brain Barrier II (BBB II): Cholinergic enhancers with improved blood-brain barrier permeability for the treatment of diseases accompanied by cognitive impairment (PCT application WO2009127218).

Jurisdiction	Patent number	Status	Expiry Date
Canada	CA 2,721,007	Granted	04/14/2028
China	CN 102007129	Granted	04/14/2028
Europe (11 European Patent Convention member states)	EP 2137192	Granted	04/14/2028
United States	US 9,763,953	Granted	12/1/2026
	US 10,265,325	Granted	09/22/2026

In Europe, China and Canada, this patent protects the therapeutic use of ALPHA -1062 to treat a variety of neurodegenerative, psychiatric or neurological diseases with a cholinergic deficit. In the United States two patents are granted in this patent family that cover the corresponding method of treatment claims, one of which is directed to nasal administration of ALPHA-1062.

A patent term extension (PTE) of U.S. 9,763,953 has been filed to potentially extend the term of this granted patent. The duration of a PTE may not exceed five (5) years, and the patent cannot be extended such that it would expire, with PTE, more than 14 years after the date of the underlying FDA approval. We cannot guarantee whether the USPTO will grant any term extension, including the requested extension of time.

Blood Brain Barrier III (BBB III): Enhanced bioavailability of galantamine by selected formulations and trans-mucosal routes of administration of lipophilic prodrugs (PCT application WO2014016430).

Jurisdiction	Patent/Application number	Status	Expiry Date
Australia	AU 2013294917	Granted	07/29/2033
Europe (11, and 18, European Patent Convention member states)	EP 2877165	Granted	07/29/2033
	EP 3417862	Granted Divisional	
Canada	CA 2,878,135	Granted	07/29/2033
United States	US 11,077,119	Granted	08/07/2033
	US 17/356,136	Pending Continuation	

The granted claims in the jurisdictions above are directed to the therapeutic use of ALPHA -1062 and corresponding pharmaceutical compositions in the treatment of brain disease associated with cognitive impairment, wherein the claims cover intranasal, sublingual or buccal administration of the gluconate, saccharate or lactate salt of ALPHA-1062. Divisional applications have been filed and issued in some jurisdictions (e.g. in Europe) to cover these embodiments. In the U.S., the patent has been granted for sublingual administration, a continuation application is pending, further divisional and continuation applications are intended.

Blood Brain Barrier IV (BBB IV): Self-preserving compositions and multi-use dispensers for administering ALPHA-1062 (PCT application WO2022236396).

Jurisdiction	Application number	Status	Estimated Expiry Date (20-year term)
Australia	2021445637	Pending	05/14/2041
Canada	3,218,929	Pending	05/14/2041
China	2021800981674	Pending	05/14/2041
Hong Kong	n/a	Pending	05/14/2041
Europe	21941020.6	Pending	05/14/2041
United States	18/560,636	Pending	05/14/2041

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This invention is based on the discovery that ALPHA -1062 exhibits potent anti-microbial properties. This effect enables self-preserving formulations, for example multi-use solutions or dispensers for oral/nasal transmucosal administration, without additional preservatives. The claims cover anti-microbial methods, multi-use delivery devices and corresponding formulations of ALPHA -1062.

Blood Brain Barrier V (BBB V): Solid Forms of ALPHA -1062 Gluconate (PCT application WO2022150917).

Jurisdiction	Patent/Application number	Status	Estimated Expiry Date (20-year term)
United States	US 11,795,176 18/463,157	Granted Pending Continuation (Allowed)	01/13/2042
Europe	21152317.0 22738869.1	Priority Pending Pending	01/13/2042
Singapore	11202304626U	Pending	01/13/2042
Russia	2023121087	Pending	01/13/2042
Mexico	MX/a/2023/008276	Pending	01/13/2042
Korea	10-2023-7024970	Pending	01/13/2042
Japan	2023-565641	Pending	01/13/2042
Israel	303907	Pending	01/13/2042
China	2022800098271 62024086161.2	Pending Pending	01/13/2042
Hong Kong	62024091747.1	Pending	01/13/2042
Canada	3,205,859	Pending	01/13/2042
Brazil	BR 11 2023 013926 0	Pending	01/13/2042
Australia	2022208641	Pending	01/13/2042

This invention is based on the discovery and isolation of multiple unique crystalline forms of the ALPHA - 1062 gluconate salt. A stable, highly soluble polymorph form was identified, which shows improved stability and solubility over other crystalline forms and is intended for use in the drug product. An international PCT application and parallel U.S. application were filed January 13, 2022, the European priority application also remains pending. The Canadian Intellectual Property Office (CIPO) has acknowledged novelty and inventive step of the claims of the PCT application. The USPTO granted a patent on October 24, 2023, which issued as US 11,795,176. The USPTO issued a Notice of Allowance for the continuation application, US 18/463,157.

Blood Brain Barrier VI (BBB VI): ALPHA-1062 for Treating Traumatic Brain Injury (TBI)

Jurisdiction	Application number	Status	Estimated Expiry Date (20-year term)
PCT application	WO2023092231	Pending	11/25/2042
United States	18/549,309	Pending	11/25/2042
Japan	2024-531248	Pending	11/25/2042
Europe	22896916.8	Pending	11/25/2042
China	2022800777268	Pending	11/25/2042
Canada	3,238,221	Pending	11/25/2042
Australia	2022399054	Pending	11/25/2042

This invention is based on preclinical animal studies in TBI showing enhanced therapeutic benefit, suited for multi-use intranasal administration, building on the antimicrobial properties of ALPHA 1062. National phases from the PCT application have been initiated as above and remain pending.

Blood Brain Barrier VII (BBB VII): ALPHA-1062 for Treating Post Concussive Syndrome (PCS)

Jurisdiction	Application number	Status	Estimated Expiry Date (20-year term)
PCT application	PCT/CA2024/050691	Pending (not published)	5/24/2044

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This invention is based on treating cognitive impairment in patients with persistent post-concussion symptoms (PCS) after TBI, using ALPHA 1062. A US provisional application was filed May 25, 2023 (U.S. prov. appln. no. 63/504,292). An international PCT application was filed in May 2024.

Blood Brain Barrier VIII (BBB VIII): Coated tablets for pH-dependent release of benzgalantamine

Jurisdiction	Application number	Status	Expiry Date
United States	18/434,155	Priority filing, Pending (Allowed)	est. 02/06/2044

This invention is based on an oral tablet formulation for administering ALPHA 1062, employing a coating for pH dependent release. The formulation enables beneficial pharmacokinetic properties and side effect profile. A US application was filed on February 6, 2024. A Notice of Allowance was issued September 25, 2024, for US 18/434,155. After payment of the Issue Fee a US patent will be granted, with an estimated 20-year patent term until February 6, 2044. An international PCT application is planned in February 2025.

Employees and Human Capital Resources

The Company has 3 full-time employees and 2 part time contractors in total. Employees and contractors work virtually and in offices located in Vancouver BC, West Palm Beach, Florida, and Dallas/Fort Worth, Texas. The Company has an office in Grapevine Texas on a month to month lease. Employees utilize remote video conferencing and other connection tools to meet and advance business projects.

We recognize that our continued ability to attract, retain, and motivate exceptional employees is vital to ensuring our long-term competitive advantage. Our employees are critical to our long -term success and are essential to helping us meet our goals. Among other things, we support and incentivize our employees in the following ways:

- **Talent development, compensation, and retention:** We strive to provide our employees with a rewarding flexible and remote work environment. We provide a competitive compensation and benefits package, including bonus and equity incentive plans — all designed to attract and retain a skilled and diverse workforce.
- **Health and safety:** We support the health and safety of our employees by providing comprehensive insurance benefits, company-paid holidays, a personal time-off program, and other additional benefits which are intended to assist employees to manage their well-being.
- **Inclusion and diversity:** We are committed to efforts to increase diversity and foster an inclusive work environment that supports our workforce.

Foreign Operations

The Company's management team oversees the various contract development and manufacturing organizations which have been retained to assist the Company in the ALPHA-1062 and ALPHA -0602 development program, as further described below.

ZUNVEYL, also known as ALPHA-1062 Delayed Release Oral Tablet Formulation, Manufacturing

With respect to the manufacturing of ZUNVEYL, the Company has entered into agreements with specialized contract manufacturing organizations located in Taiwan for the manufacturing of the ZUNVEYL active pharmaceutical ingredient, and with manufacturing companies located in the United States specialized in the production of oral tablets and nasal spray formulations. As the development program proceeds, the Company intends to contract with back-up active pharmaceutical ingredient and contract manufacturing organizations, ensuring a reduced risk of disruption in the supply of the product on commercialization. The Company expects that this strategy will help reduce the operational risk.

ALPHA-0602, ALPHA-702 and ALPHA -802 are in pre-clinical studies and not yet in the production phase.

ZUNVEYL Clinical Testing

The Company contracted with Contract Research Organizations (CROs) to conduct both pilot and pivotal bioavailability and bioequivalence (BABE) clinical trials. Based on historical experience of these CROs, including independent third party audits and monitoring commissioned by the Company at these sites, the Company believes that the CROs and sites meet international and FDA standards required to conduct Pilot and Pivotal Studies required for NDA approval.

ZUNVEYL Regulatory Matters

The Company has entered into contracts with regulatory consultants to provide advice and assist in preparing documentation for regulatory submissions to the FDA. The Company also plans to contract with appropriate regulatory consultants focused on the European Medicines Agency (EMA) of the European Union.

The Company intends to develop a detailed commercialization plan for ZUNVEYL in the United States. The Company also intends to identify pharmaceutical distribution partners to enter the markets in Asia, European Union, and/or LATAM (Mexico, Central and South America).

The Company is in discussions with several pharmaceutical distributors with respect to LATAM (Mexico, Central and South America) and select Asian countries. The Company anticipates that it may be possible to enter into license agreements in several of these non-core territories. Distributors often have a deep understanding of local market dynamics, including regulatory requirements, distribution channels, and consumer preferences. Partnering with a local distributor allows pharmaceutical companies to leverage this expertise and navigate the complexities of entering a new market more effectively. By outsourcing distribution activities to a reliable partner, the Company can focus our resources and expertise on our core competencies, such as commercializing in the U.S. FDA regulatory approval does not guarantee approval and/or distribution in other territories.

Government Regulation

Government authorities in the United States, at the federal, state, and local level, and other countries extensively regulate, among other things, the research, development, nonclinical and clinical testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing, and export and import of products such as those we are developing. Generally, before a new drug can be marketed, considerable data must be generated, which demonstrate the drug's quality, safety, and efficacy. Such data must then be organized into a format specific for each regulatory authority, submitted for review and approved by the regulatory authority.

U.S. Drug Development Process

In the United States, the FDA regulates drugs under the federal Food, Drug, and Cosmetic Act ("FDCA"), and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, the approval process or after approval may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, 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 us.

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, animal studies, and formulation studies in accordance with FDA's good laboratory requirements and other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent Institutional Review Board ethics committee, either centralized or with respect to each clinical site, before each clinical trial may be initiated;

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- performance of adequate and well-controlled human clinical trials in accordance with GCP requirements to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA after completion of all pivotal trials;
- determination by the FDA within 60 days of its receipt of an NDA to accept the filing for substantive review;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practice ("cGMP") requirements to ensure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality, and purity, and of selected clinical investigation sites to assess compliance with GCP;
- FDA review and approval of the NDA to permit commercial marketing of the product for particular indications for use in the United States;
- compliance with any post-approval requirements, including potential requirements to conduct any post-approval studies required by the FDA or the potential requirement to implement risk evaluation and mitigation strategies ("REMS"); and
- compliance with the United States *Pediatric Research Equity Act of 2003* ("PREA"), which requires either exemption from the requirements or may require conducting clinical research in a pediatric population.

During the development of a new drug, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA is submitted. Meetings at other times may be requested. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and the FDA to reach agreement on the next phase of development. Sponsors typically use the meetings at the end of the Phase 2 clinical trial to discuss Phase 2 clinical results and present plans for the pivotal Phase 3 clinical trials that they believe will support approval of the new drug.

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

While the IND is active and before approval, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the same or similar drugs, findings from animal or *in vitro* testing suggesting a significant risk to humans, and any clinically important increased incidence of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

NDA Review and Approval Process

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development nonclinical and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of substantial user fees; a waiver of such fees may be obtained under certain limited circumstances. Additionally, no user fees are assessed on NDAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality, and purity. Under the PDUFA, guidelines that are currently in effect, the FDA has a goal of ten months from the date

of “filing” of a standard NDA for a new molecular entity to review and act on the submission. This review typically takes 12 months from the date the NDA is submitted to FDA because the FDA has approximately two months to make a “filing” decision after the application is submitted. The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing.

The FDA may refer an application for a novel drug to an advisory committee. 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 recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

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 and adequate to assure consistent production 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 in the submission 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.

After the FDA evaluates an NDA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete, and the application will not be approved in its present form. A Complete Response Letter usually describes the specific deficiencies in the NDA identified by the FDA and may require additional clinical data, such as an additional pivotal Phase 3 clinical trial or other significant and time-consuming requirements related to clinical trials, nonclinical studies, or manufacturing. If a Complete Response Letter is issued, the sponsor must resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA does not satisfy the criteria for approval.

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA with a REMS to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a medicine and to enable patients to have continued access to such medicines by managing their safe use. It 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 also may offer conditional approval subject to, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may also 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. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could impact the timeline for regulatory approval or otherwise impact ongoing development programs.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant ODD, to a drug or therapeutic biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making a biological product available in the United States for this type of disease or condition will be recovered from sales of the product. ODD must be requested before submitting a BLA. After the FDA grants ODD, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. ODD does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has ODD receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as not being able to supply the product for patients or showing clinical superiority to the product with orphan exclusivity.

Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same drug or biological product as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If a biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity.

Expedited Development and Review Programs

The FDA has a fast track designation program that is intended to expedite or facilitate the process for reviewing new drug products that meet certain criteria. Specifically, new drugs are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. With regard to a fast track product, 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 NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

Any product submitted to the FDA for approval, including a product with a fast track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis, or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug designated for priority review in an effort to facilitate the review. The FDA endeavors to review applications with priority review designations within six months of the filing date as compared to ten months for review of new molecular entity NDAs under its current PDUFA review goals.

In addition, a product may be eligible for accelerated approval. Drug products intended to treat serious or life-threatening diseases or conditions may be eligible for accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality 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 adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires pre-approval of promotional materials as a condition for accelerated approval, which could adversely impact the timing of the commercial launch of the product.

The Food and Drug Administration Safety and Innovation Act established a category of drugs referred to as "breakthrough therapies" that may be eligible to receive breakthrough therapy designation. A sponsor may seek FDA designation of a product candidate as a "breakthrough therapy" if the product is intended, alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance. The breakthrough therapy designation is a distinct status from both accelerated approval and priority review, which can also be granted to the same drug if relevant criteria are met. If a product is designated as breakthrough therapy, the FDA will work to expedite the development and review of such drug.

Fast track designation, priority review, accelerated approval, and breakthrough therapy designation do not change the standards for approval, but may expedite the development or approval process. 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. We may explore some of these opportunities for our product candidates as appropriate.

Post-Approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There are continuing, annual program fees for any marketed products. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

The FDA may withdraw 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 revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions 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 untitled letters;
- clinical holds on post-approval or Phase IV clinical studies, if applicable;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment, or exclusion from federal healthcare programs; and
- mandated modification of promotional materials and labeling and the issuance of corrective information.

Under the PREA, an NDA must contain data to assess the safety and efficacy of the applicant product for indications in applicable pediatric populations. It must also contain information to support dose administration for pediatric populations where the drug may be utilized. FDA has the ability to grant complete waivers, partial waivers, or deferrals for compliance with PREA. PREA requirements may be waived for applications for approval of drug candidates intended to treat, mitigate, prevent, diagnose or cure diseases and other conditions that do not occur in pediatric populations. Generally, PREA does not apply for drug candidates which have obtained an orphan designation, unless otherwise regulated by the FDA. Despite this, separate PREA compliance or waivers may still be required for each product indication. Although noncompliance with PREA will generally not be considered for withdrawal of an approval it may be considered by the FDA as the sole basis for enforcement action such as injunction or seizure as non-compliance and may render the drug misbranded.

The FDA closely regulates the marketing, labeling, advertising, and promotion of drug products. A company can make only those claims relating to safety and efficacy that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising, and potential civil and criminal penalties. Physicians may prescribe, in their independent professional medical judgment, legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in

their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined companies from engaging in off-label promotion. The FDA and other regulatory agencies have also required that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA-approved labelling.

505(b)(2) NDAs

The FDA is authorized to approve an alternative type of NDA under Section 505(b)(2) of the FDCA. 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 from the data owner. The applicant may rely upon the FDA's findings of safety and efficacy for an approved product that acts as the "listed drug." The FDA may also require 505(b)(2) applicants to perform additional studies or measurements to support the change from the listed drug. The FDA may then approve the new product for all, or some, of the conditions of use for which the branded reference drug has been approved, or for a new condition of use sought by the 505(b)(2) applicant.

Abbreviated New Drug Applications, or ANDAs

The Hatch-Waxman amendments to the FDCA established a statutory procedure for submission and FDA review and approval of abbreviated new drug applications ("ANDAs") for generic versions of listed drugs. An ANDA is a comprehensive submission that contains, among other things, data and information pertaining to the active pharmaceutical ingredient, drug product formulation, specifications and stability of the generic drug, as well as analytical methods, manufacturing process validation data, and quality control procedures. Premarket applications for generic drugs are termed abbreviated because they generally do not include clinical data to demonstrate safety and effectiveness. However, a generic manufacturer is typically required to conduct bioequivalence studies of its test product against the listed drug. Bioequivalence is established when there is an absence of a significant difference in the rate and extent for absorption of the generic product and the reference listed drug. For some drugs, other means of demonstrating bioequivalence may be required by the FDA, especially where the rate or extent of absorption is difficult or impossible to measure. The FDA will approve an ANDA application if it finds that the generic product does not raise new questions of safety and effectiveness as compared to the reference listed drug. A product is not eligible for ANDA approval if the FDA determines that it is not bioequivalent to the reference listed drug if it is intended for a different use or if it is not subject to, and requires an approved suitability petition.

Marketing Exclusivity

Market exclusivity provisions authorized under the FDCA can delay the submission and approval of certain marketing applications for products containing the same active ingredient. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity ("NCE"). A drug is an NCE if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. The FDCA also permits patent term restoration of up to five years as compensation for a patent term lost during product development and FDA regulatory review process to the first applicant to obtain approval of an NDA for a new innovative product in the United States. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. During the NCE exclusivity period, the FDA may not approve, or even accept for review, an ANDA or an NDA submitted under Section 505(b)(2) (505(b)(2) NDA), submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed in the FDA's publication *Approved Drug Products with Therapeutic Equivalence Evaluations*, which we refer to as the Orange Book, with the FDA by the innovator NDA holder. Upon approval of an NDA, each of the patents listed in the application for the drug is then published in the Orange Book. These products may be cited by potential competitors in support of approval of an ANDA or 505(b)(2) NDA. Any competitor who files an ANDA seeking approval of a generic equivalent version of a drug listed in the Orange Book or a 505(b)(2) NDA referencing a drug listed in the Orange Book must make patent certifications to the FDA that: (1) no patent information on the drug or method of use that is the subject of the

application has been submitted to the FDA; (2) the patent has expired; (3) the date on which the patent has expired and approval will not be sought until after the patent expiration; or (4) the patent is invalid or will not be infringed upon by the manufacture, use, or sale of the drug product for which the application is submitted. Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired. If the ANDA or 505(b)(2) NDA applicant has provided a paragraph IV certification the applicant must send notice of the paragraph IV certification to the NDA and patent holders once the application 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. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve. Thus, approval of an ANDA or 505(b)(2) NDA could be delayed for a significant period of time depending on the patent certification the applicant makes and the reference drug sponsor's decision to initiate patent litigation. If the drug has NCE exclusivity and the ANDA is submitted four years after approval, the 30-month stay is extended so that it expires 7½ years after approval of the innovator drug, unless the patent expires or there is a decision in the infringement case that is favorable to the ANDA applicant before then.

The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages, or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to any nonclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is another type of marketing exclusivity available in the United States. Pediatric exclusivity provides for an additional six months of marketing exclusivity attached to another period of exclusivity if a sponsor conducts clinical trials in children in response to a written request from the FDA. The issuance of a written request does not require the sponsor to undertake the described clinical trials. The indications the Company is currently pursuing for its product candidates will not be eligible for pediatric exclusivity because they are age-related degenerative diseases and disorders that do not occur in the pediatric population. In addition, orphan drug exclusivity, as described above, may offer a seven-year period of marketing exclusivity, except in certain circumstances.

Other Healthcare Laws

Pharmaceutical manufacturers are subject to additional healthcare laws, regulation, and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such laws include, without limitation, U.S. federal anti-kickback, anti-self-referral, false claims, transparency, including the federal Physician Payments Sunshine Act, consumer fraud, pricing reporting, data privacy, data protection, and security laws and regulations as well as similar foreign laws in the jurisdictions outside the U.S. Similar state and local laws and regulations may also restrict business practices in the pharmaceutical industry, such as state anti-kickback and false claims laws, which may apply to business practices, including but not limited to, research, distribution, sales, and marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, or by patients themselves; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information; state and local laws which require the tracking of gifts and other

remuneration and any transfer of value provided to physicians, other healthcare providers and entities; and state and local laws that require the registration of pharmaceutical sales representatives; and state and local laws governing 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 the United States *Health Insurance Portability and Accountability Act of 1996* (HIPAA), thus complicating compliance efforts. For example, California recently enacted the *California Consumer Privacy Act of 2018* (“CCPA”), which creates individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling certain personal data of consumers or households. The CCPA requires covered companies to provide new disclosure to consumers about such companies’ data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action. Under the CCPA the California Attorney General may bring enforcement actions for violations of the CCPA. Further, California voters approved a new privacy law, the *California Privacy Rights Act* (“CPRA”), in the November 3, 2020 election which amends and expands the CCPA. The CPRA became fully effective on January 1, 2023. The CPRA significantly modifies the CCPA, including by expanding consumers’ rights with respect to certain sensitive personal information. The CPRA also creates a new state agency, the California Privacy Protection Agency, that is vested with authority to implement and enforce the CCPA and the CPRA. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally.

The risk of our being found in violation of these or other laws and regulations is increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts and their provisions are open to various interpretations. These laws and regulations are subject to change, which can increase the resources needed for compliance and delay drug approval or commercialization. Any action brought against us for violations of these laws or regulations, even successfully defended, could cause us to incur significant legal expenses and divert our management’s attention from the operation of our business. Also, we may be subject to private “qui tam” actions brought by individual whistleblowers on behalf of the federal or state governments. Actual or alleged violation of any such laws or regulations may lead to investigations and other claims and proceedings by regulatory authorities and in certain cases, private actors, and violation of any of such laws or any other governmental regulations that apply may result in penalties, including, without limitation, significant administrative, civil and criminal penalties, damages, fines, additional reporting obligations, and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, the curtailment or restructuring of operations, exclusion from participation in government healthcare programs and imprisonment.

The United States Federal Office of Inspector General (“OIG”), continues to make modifications to the existing Federal Anti-Kickback Statute (“AKS”) safe harbors which may increase liability and risk as well as adversely impact sales relationships. On November 20, 2020, OIG issued the final rule for Safe Harbors under the AKS. This new final rule creates additional safe harbors including ones pertaining to patient incentives. OIG is able to modify safe harbors as well as regulatory compliance requirements which could impact our business adversely. The majority of states also have statutes or regulations similar to these federal laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payer.

Coverage and Reimbursement

Sales of any pharmaceutical product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance, and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. Significant uncertainty exists as to the coverage and reimbursement status of any newly approved product. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. One third-party payor’s decision to cover a particular product does not ensure that other payors will also provide coverage for the product. As a result, the coverage determination process can require manufacturers to provide scientific details, information on cost-effectiveness, and clinical support for the use of a product to each payor separately. This can be a time-consuming process, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

In addition, third-party payors are increasingly reducing reimbursements for pharmaceutical products and related services. The U.S. government and state legislatures have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of

generic products. Third-party payors are increasingly challenging the prices charged, examining the medical necessity and reviewing the cost effectiveness of pharmaceutical products, in addition to questioning their safety and efficacy. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product.

At the state level, there are also new laws and ongoing ballot initiatives that create additional pressure on drug pricing and may affect how pharmaceutical products are covered and reimbursed. A number of states have adopted or are considering various pricing actions, such as those requiring pharmaceutical manufacturers to publicly report proprietary pricing information, limit price increases or to place a maximum price ceiling or cap on certain products. Existing and proposed state pricing laws have added complexity to the pricing of pharmaceutical drug products.

In international markets, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the Company placing the medicinal product on the market. Pharmaceutical products may face competition from lower-priced products in foreign countries that have placed price controls on pharmaceutical products and may also compete with imported foreign products. Furthermore, there is no assurance that a product will be considered medically reasonable and necessary for a specific indication, that it will be considered cost-effective by third-party payors, that an adequate level of reimbursement will be established even if coverage is available, or that the third-party payors' reimbursement policies will not adversely affect the ability for manufacturers to sell products profitably.

Healthcare Reform

In the United States and certain foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "**ACA**"), was signed into law, which substantially changed the way healthcare is financed by both governmental and private insurers in the United States. By way of example, the ACA increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1%; it required collection of rebates for drugs paid by Medicaid managed care organizations; imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell certain "branded prescription drugs" to specified federal government programs; it implemented a new methodology under which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected; it expanded the eligibility criteria for Medicaid programs; it created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and it established a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services ("**CMS**"), to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been executive, judicial and Congressional challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. Since January 2017, President Trump signed several Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, several bills affecting the implementation of certain taxes under the ACA have passed. For example, in 2017, Congress enacted the Tax Act, which eliminated the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year, a process that is commonly referred to as the "individual mandate". In addition, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the ACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. On December 14, 2018, a Texas U.S. District Court Judge ruled that the individual mandate is a critical and inseparable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. On December 18, 2019, the U.S. Court of Appeals for the

5th Circuit ruled that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review the case and held oral arguments in November 2020. On June 17, 2021, the Supreme Court ruled that the plaintiffs lacked standing to challenge the law as they had not alleged personal injury traceable to the allegedly unlawful conduct. As a result, the Supreme Court did not rule on the constitutionality of the ACA or any of its provisions. There may be other efforts to challenge, repeal, or replace the ACA. If successful, such efforts may potentially impact our business in the future.

President Joseph R. Biden, Jr. signed the Executive Order on Strengthening Medicaid and stating his administration's intentions to reverse the actions of his predecessor and strengthen the ACA. As part of this Executive Order, the Department of Health and Human Services, United States Treasury, and the Department of Labor are to review all existing regulations, orders, guidance documents, policies, and agency actions to consider if they are consistent with ensuring both coverage under the ACA and if they make high-quality healthcare affordable and accessible to Americans. We are unable to predict the likelihood of changes to the Affordable Care Act or other healthcare laws which may negatively impact our profitability. President Biden intends, as his predecessor did, to take action against drug prices which are considered "high". Drug pricing continues to be a subject of debate at the executive and legislative levels of U.S. government, and we expect to see legislation focusing on this in the coming year. The American Rescue Plan Act of 2021 signed into law by President Biden on March 14, 2021 includes a provision that will eliminate the statutory cap on rebates drug manufacturers pay to Medicaid that commenced in January 2024. With the elimination of the cap, manufacturers may be required to compensate states in an amount greater than what the state Medicaid programs pay for the drug.

Other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2030 with the exception of a temporary suspension implemented under various COVID-19 relief legislation from May 1, 2020 through March 31, 2021, unless additional congressional action is taken. Moreover, there has recently 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 legislation designed, among other things, to bring more transparency to product pricing, to review the relationship between pricing and manufacturer patient programs, and to reform government program reimbursement methodologies for pharmaceutical products. The Prescription Drug Pricing Reduction Act, or PDPRA, which was introduced in Congress in 2019, and again in 2020, proposed to, among other things, penalize pharmaceutical manufacturers for raising prices on drugs covered by Medicare Parts B and D faster than the rate of inflation, cap out-of-pocket expenses for Medicare Part D beneficiaries, and proposes a number of changes to how drugs are reimbursed in Medicare Part B. We cannot predict whether any proposed legislation will become law and the effect of these possible changes on our business cannot be predicted at this time.

Specialized Skill and Knowledge

The development of pharmaceutical products is a complex undertaking which requires many diverse skill sets. Given the international nature of drug development, there are numerous companies and organizations which service the pharmaceutical industry. The Company has had no difficulty to date contracting with the various specialized service providers required to complete a drug development program.

The Company has assembled a management team capable of overseeing the various contract development, manufacturing organizations which have been retained to assist the Company in the ALPHA-1062 development program. The Company is also in the process of assembling a commercialization team with the experience and skills necessary to commercialize ZUNVEYL, following the marketing approval received on July 26, 2024.

Business Cycle and Seasonality

The Company's business is not expected to be cyclical or seasonal.

Economic Dependence

The Company's business is not expected to be substantially dependent on any single commercial contract or group of contracts either from suppliers or contractors.

Changes to Contracts

The Company does not expect that its business will be materially affected in the current financial year by the renegotiation or termination of any contracts or sub-contracts.

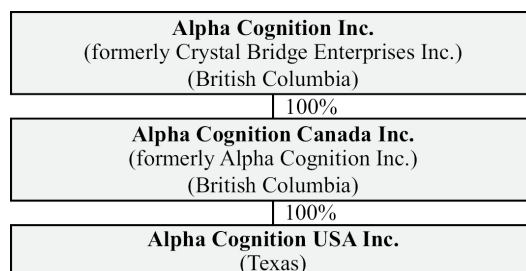
Corporate Structure

The Company was incorporated on November 15, 2017, under the Business Corporations Act (British Columbia) ("BCBCA") under the name "Crystal Bridge Enterprises Inc.". The Company is a reporting issuer in all of the provinces and territories of Canada. The Company completed its Qualifying Transaction with Alpha Cognition Canada Inc. (formerly Alpha Cognition Inc.) ("Alpha Canada" or "ACI Canada") on March 18, 2021, and changed its name to Alpha Cognition Inc. As a result of the Qualifying Transaction Alpha Canada became the Company's wholly-owned subsidiary.

Alpha Canada was a privately held company incorporated pursuant to the BCBCA on May 16, 2014, under the name "Neurodyn Cognition Inc.". On March 16, 2020, Alpha Canada changed its name to "Alpha Cognition Inc." and on March 17, 2021, changed its name to "Alpha Cognition Canada Inc."

Alpha Canada has one wholly-owned subsidiary, Alpha Cognition USA Inc., which was incorporated pursuant to the laws of the State of Florida on August 19, 2019 and redomiciled to the State of Texas effective as of March 8, 2022.

The chart below sets out the intercorporate relationship between the Company, Alpha Canada and Alpha Cognition USA Inc.



The principal office of the Company is located at 1200 – 750 West Pender Street Vancouver, BC, V6C 2T8. The Company's registered and records office is located at 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8. The Company's phone number is 1-858-344-4375. The Company's website is www.alphacognition.com. Information contained on the Company's website is not incorporated into this prospectus.

Legal Proceedings

From time to time, we are involved in various legal proceedings arising from the normal course of business activities. We are not currently a party to any material legal proceedings. However, from time to time, we may become involved in other litigation or legal proceedings relating to claims arising from the ordinary course of business.

Competition

We face substantial competition from multiple sources, including large and specialty biotechnology and pharmaceutical companies, academic research institutions and governmental agencies and public and private research institutions. Our competitors compete with us on the level of the technologies employed, or on the level of development of product candidates. In addition, many small biotechnology companies have formed collaborations with large, established companies to (i) obtain support for their research, development and commercialization of products or (ii) combine several treatment approaches to develop longer lasting or more efficacious treatments that may potentially directly compete with our current or future product candidates. We anticipate that we will continue to face increasing competition as new therapies and combinations thereof, technologies, and data emerge.

In addition to the current standard of care treatments for patients with neurodegenerative diseases, numerous commercial and academic preclinical studies and clinical trials are being undertaken by a large number of parties to assess technologies and product candidates in the CNS field.

Many of our competitors, either alone or in combination with their respective strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, the regulatory approval process, commercialization, and marketing than we do. Mergers and acquisition activity in the biopharmaceutical sector is likely to result in greater resource concentration among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through sizeable collaborative arrangements with established companies. These competitors also compete with us in recruiting and retain qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if one or more of our competitors develop and commercialize products that are safer, more effective, better tolerated, or of greater convenience or economic benefit than our proposed product offering. Our competitors also may be in a position to obtain FDA or other regulatory approval for their products more rapidly, resulting in a stronger or dominant market position before we are able to enter the market. The key competitive factors affecting the success of our programs are likely to be product safety, efficacy, convenience and treatment cost.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, and includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the section entitled "Risk Factors" our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. See also the section entitled "Special Note Regarding Forward-Looking Statements."

Overview

The Company is a biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's disease ("Alzheimer's disease" or "AD"), for which there are limited or no treatment options. On July 26, 2024, the Company received approval by the FDA of the Company's New Drug Application (the "NDA") for ZUNVEYL™ (benzgalantamine) previously known as ALPHA-1062 ("ZUNVEYL" or "ALPHA-1062") a delayed release oral tablet formulation indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults (Alzheimer's disease). The Company will now focus on the commercial manufacturing and sales of ZUNVEYL oral tablet formulation. The Company's commercial development program for ZUNVEYL is primarily focused on building a long term care commercial team that can focus on providing key points of differentiation, exploiting key issues with existing Acetylcholinesterase inhibitors ("AChEI") treatments, and seeking potential licensing partners for other additional indications and new formulations. The Company intends to target large volume nursing homes specializing in Alzheimer's, to leverage an account based sales team with demonstrated success in long-term care ("LTC"), in order to position ZUNVEYL with Medicare payors, and to work with strategic and clinical partnerships with consultant pharmacists and long term care pharmacies. The Company has five additional pre-clinical development programs: (1) ZUNVEYL in combination with memantine for the treatment of moderate-to-severe Alzheimer's disease, (2) ALPHA-1062 sublingual formulation, (3) ALPHA-1062 intranasal ("ALPHA-1062IN") formulation for the treatment of cognitive impairment with mild traumatic brain injury (mTBI; otherwise known as concussion), (4) ALPHA-0602, and (5) ALPHA-0702 & ALPHA-0802, the latter two programs also referred to as 'Progranulin' and 'Progranulin GEM's', respectively, for the treatment of neurodegenerative diseases including amyotrophic lateral sclerosis (ALS) or Lou Gehrig's disease and spinal muscular atrophy (SMA).

ZUNVEYL, is a patented next generation acetylcholinesterase inhibitor indicated for the treatment of mild to moderate dementia of the Alzheimer's type in adults. ZUNVEYL's active metabolite is differentiated from donepezil and rivastigmine in that it binds neuronal nicotinic receptors, most notably the alpha-7 subtype, which is known to have a positive effect on cognition. In addition to our approved oral formulation, ZUNVEYL is also in pre-clinical development (1) in combination with memantine to treat moderate to severe Alzheimer's disease, (2) alone as a with sublingual formulation for patients suffering from dysphagia, and (3) alone and referred to herein as "ALPHA-1062IN" that is intended to be out-licensed for pre-clinical development to study an intranasal formulation for cognitive impairment with mTBI.

Our other pre-clinical assets include ALPHA-0602 and ALPHA-0702 & ALPHA-0802 (Progranulin and Progranulin GEM's), which are expressed in several cell types in the central nervous system and in peripheral tissues, promotes cell survival, regulates certain inflammatory processes, and play a significant role in regulating lysosomal function and microglial responses to disease. Its intended use for the treatment of neurodegenerative diseases has been patented by the Company and ALPHA-0602 has been granted an Orphan Drug Designation for the treatment of ALS by the FDA. Orphan Drug Designation was provided for ALPHA-0602 by the Office of Orphan Drug Products, FDA on February 2020 based on the Federal Food Drug, and Cosmetic Act, whereby the ALPHA-0602 met the criteria designated in Section 526 of such Act. For a further description see the section entitled "Business — Government Regulation — Orphan Drug Designation". The Orphan Drug Designation allows for exclusivity provisions provided

the drug is approved first for indication: treatment of amyotrophic lateral sclerosis ALPHA -0702 and ALPHA-0802 are Granulin Epithelin Motifs, ("GEMs"), derived from full length progranulin which have therapeutic potential across multiple neurodegenerative diseases. GEMs have been shown to be important in regulating cell growth, survival, repair, and inflammation. ALPHA-0702 and ALPHA-0802 are designed to deliver this result with potentially lower toxicity, and greater therapeutic effect than full length progranulin. As the assets are pre-clinical and do not add material value to the Company, the Company will not develop these assets further and instead will seek to out-license the assets to interested third parties. Given the early stage of discussion with third parties, the Company cannot assess value to a license agreement.

The Company is the parent company of Alpha Cognition Canada Inc. ("Alpha Canada" or "ACI Canada") which is the parent company of Alpha Cognition USA Inc. ("ACI USA"). As of May 1, 2023, the Company's common shares commenced trading on the CSE under the symbol "ACOG", previously the Company's shares were traded on the TSX-V until April 28, 2023, when the Company had them delisted. As of November 12, 2024, the Company's common shares commenced trading on the Nasdaq Capital Market under the symbol "ACOG". The Company's shares were voluntarily delisted from the CSE on December 17, 2024. The Company's shares also quoted for trading on the OTCQB under the trading symbol "ACOGF".

Operations

The Company has not generated revenues from its operations to date and as of September 30, 2024, and had a deficit of \$70,626,302 (December 31, 2023 – \$61,648,173) which has been primarily financed by equity. The Company had \$3,666,389 in cash and cash equivalents, including restricted cash, and \$3,005,836 in current liabilities (of which \$107,010 is payable from the Company's available restricted cash balance) as of June 30, 2024. The Company's continuing operations, as intended, are highly dependent upon its ability to obtain additional funding and eventually generate cash flows. Management is of the opinion that it does not have sufficient working capital to fully meet the Company's liabilities and commitments as outlined and planned in the following discussion. Management is of the opinion it will need to raise additional capital to cover upcoming planned Research and Development ("R&D"), commercialization of ZUNVELY and operating costs. Possible sources of such capital may come from private placements and public offerings of the Company's common shares and funds received from the exercise of warrants and share options. Additionally, the Company will also consider funding that may arise through partnership activities, including royalties, and debt. There is a risk that additional financing will not be available on a timely basis, on terms acceptable, or at all to the Company. These factors indicate the existence of a material uncertainty which causes significant doubt in the ability of the Company to continue as a going concern.

The Company is also contemplating raising capital by pursuing both dilutive and non -dilutive strategic sources of capital to fully execute its commercialization and operating plans following receipt of the NDA approval for ZUNVEYL from the FDA. Any additional capital is expected to further support our planned costs to begin commercial activities including launching U.S. sales of ZUNVEYL for the treatment of mild-to-moderate Alzheimer's disease.

Reverse Stock Split

On November 5, 2024, we completed a reverse stock split of our common shares with a stock split ratio of 1-for-25 ("Reverse Stock Split").

Except as otherwise indicated, all references to our common shares, share data, per share data and related information depict the effect of the Reverse Stock Split as if it had occurred at the beginning of the earliest period presented. The Reverse Stock Split combined each twenty five shares of our outstanding common shares into one common share, without any change in the par value per share which will remain no par value, and the Reverse Stock Split correspondingly adjusted, among other things, the number of common shares issuable upon exercise of outstanding options and warrants and the exercise price of such options and warrants and shares issuable upon conversion of preferred stock and other convertible securities. No fractional shares will be issued in connection with the Reverse Stock Split, and any fractional shares resulting from the Reverse Stock Split were rounded to the nearest whole share.

Components of our Results of Operations

Research and development

Research and development expenses represent costs incurred to conduct research, such as the discovery and development of our product candidates. We recognize all research and development costs as they are incurred unless there is an alternative future use in other research and development projects or otherwise.

Research and development expenses consists primarily of the following:

- costs related to production of clinical supplies and non-clinical materials, including fees paid to contract manufacturers.
- employee-related expenses, which include salaries, benefits, and stock-based compensation.
- other expenses including travel and consulting services.

General and administrative expenses

General and administrative expenses costs consist of personnel costs, other outside professional services including legal, human resources, audit and accounting services, consulting and pre-commercialization expenses, including selling and marketing costs as well attendance to various conferences. Personnel costs consist of salaries, benefits, and share-based compensation. We expect to continue to incur expenses to support our continued operations as a public company, including expenses related to existing and future compliance with rules and regulations of the stock exchanges on which our securities are now traded, insurance expenses, investor relations, audit fees, professional services and general overhead and administrative costs.

Foreign exchange gain (loss)

The foreign exchange gain (loss) amount consists of changes in the value of the Canadian Dollar compared to the U.S. Dollar throughout the year.

Liability-Based Awards

Bonus right awards that include cash settlement features are accounted for as liability -based awards in accordance with ASC 718, Compensation — Share Based Compensation. The fair value of the bonus right awards is estimated using a Black-Scholes option-pricing model and is revalued on each reporting date, based on the probability of the expected awards to vest, until settlement. Changes in the estimated fair value of the bonus right awards are recognized within general and administrative expense in the consolidated statement of operations and comprehensive loss over the vesting period. Key assumptions in the calculation of the fair value of the bonus right awards include expected volatility, risk-free interest rate, expected life, and fair value per award.

Share Based Compensation

Share-based compensation cost is recorded for all option grants and awards of non-vested stock based on the grant date fair value of the award using the Black-Scholes option-pricing model and is recognized over the service period required for the award. We estimate the fair value of stock option grants using the Black-Scholes option pricing model and the assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

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Expected Term — The expected term of options represents the period that the Company's stock -based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term.

Expected Volatility — The Company computes stock price volatility over expected terms based on its historical common stock trading prices.

Risk-Free Interest Rate — The Company bases the risk-free interest rate on the implied yield available on United States Treasury zero-coupon issues with an equivalent remaining term.

Expected Dividend — The Company has never declared or paid any cash dividends on its common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, uses an expected dividend yield of zero in its valuation models.

Interest income

Interest income consists of interest earned on our cash and cash equivalents.

Grant revenue

The Company received grant revenue from the Army Medical Research and Material Command on June 5, 2023, for a pre-clinical study on the use of the ALPHA -1062 Intranasal to reduce blast of mTBI induced functional deficit and brain abnormalities. All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of operations and comprehensive loss. When grant proceeds are initially received, they are recorded as deferred income and restricted cash. Grant proceeds used to pay for study costs and are expensed as incurred, with a corresponding amount of grant revenue recorded along with a reduction of the balance of the deferred income liability. The Company classifies the balance of cash received from grants as restricted cash, when the proceeds from the grant have been designated for use in specified research. During the three months ended September 30, 2024 and September 30, 2023, the Company recorded grant income of \$61,122 and \$32,757, respectively and during the nine months ended September 30, 2024, and September 30, 2023, the Company recorded grant income of \$333,462 and \$32,757, respectively, from its R&D Grant in the consolidated statements of operations and comprehensive loss.

Interest expense

Interest expense relates primarily to the interest paid on the Neurodyn Life Sciences Inc. ("NLS") promissory note. Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 2024 to July 2025. Additionally, \$300,000 will be due on December 31, 2024, with the remaining principal balance due at maturity.

Change in fair value of derivatives

The change in the fair value of warrant liability consists of the Company's revaluation of their liability classified warrants that have an exercise price in USD. The Company uses the Black-Scholes Option Pricing Model to determine the fair value of the warrant liability at the end of each reporting period. This model requires the input of subjective assumptions including expected share price volatility, risk-free interest rate, and term of the warrant. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity.

Currency translation adjustment

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's CAD operations are translated to USD at the exchange rate on the reporting date. The income and expenses are translated using average exchange rates. Foreign currency differences that arise on translation for consolidated purposes are recognized in other comprehensive loss on the consolidated statement of operations and comprehensive loss.

Results of Operations

Comparison of the Three Months ended September 30, 2024 and 2023

	For the Three Months Ended September 30,			
	2024	2023	Dollar Change	Percentage Change
Operating expenses				
Research and development	\$ 996,029	\$ 1,429,716	\$ (433,686)	(30)%
General and administrative expenses	1,491,755	1,336,197	155,558	12
Total operating expenses	2,487,784	2,765,913	(278,129)	(10)
Net operating loss	2,487,784	(2,765,913)	278,129	(10)
Other income (expense)				
Foreign exchange (loss) gain	(8,217)	(13,301)	5,084	(38)
Interest income	1,916	2,172	(796)	(29)
Grant income	61,122	32,757	28,365	87
Interest expense	(18,679)	(9,607)	(9,072)	94
Change in fair value of conversion feature liability	174,930	—	174,930	100
Change in fair value of warrant liabilities	416,806	(515,771)	932,577	(181)
Total other income (expense)	627,878	(503,210)	1,131,088	(225)
Net loss	(1,859,906)	(3,269,123)	1,409,217	(43)
Other comprehensive loss				
Currency translation adjustment	—	(11,232)	11,232	(100)
Comprehensive loss	\$ (1,859,906)	\$ (3,280,355)	\$ 1,397,985	(43)
Net loss per share, basic and diluted	\$ (0.31)	\$ (0.84)	\$ 0.79	(63)
Weighted-average shares used to compute net loss per share, basic and diluted	6,030,259	3,880,433	2,149,826	55%

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

	For the Nine Months Ended September 30,		Dollar Change	Percentage Change
	2024	2023		
Operating expenses				
Research and development	\$ 2,879,945	\$ 3,773,880	\$ (893,935)	(24)%
General and administrative expenses	6,440,568	3,744,162	2,696,406	72
Total operating expenses	<u>9,320,513</u>	<u>7,518,042</u>	<u>1,802,471</u>	<u>24</u>
Net operating loss	<u>(9,320,513)</u>	<u>(7,518,042)</u>	<u>(1,802,471)</u>	<u>24</u>
Other income (expense)				
Foreign exchange (loss) gain	(29,708)	(3,584)	(26,124)	729
Interest income	16,146	5,059	11,087	219
Grant income	333,462	32,757	300,705	918
Interest expense	(42,153)	(14,017)	(28,136)	201
Impairment of intangible assets	(39,166)	—	(39,166)	100
Change in fair value of conversion feature liability	174,930	—	174,930	100
Change in fair value of warrant liability	(16,127)	(532,429)	516,302	(97)
Provision for loan losses	(55,000)	—	(55,000)	100
Total other income (expense)	<u>342,384</u>	<u>(512,214)</u>	<u>854,598</u>	<u>(167)</u>
Net loss	<u>(8,978,129)</u>	<u>(8,030,256)</u>	<u>(947,873)</u>	<u>12</u>
Other comprehensive loss (income)				
Currency translation adjustment	—	(19,573)	19,573	(100)
Comprehensive loss	<u>\$ (8,978,129)</u>	<u>\$ (8,049,829)</u>	<u>\$ (967,446)</u>	<u>12</u>
Net loss per share, basic and diluted	<u>\$ (1.51)</u>	<u>\$ (2.23)</u>	<u>\$ 0.72</u>	<u>(32)</u>
Weighted-average shares used to compute net loss per share, basic and diluted	<u>5,928,460</u>	<u>3,599,266</u>	<u>2,329,194</u>	<u>65%</u>

Research and development expenses
Comparison of Research and Development for the Three Months ended September 30, 2024 and 2023

Research and development expenses decreased by \$433,687, or 30%, from \$1,429,716 for the three months ended September 30, 2023, to \$996,029 for the three months ended September 30, 2024. Research and development costs decreased primarily due to lower product development costs and consulting fees for ALPHA-1062 in AD, offset by grant expenses of \$61,122 which were incurred in 2024 following the receipt of the DOD grant in June 2023, and increased management fees and salaries. The Company's research and development expenses are summarized below:

	For the three months ended September 30,		Dollar Change	Percentage Change
	2024	2023		
Product development	\$ 504,309	\$ 1,083,172	\$ (578,863)	(53)%
Management fees and salaries	286,038	203,375	82,663	41
Share-based compensation	50,882	173,023	(122,141)	(71)
R&D grant expenses	61,122	32,757	28,365	87
Consulting fees	3,190	(82,337)	85,527	(104)
Subcontractors	90,488	19,726	70,762	359
	<u>\$ 996,029</u>	<u>\$ 1,429,716</u>	<u>\$ (433,687)</u>	<u>(30)%</u>

Comparison of Research and Development for the Nine months ended September 30, 2024 and 2023

Research and development expenses decreased by \$893,935, or 24%, from \$3,773,880 for the nine months ended September 30, 2023, to \$2,879,945 for the nine months ended September 30, 2024. Research and development costs decreased primarily due to lower product development costs including clinical trial costs and consulting fees for ALPHA-1062 in AD following the submission of the NDA filed in September of 2023, offset by grant expenses of \$333,462 which were incurred in 2024 following the receipt of the DOD grant in June 2023 and increased management fees and salaries. The Company's research and development expenses are summarized below:

	For the nine months ended September 30,		Dollar Change	Percentage Change
	2024	2023		
Product development	\$ 1,266,070	\$ 2,609,142	\$ (1,343,072)	(51)%
Management fees and salaries	689,698	486,760	202,938	42
Share-based compensation	320,427	421,766	(101,339)	(24)
R&D grant expenses	333,462	32,757	300,705	918
Consulting fees	10,500	59,810	(49,310)	(82)
Subcontractors	259,788	163,645	96,143	59
	<u>\$ 2,879,945</u>	<u>\$ 3,773,880</u>	<u>\$ (893,935)</u>	<u>(24)%</u>

General and administrative expenses

General and administrative expenses costs consist of personnel costs, consulting fees, other outside professional services including legal, human resources, audit and accounting services, and pre-commercialization expenses, including selling and marketing costs as well attendance to various conferences. Personnel costs consist of salaries, benefits, and share-based compensation. We expect to continue to incur expenses to support our continued operations as a public company, including expenses related to existing and future compliance with rules and regulations of the stock exchanges on which our securities are traded, insurance expenses, investor relations, audit fees, professional services and general overhead and administrative costs.

Comparison of General and Administrative Expenses for the Three Months ended September 30, 2024 and 2023

General and administrative expenses increased by \$155,558 or 12%, from \$1,336,197 for the three months ended September 30, 2023, to \$1,491,755, for the three months ended September 30, 2024. Consulting fees, financing fees, registrar and filing fees, investor relations and other general and administrative costs were primarily higher in the three months ended September 30, 2024, in support of the Company's US IPO filing and general business operating support. Share-based compensation was lower primarily due to fluctuations in the Company stock price and accounting for equity awards that were issued after September 30, 2023. The following table depicts the fluctuation in the general and administrative accounts:

	For the three months ended September 30,			
	2024	2023	Dollar Change	Percentage Change
General and Administrative Expenses:				
Accretion expenses	\$ 85,476	\$ (20,931)	\$ 106,407	(508)%
Amortization expense	19,761	20,594	(833)	(4)
Consulting fees	223,874	101,141	122,733	121
Depreciation	236	525	(289)	(55)
Financing fees	354,791	—	354,791	100
Investor relations	46,397	5,538	40,859	738
Management fees and salaries	291,765	388,771	(97,006)	(25)
Marketing	6,623	8,299	(1,676)	(20)
Other general and administrative	116,596	65,488	51,108	78
Professional fees	152,274	225,567	(73,293)	(32)
Registrar and filing fees	51,103	13,014	38,089	293
Share-based compensation	142,859	524,050	(381,191)	(73)
Subcontractor	—	4,141	(4,141)	(100)
	\$ 1,491,755	\$ 1,336,197	\$ 155,558	12%

Comparison of General and Administrative Expenses for the Nine months ended September 30, 2024 and 2023

General and administrative expenses increased by \$2,696,406 or 72%, from \$3,744,162 for the nine months ended September 30, 2023, to \$6,440,568, for the nine months ended September 30, 2024, primarily due to the increase in expenses related to consulting fees, financing fees, professional fees, investor relations and registrar and filing fees. Consulting fees during the nine months ended September 30, 2024, included \$2,273,949 relating to the issuance of 582,331 Common Shares pursuant to the Spartan Consulting Agreement. Management fees and salaries, professional fees, registrar and filing fees, investor relations were primarily higher in the nine months ended September 30, 2024, in support of the Company's NDA filing for ALPHA-1062, the US IPO filing and general business operating support. Share-based compensation was lower primarily due to fluctuations in the Company stock price and accounting for equity awards that were issued after September 30, 2023. The following table depicts the fluctuation in the general and administrative accounts:

	For the Nine months ended September 30,			
	2024	2023	Dollar Change	Percentage Change
General and Administrative Expenses:				
Accretion expenses	\$ 123,231	\$ 42,980	\$ 80,251	187%
Amortization expense	60,115	61,782	(1,667)	(3)
Consulting fees	2,567,319	125,226	2,442,093	1,950
Depreciation	710	1,577	(867)	(55)
Financing fees	354,791	—	354,791	100
Investor relations	146,249	9,605	136,644	1,423
Management fees and salaries	1,077,093	1,035,465	41,628	4
Marketing	11,874	16,099	(4,225)	(26)
Other general and administrative	297,563	202,159	95,404	47
Professional fees	1,013,681	714,443	299,238	42
Registrar and filing fees	181,440	45,030	136,410	303
Share-based compensation	596,726	1,477,663	(880,937)	(60)
Subcontractor	—	12,133	(12,133)	(100)
Travel and related	9,776	—	9,776	100
	<u>\$ 6,440,568</u>	<u>\$ 3,744,162</u>	<u>\$ 2,696,406</u>	<u>72%</u>

Foreign Exchange (Loss) Gain

The foreign exchange (loss) gain amount consists of changes in the value of the Canadian Dollar compared to the U.S. Dollar throughout the year.

The foreign exchange gain (loss) changes by \$5,086, or 38%, from a loss of \$13,301 for the three months ended September 30, 2023, to a loss of \$8,217 for the three months ended September 30, 2024. The foreign exchange loss increased by \$26,124, or 729%, from a loss of \$3,584 as of September 30, 2023, to a loss of \$29,708 as of September 30, 2024, due primarily to the fluctuations in exchange rate between the Canadian Dollar and the U.S. Dollar. This variance is largely due to the Company changing its functional currency from the CAD to the USD on August 31, 2023, therefore having less transactions needing to be denominated in a foreign currency. The change in mix and balance of the Company's assets and liabilities over the periods also impacted the changes in foreign currency exchange (loss) gain.

Interest Income

Interest income consists of interest earned on the Company's cash.

Interest income decreased \$796, or 29%, from \$2,172 for the three months ended September 30, 2023, to \$1,916 for the three months ended September 30, 2024. Interest income increased \$11,087, or 219%, from \$5,059 for the nine months ended September 30, 2023, to \$16,146 for the nine months ended September 30, 2024.

Grant Income

The Company received grant revenue from the Army Medical Research and Material Command on June 5, 2023, for a pre-clinical study on the use of the ALPHA -1062 Intranasal to reduce blast of mTBI induced functional deficit and brain abnormalities. During the three months ended September 30, 2024 and 2023, the Company recorded grant income of \$61,122 and \$32,757, respectively. During the nine months ended September 30, 2024 and 2023, the Company recorded grant income of \$333,462 and \$32,757, respectively.

Interest Expense

Interest expense increased \$9,072, or 94%, from \$9,607 for the three months ended September 30, 2023, to \$18,679 for the three months ended September 30, 2024. Interest expense increased \$28,136, or 201%, from \$14,017 for the nine months ended September 30, 2023, to \$42,153 for the nine months ended September 30, 2024, following the increase in interest rates on the NLS note which occurred in 2023. Interest expense relates primarily to the interest paid on the NLS promissory note and the accrued interest for the convertible debentures.

Impairment of Intangible Assets

During the three and nine months ended September 30, 2024, the Company recorded an impairment of intangible assets of \$0 and \$39,166, respectively, from the impairment of the ALPHA-0602 license as the Company decided to discontinue development of the ALPHA-602 technology, no impairments were reported in the comparable 2023 periods.

Change in Fair Value of Derivatives

The Company uses the Black-Scholes Option Pricing Model to determine the fair value of stock options, standalone share purchase warrants issued and derivative liability. This model requires the input of subjective assumptions including expected share price volatility, interest rate, and forfeiture rate. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity reserves.

The gain of \$416,806 for the three months ended September 30, 2024 for the fair value of the warrant liabilities was a net change of \$932,577, or 181%, compared to a loss of \$515,771 for the three months ended September 30, 2023. The loss of \$16,127 for the nine months ended September 30, 2024 for the fair value of the warrant liabilities was a net change of \$516,302, or 97%, compared to a loss of \$532,429 for the nine months ended September 30, 2023. The change was primarily due to the fluctuation in the Company's stock price as well as the volatility of the financial markets, coupled with the addition of new warrants issued during the first quarter of 2023 which were priced differently than the Company's functional currency at the time of issuance and new warrants issued during the third quarter of 2024 which have a variable exercise price.

Provision for Loan Losses

The Company recorded a provision for loan losses of \$55,000 relating to its loan to Alpha Seven during the nine months ended September 30, 2024, following a delay in Alpha Seven's initial capital raise and therefore potential inability to repay the loan when due.

Currency Translation Adjustment

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's CAD operations were translated to USD at the exchange rate on the reporting date. The income and expenses were translated using average exchange rates. Foreign currency differences that arise on translation for consolidated purposes are recognized in other comprehensive loss on the consolidated statement of operations and comprehensive loss.

For the three months ended September 30, 2024, the currency translation adjustments recorded increased \$11,232, or 100%, from a loss of \$11,232 to \$nil. The currency translation adjustment was \$(19,573) for September 30, 2023, compared to \$nil for the nine months ended September 30, 2024. The change is due to the Company changing its functional currency from the CAD to the USD on August 31, 2023, resulting in no currency translation adjustment being required after August 31, 2023.

Comparison of the Year ended December 31, 2023, and 2022

	For the Year Ended December 31,			
	2023	2022	Dollar Change	Percentage Change
Operating expenses				
Research and development	\$ 4,883,973	\$ 8,717,945	\$ 3,833,972	(44)%
General and administrative expenses	5,054,120	4,841,884	212,236	4
Total operating expenses	9,938,093	13,559,829	(3,621,736)	(27)
Net operating loss	(9,938,093)	(13,559,829)	3,621,736	(27)
Other income (expense)				
Foreign exchange gain (loss)	9,928	(296,057)	305,985	(103)
Interest income	6,804	1,925	4,879	(253)
Grant income	191,087	—	191,087	100
Federal wage tax credits	69,416	—	69,416	100
Interest expense	(17,516)	(37,237)	19,721	(53)
Write off of equipment	—	(5,506)	5,506	(100)
Change in fair value of warrant liability	(4,085,284)	1,823,444	(5,908,728)	(324)
Total other (expense) income	(3,825,565)	1,486,569	(5,312,134)	(357)
Net loss	(13,763,658)	(12,073,260)	(1,690,398)	14
Other comprehensive loss				
Currency translation adjustment	(19,573)	16,806	(36,379)	(216)
Comprehensive loss	\$ (13,783,231)	\$ (12,056,454)	\$ (1,726,777)	14%
Net loss per share, basic and diluted	\$ (3.65)	\$ (4.44)	\$ 0.79	(18)%
Weighted-average shares used to compute net loss per share, basic and diluted	3,774,219	2,718,888	829,897	39%

Research and development expenses

Research and development expenses decreased by \$3,833,972, or 44%, from \$8,717,945 for the year ended December 31, 2022, to \$4,883,973 for the year ended December 31, 2023. Research and development costs decreased due to the Company reducing overall research and development activities and related costs, as related clinical activities and clinical trial costs related to ALPHA-1062 in AD were substantially completed during 2022. R&D costs incurred in 2023 relate mainly to ongoing chemistry, manufacturing and controls (“CMC”) and NDA filing and submission costs.

The Company’s research and development expenses are summarized below:

	For the Year Ended December 31,		
	2023	2022	Percentage Change
Product development	\$ 3,046,622	\$ 5,737,915	188%
Management fees and salaries	755,999	1,127,095	149
Share-based compensation	540,076	556,293	103
Subcontractors	327,090	933,718	285
R&D grant expenses	191,087	—	—
Consulting fees	23,100	343,408	1,487
Other research and development	—	19,516	100
	\$ 4,883,974	\$ 8,717,945	179%

General and administrative expenses

General and administrative expenses increased by \$212,236, or 4%, from \$4,481,884 for the year ended December 31, 2022, to \$5,054,120, for the year ended December 31, 2023, primarily due to the increase in expenses related to, management fees and salaries, consulting fees, and share based compensation, which were offset somewhat by decreases in investor relations, professional fees, subcontractors, and other general and administrative expenses. The following table depicts the fluctuation in the general and administrative accounts:

	For the Year ended December 31			
	2023	2022	Dollar Change	Percentage Change
General and Administrative Expenses:				
Accretion expenses	\$ 59,777	\$ 24,274	\$ 35,503	146%
Amortization expense	82,376	82,376	—	—
Consulting fees	248,251	162,287	85,964	53
Depreciation	2,103	8,547	(6,444)	(75)
Investor relations	31,548	191,515	(159,967)	(84)
Management fees and salaries	1,586,572	1,478,791	107,781	7
Marketing	19,791	31,733	(11,942)	(38)
Other general and administrative	261,235	324,871	(63,636)	(20)
Professional fees	858,233	1,068,099	209,866	(20)
Registrar and filing fees	56,689	57,336	(647)	(1)
Share-based compensation	1,829,509	1,151,046	678,463	59
Subcontractors	18,036	243,316	(225,280)	(93)
Travel and related	—	17,693	(17,693)	(100)
	<u>\$ 5,054,120</u>	<u>\$ 4,841,884</u>	<u>\$ 212,236</u>	<u>4%</u>

The foreign exchange gain

The foreign exchange gain increased by \$305,985, or 103%, from \$(296,057) as of December 31, 2022, to \$9,928 as of December 31, 2023, due to the fluctuations in exchange rate between the Canadian Dollar and the U.S. Dollar. This variance is largely due to the Company changing its functional currency from the CAD to the USD, therefore having less transactions needing to be denominated in a foreign currency. The change in mix and balance of our assets and liabilities over the periods also impacted the changes in foreign currency exchange gain (loss).

Interest income

Interest income increased \$4,879, or 253%, from \$1,925 for the year ended December 31, 2022, to \$6,804 for the year ended December 31, 2023.

Grant income

The Company received grant revenue from the Army Medical Research and Material Command on June 5, 2023, for a pre-clinical study on the use of the ALPHA -1062 Intranasal to reduce blast of mTBI induced functional deficit and brain abnormalities. During the year ended December 31, 2023, the Company recorded grant income of \$191,087 from its R&D Grant in the consolidated statements of operations and comprehensive loss. Total grant income for the years ended December 31, 2023, and 2022 was \$191,087 and \$0, respectively.

Interest expense

Interest expense decreased \$19,721, or 53%, from \$37,237 for the year ended December 31, 2022, to \$17,516 for the year ended December 31, 2023, and relates primarily to the interest paid on the NLS promissory note.

Change in fair value of derivatives

The change in fair value of the warrant liability decreased by \$5,908,728, or 324%, from \$1,823,444 for the year ended December 31, 2022 to \$(4,085,284) for the year December 31, 2023 due to the fluctuation in the Company's stock price as well as the volatility of the financial markets.

The currency translation adjustment

The currency translation adjustment decreased by \$36,379, or 216%, from \$16,806 for the year ended December 31, 2022, to \$(19,573) for the year ended December 31, 2023. The decrease is due to the fluctuation of the exchange rates between the Canadian Dollar and the U.S. Dollar as well as the level of the Company's activities.

Liquidity and Capital Resources

Sources of Liquidity

The Company does not have operating revenue to finance its existing obligations and therefore must continue to rely on external financing to generate capital to maintain its capacity to meet working capital requirements. The Company has relied on debt and equity raises to finance its operating activities since incorporation. The Company expects to continue to rely on debt and the issuance of shares, and possibly other non-dilutive financing options to finance its ongoing operations and plans for commercialization of ZUNVEYL. However, there is a risk that additional financing will not be available on a timely basis or on terms acceptable to the Company.

Future Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we continue the commercialization of ZUNVEYL, following the FDA's approval in July 2024 and potentially seek to discover and develop additional product candidates, conduct our ongoing and planned clinical trials and preclinical studies, continue our R&D activities, utilize third parties to manufacture ZUNVEYL, hire additional personnel, expand and protect our intellectual property, and incur additional costs associated with being a public company.

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, accrued expenses, and prepaid expenses. The timing and amount of our funding requirements will depend on many factors, including:

- the initiation, type, number, scope, progress, expansions, results, costs and timing of clinical trials and preclinical studies of ZUNVEYL and any future product candidates we may choose to pursue, including the costs of modification to clinical development plans based on feedback that we may receive from regulatory authorities and any third-party products used as combination agents in our clinical trials;
- the costs, timing and outcome of regulatory meetings and reviews of ZUNVEYL or any future product candidates, including requirements of regulatory authorities in any additional jurisdictions in which we may seek approval for ZUNVEYL and any future product candidates;
- the costs of obtaining, maintaining, enforcing and protecting our patents and other intellectual property and proprietary rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal control over financial reporting;
- the costs associated with hiring additional personnel and consultants as our business grows, including additional executive officers and clinical development, regulatory, CMC quality and commercial personnel;
- the costs and timing of establishing or securing sales and marketing capabilities of any future product candidate approval;
- our ability to achieve sufficient market acceptance, coverage, and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;

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- our ability and strategic decision to develop future product candidates other than ZUNVEYL, and the timing of such development, if any;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements; and
- costs associated with any products or technologies that we may in-license or acquire.

Based upon our current operating plan, we estimate that our existing cash, cash equivalents and marketable securities as of the date of this filing, will be sufficient to fund our projected base ongoing operating expenses, the initial costs to prepare for commercialization of ZUNVEYL in AD, planned CMC costs, ongoing operating costs and capital expenditures through at least the next 24 months. We expect to look to raise additional capital to continue to further advance our commercialization plans and ongoing operating costs. However, we have based our estimates on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. In addition, we could utilize our available capital resources sooner than we expected. The Company is also contemplating raising additional capital by pursuing both dilutive and non-dilutive strategic sources of capital; to fully execute its commercial and operating plans following receipt of the NDA approval for ZUNVEYL from the FDA. Any additional capital would further support our planned costs to begin commercial activities including launching U.S. sales of ZUNVEYL in AD.

We have no other committed sources of capital. Until such time, if ever, we can generate substantial product revenue, we expect to finance our operations through equity offerings, debt financings, or other capital sources, including current or potential future collaborations, licenses, royalties and other similar arrangements. We do not know what the terms of these future financings will be and whether they will be acceptable to the us or not and, therefore, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. To the extent we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions, engaging in acquisition, merger or collaboration transactions, selling or licensing our assets, making capital expenditures, redeeming our stock, making certain investments or declaring dividends. If we raise additional funds through collaborations or license agreements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves, or even cease operations.

Financing Activities

Recent capital raising activities

During the third quarter of 2022 the Company initiated cost cutting measures to extend its cash runway and reduce ongoing cash burn. The Company streamlined R&D programs and has prioritized spend towards the NDA filing and development of ALPHA-1062 in AD. The Company has reduced headcount and other operating costs related to the ZUNVEYL NDA file and other development costs. The Company has lowered its near-term operating burn until additional capital can be secured. If we are unable to raise adequate funds, we may have to further delay or reduce the scope of or eliminate some or all of our current research and development. Any of these actions could have a material adverse effect on our business, results of operations or financial condition.

During the first quarter of 2023 the Company completed the brokered private placement by issuing 949,906 units at a price of CAD\$6.38 per unit for total proceeds of \$4,506,055 (CAD\$6,055,650) with each unit consisting of one Common share and one warrant exercisable at a price of CAD\$9.75 per warrant for a term of 5 years from the closing date ("Q1 2023 PP").

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In March 2023, the Company entered into an amendment of the Promissory Note and License Agreement with the NLS promissory note holders to extend the maturity of the \$1.2M outstanding promissory note to July 15, 2024, the previous maturity date of the promissory note was December 31, 2022. The parties also agreed to increase the Promissory Note interest rate from 2% annually to a market rate of 5.5% annually. (see Note 6 of the accompanying audited financial statements).

On May 30, 2023, the Company announced a best-efforts private placement offering of up to \$6,500,000 of units at the initial pricing of \$5.50 per unit ("Q2 2023 PP"). Each unit consists of one common share and one-half of a warrant. Each whole warrant will entitle the holder to purchase an additional common share of the Company at the initial pricing of \$7.75 per share for a period of three years from the closing date. The aggregate proceeds may be increased by 30% to accommodate any over-allotment. The Company also announced that it entered into an Investment Banking Agreement ("IBA") with Spartan Securities LLC ("Spartan") pursuant to which Spartan will act as agent on a best-efforts basis in connection with the Q2 2023 PP. In accordance with the Q2 2023 PP, the Company has agreed to pay Spartan cash commissions of 10% of the gross proceeds, issue Spartan finder's warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list. The Company and Spartan also entered into a consulting agreement pursuant to which Spartan agreed to provide ongoing consulting services for a three year term (the "Spartan Consulting Agreement"). The Company agreed to pay Spartan a consulting fee in the aggregate amount of \$480,000, payable in three equal installments with each installment being subject to the Company achieving certain business development and capital raising objectives which will be issued to Spartan on a rolling basis upon completion of predetermined business development objectives including the closing of certain offering amounts and the completion of material business transactions. In January 2024, the Company and Spartan entered into an acknowledgement of completion of the business development objectives.

The Q2 2023 PP capital raising are summarized below for each closing date.

The following table summarizes the Q2 2023 PP closing activity:

Date Issued	Tranche	# Units Issued at \$5.50 per share	Gross Proceeds	# of Warrants issued at \$7.75 per Warrant	Cash Commissions Paid ⁽²⁾	Agent Warrants Issued ⁽¹⁾	Warrant Expiry date
August 31, 2023	Tranche 1	244,562	\$1,345,093	122,284	\$ 180,051	10,912	August 31, 2026
October 16, 2023	Tranche 2	63,873	\$ 351,303	31,937	\$ 51,600	3,127	October 16, 2026
November 8, 2023	Tranche 3	183,636	\$1,009,999	91,818	\$ 151,500	9,182	November 8, 2026
December 22, 2023	Tranche 4	365,661	\$2,011,137	365,659	\$ 238,515	28,911	December 22, 2026
January 19, 2024	Tranche 5	678,630	\$3,732,469	678,626	\$ 342,320	41,493	January 19, 2027
Totals		1,536,362	\$8,450,000	1,290,324	\$ 963,986	93,625	

(1) Each warrant is exercisable at \$7.75 per warrant.

(2) On November 8, 2023, the Company also paid a consulting fee of US\$160,000 pursuant to the Spartan Consulting Agreement. In January 2024 the Company also paid a consulting fee of US\$320,000 and issued 582,331 common shares to Spartan pursuant to a consulting agreement. The Company also paid to certain finders aggregate cash commission of US\$48,858, being 6% of the gross proceeds raised under the offering from investors introduced to the Company by such finders.

On September 24, 2024, the Company announced the closing of a \$4.545 million bridge financing through the issuance of convertible notes and warrants led by existing investors and select new investors comprised of institutional funds and high-net-worth accredited investors.

- The notes are convertible into common shares of the Company at a conversion price of \$10.55 per share. The notes were set to mature on September 24, 2026, had an aggregate face value of \$4.545 million and bears interest at a rate of 10% per annum paid in common shares of the Company at the conversion price, subject to certain limitations. The notes were subject to mandatory conversion into common shares of the Company in conjunction with the closing of an offering of securities of the Company for at least \$10 million in aggregate gross proceeds in coordination with the simultaneous uplisting of the common shares of the Company onto a United States national securities exchange (a "Qualified Offering").

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Such conversion was completed into the securities offered in such Qualified Offering at the lower of (i) the conversion price in effect at such time and (ii) the offering price of the securities in the Qualified Offering. The notes were unsecured and rank senior to the Company's other indebtedness.

- The notes were sold along with warrants to purchase common shares of the Company at an exercise price of \$10.55 for a five-year term. Each investor received warrants sufficient to purchase such number of common shares equal to the principal amount of notes such investor purchased divided by the conversion price of the notes. Each investor will receive an additional 50% of warrants with identical terms upon the closing of a Qualified Offering, as described above. The exercise price of the warrants is subject to adjustment upon the completion of a Qualified Offering to the lower of (i) the then existing exercise price, (ii) the exercise price of any common share purchase warrants issued in the Qualified Offering or (iii) if no common share purchase warrants are issued in the Qualified Offering, the closing price of the common shares on the Canadian Securities Exchange (as converted into U.S. dollars) immediately prior to the pricing news release of the Qualified Offering.

On November 13, 2024, the Company completed a public offering of common shares by issuing 8,695,653 common shares at a public offering price of \$5.75 per share for gross proceeds of approximately \$50 million. In connection with the US public offering, the Company's Common Shares began trading on The Nasdaq Capital Market on November 12, 2024.

The completion of the public offering of common shares was a "Qualified Offering" under the Company's convertible notes, which automatically converted into 801,413 common shares at closing of the public offering at a price of \$5.75 per share, being the public offering price in the Qualified Offering. The amount converted consisted of the converted principal amount of convertible notes and interest through November 13, 2024.

Additionally, as a result of the closing of the Qualified Offering, the Company issued an additional 215,418 warrants exercisable to acquire 215,418 Common Shares with an exercise price of \$7.19 per share and the exercise price of the Company's existing 430,835 warrants issued in connection with the offering of the convertible notes was repriced from \$10.55 per share to \$7.19 per share.

On December 12, 2024, the underwriter of the Company's underwritten U.S. public offering partially exercised its over-allotment option to purchase an additional 488,506 common shares at the public offering price of \$5.75 per share for additional gross proceeds of \$2.8 million.

The following table includes our cash flow data for the periods indicated:

Cash Flows

The following table provides information regarding our cash flows for the years ended September 30, 2024, and 2023:

	For the nine months ended September 30,		Dollar Change	Percentage Change
	2024	2023		
Consolidated Statement of Cash Flows Data				
Cash used in operating activities	\$ (5,451,927)	\$ (6,769,171)	\$ 1,317,244	(19)%
Cash provided by investing activities	\$ —	\$ —	\$ —	—%
Net cash provided by financing activities	\$ 7,730,753	\$ 5,613,412	\$ 2,117,341	38%
Share-based compensation	\$ 917,153	\$ 1,899,429	\$ (982,276)	(52)%

Cash used in operating activities

Cash used in operating activities decreased by \$1,317,244 to \$5,451,927 for the nine months ended September 30, 2024, from \$6,769,171 for the comparative period. The change in cash flows from operating activities represents the effect on cash flows from net losses adjusted for items not affecting cash, principally amortization and depreciation, accrued expenditures for government grant, share-based compensation, impairment of intangible assets, provision for loan losses, shares issued for services, and the changes in the value of conversion feature liability, warrant liabilities, and bonus rights liability, in addition to net changes in non-cash balances related to working capital items.

Cash provided by/(used in) investing activities

There were no investing activities that occurred during the nine months ended September 30, 2024, or 2023.

Cash provided by financing activities

Cash provided by financing activities for the nine months ended September 30, 2024, increased by \$2,117,341 compared to the comparative period. During the nine months ended September 30, 2024, financing activities primarily consisted of raising proceeds of \$3,732,469 from units issued for cash, raising proceeds of \$4,545,000 from the issuance of convertible debentures, and receiving \$373,825 in government grant proceeds offset by \$357,228 of related grant expenses. The funds raised under financing activities were offset by share issuance costs of \$405,753 and debt issuance costs of \$459,360. During the nine months ended September 30, 2023, financing activities primarily consisted of raising proceeds of \$5,851,148 from units issued for cash offset by share issuance costs of \$394,736.

Contractual Obligations and Other Commitments

In the normal course of business, we enter into agreements with contract service providers to assist in the performance of R&D and clinical and commercial manufacturing activities. We currently have two license agreements, ALPHA-1062 technology and ALPHA-602 technology, which are outlined below. We expect to enter into additional clinical development, contract research, clinical and commercial manufacturing, supplier, and collaborative research agreements in the future, which may require upfront payments and long-term commitments of capital resources.

The following table provides information regarding our cash flows for the years ended December 31, 2023, and 2022:

	For the Year Ended December 31,		Dollar Change	Percentage Change
	2023	2022		
Consolidated Statement of Cash Flows Data				
Cash used in operating activities	\$ (8,799,565)	\$ (9,252,118)	\$ 452,553	(5)%
Cash provided by/(used in) in investing activities	\$ —	\$ (4,876)	\$ 4,876	(100)%
Net cash provided by financing activities	\$ 8,230,015	\$ 40,785	\$ 8,189,230	20,079%
Share-based compensation	\$ 2,369,585	\$ 1,777,271	\$ 592,314	33%

Cash used in operating activities

Cash used in operating activities decreased by \$452,553 to \$8,799,565 for the year ended December 31, 2023, from \$9,252,118 for the comparative year. The decrease in cash flows from operating activities represents the effect on cash flows from net losses adjusted for items not affecting cash, principally amortization and depreciation, accrued expenditures for government grant, share-based compensation, and the changes in the value of warrant liability and bonus rights liability, in addition to net changes in non-cash balances related to operations.

Cash provided by/(used in) investing activities

Cash provided by (used in) investing activities for the year ended December 31, 2023, increased by \$4,876. There were no investing activities that occurred during the year ended December 31, 2023, and only minimal activity during the year ended December 31, 2022.

Cash provided by financing activities

Cash provided by financing activities for the year ended December 31, 2023, increased by \$8,189,230 compared to the comparative year. During the year ended December 31, 2023, financing activities primarily consisted of raising proceeds of \$9,223,587 from units issued for cash and \$27,000 from the exercise of Common Stock options and receiving \$201,500 in government grant proceeds offset by \$111,087 of related expenses. The funds raised under financing activities were offset by share issuance costs of \$1,055,985 and the issuance of a related party note of \$55,000. There were minimal financing activities that incurred during the year ended December 31, 2022.

Contractual Obligations and Other Commitments

In the normal course of business, we enter into agreements with contract service providers to assist in the performance of R&D and clinical and commercial manufacturing activities. We currently have two license agreements, ALPHA-1062 technology and ALPHA-602 technology, which are outlined below. We expect to enter into additional clinical development, contract research, clinical and commercial manufacturing, supplier, and collaborative research agreements in the future, which may require upfront payments and long-term commitments of capital resources.

See “Note 11 — Commitments and Contingencies” of the accompanying financial statements for the three and nine months ended September 30, 2024 for a discussion of our contractual obligations and long-term commitments.

Contingencies

The Company did not have any contingencies as at September 30, 2024, or the date of this filing.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with US GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the consolidated financial statements 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. 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.

Use of Estimates and Assumptions

The preparation of these consolidated financial statements in conformity with US GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as of the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including valuing equity securities in share-based payment arrangements, estimating the fair value of financial instruments recorded as a warrant liability, useful lives of depreciable assets and definite lived intangible assets, and whether impairment charges may apply, and the determination of whether an asset constitutes a business a business combination or asset acquisition. Management bases these estimates on historical and anticipated results, trends, and various other assumptions that the Company believes are reasonable under the circumstances, including assumptions as to forecasted amounts and future events. Actual results could differ materially from these estimates under different assumptions or conditions.

Functional Currency

The functional currency of an entity is the currency of the primary economic environment in which the entity operates. Effective August 31, 2023, the functional currency of the Company was updated to the United States Dollar (“USD” or U.S. Dollar”) as management assessed that the currency of the primary economic environment in which the Company operates changed to USD on that date. The key factor influencing this decision was the change in the Company's primary funding from Canadian dollars (“CAD”) to USD, whereas the functional currency of its subsidiaries was unchanged and remain in USD. Prior to USD the functional currency of the Company was CAD, and its subsidiaries was USD. Changes to the Company's functional currency have been accounted for on a prospective basis from August 31, 2023. The determination of functional currency was made in accordance with the Financial Accounting Standards Board (“FASB”) Accounting Standard Codification (“ASC”) 830, Foreign Currency Matters.

The Company's reporting currency is the USD. For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's CAD operations are translated to USD at the exchange rate on the reporting date. The income and expenses are translated using average exchange rates. Foreign currency differences that arise on translation for consolidated purposes are recognized in other comprehensive loss on the consolidated statements of operations and comprehensive (loss) income.

Grant Accounting

All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of comprehensive loss. When grant proceeds are initially received they are recorded as deferred income and restricted cash. Grant proceeds are then used to pay for study costs and are expensed, the Company will also record a corresponding amount to grant revenue and reduce the balance of the deferred income liability.

On June 5, 2023, the Company was awarded a \$750,000 research and development grant from the Army Medical Research and Materiel Command for a pre-clinical study on the use of the ALPHA -1062IN (Intranasal) to reduce blast mTBI (mild Traumatic Brain Injury) induced functional deficit and brain abnormalities ("R&D Grant"). The grant funds are to be used on the following project "*Assessment of Functional Recovery and Reduced Tauopathy Following ALPHA-1062 Administration in a Repetitive Blast TBI Model in Rodents.*" The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense. Funds received from the R&D grant are restricted and to be used solely as outlined in the grant. The R&D grant funding will expire for use on September 30, 2028. The award funding is to subsidize the costs for research and development with the following specific Aims:

- Specific Aim 1: Quantify the ability of ALPHA -1062 to reduce brain-wide tauopathy and pathology in blast-mTBI;
- Specific Aim 2: Characterize and quantify changes in the inter-cellular associations between disease-associated microglia and cells of the basal forebrain induced by repetitive blast-mTBI and altered by ALPHA -1062 treatment; Specific Aim 3: Determine the efficacy of ALPHA-1062 to improve the adverse cognitive and behavioral outcomes consequent to repetitive blast-mTBI.

Per the R&G Grant budget expenses are expected to include cost to carry out the clinical trials including personnel costs, materials and supplies, animal housing, publications, and travel costs. The Company classifies any cash received from the R&D Grant that has not yet been used to pay ongoing R&D grant expenditures as restricted cash, as the proceeds from the grant are to be designated for the specified grant research.

Fair Value Measurements

Fair value is defined as the price that would be received for sale of an asset or paid for transfer of a liability, in an orderly transaction between market participants at the measurement date. U.S. GAAP establishes a three-tier fair value hierarchy that prioritizes the inputs used in measuring fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). These tiers include:

- *Level 1* — defined as observable inputs such as quoted prices for identical instruments in active markets;
- *Level 2* — quoted prices for similar assets and liabilities in active markets or inputs that are observable;
- *Level 3* — inputs that are unobservable.

The Company's financial instruments consist of cash, restricted cash, prepaid and other current assets, notes receivable, accounts payable and accrued liabilities, warrant liability, promissory note, and other liabilities.

Share Based Compensation

Share-based compensation cost is recorded for all option grants and awards of non-vested stock based on the grant date fair value of the award using the Black-Scholes option-pricing model and is recognized over the service period required for the award. We estimate the fair value of stock option grants using the Black-Scholes option pricing model and the assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

Expected Term — The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term.

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Expected Volatility — The Company computes stock price volatility over expected terms based on its historical common stock trading prices.

Risk-Free Interest Rate — The Company bases the risk-free interest rate on the implied yield available on U. S. Treasury zero-coupon issues with an equivalent remaining term.

Expected Dividend — The Company has never declared or paid any cash dividends on its common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, uses an expected dividend yield of zero in its valuation models.

Liability-Based Awards

Bonus right awards that include cash settlement features are accounted for as liability -based awards in accordance with ASC 718, Compensation — Stock Compensation. The fair value of the bonus right awards is estimated using a Black-Scholes option-pricing model and is revalued on each reporting date, based on the probability of the expected awards to vest, until settlement. Changes in the estimated fair value of the bonus right awards are recognized within general and administrative expense on the consolidated statement of operations and comprehensive income. Key assumptions in the calculation of the fair value of the bonus right awards include expected volatility, risk-free interest rate, expected life, and fair value per award.

Research and Development Costs

Research and development costs are expensed as incurred unless there is an alternate future use in other research and development projects or otherwise. Research and development costs include salaries and benefits, share-based compensation expense, management fees and salaries, research costs, travel costs and other consulting services. We expect our research and development expenses will increase as we progress our product candidates into later stage clinical trials, add to the number of ongoing clinical trials, advance our discovery research projects into the pre-clinical stage, continue our early-stage research, and prepare for the commercialization of our product candidates. The process of conducting research, identifying potential product candidates, and conducting pre-clinical and clinical trials necessary to obtain regulatory approval and commencing pre-commercialization activities is costly and time intensive. We may never succeed in achieving marketing approval for our product candidates regardless of our costs and efforts. The probability of success of our product candidates may be affected by numerous factors, including pre-clinical data, clinical data, competition, manufacturing capability, our cost of goods to be sold, our ability to receive, and the timing of, regulatory approvals, market conditions, and our ability to successfully commercialize our products if they are approved for marketing. As a result, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates. Our research and development programs are subject to change from time to time as we evaluate our priorities and available resources.

Going concern

We continue to assess the ability to continue as a going concern, which involves management judgement and analysis of resources and prospects. The Company has reported negative cash flow from operating activities since inception and expects to experience negative operating cash flows for the foreseeable future. The Company has not generated revenues from its operations to date and as of September 30, 2024, had a deficit of \$70,626,302 (December 31, 2023 — \$61,648,173) which has been primarily financed by equity. The Company had \$3,773,399 in cash and restricted cash and \$3,005,836 in current liabilities (of which \$56,233 is payable from the Company's available restricted cash balance) as of September 30, 2024. The Company's continuing operations, as intended, are highly dependent upon its ability to obtain additional funding and generate cash flows. Based upon our current operating plan and our closing of our public offering of common shares for approximately \$46.42 million in net proceeds on November 13, 2024, we estimate that our existing cash, cash equivalents and marketable securities as of the date of this filing would be sufficient to fund our projected base ongoing operating expenses, the initial costs to prepare for commercialization of ZUNVEYL in AD, planned CMC costs, ongoing operating costs and capital expenditures through at least the next 12 months. However, we may look to raise additional capital to continue to further advance our commercialization plans and ongoing operating costs through a debt financing in the next 12 months. We have based our estimates on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. In addition, we could utilize our available capital resources sooner than we expected. The Company

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is also contemplating raising additional capital by pursuing both dilutive and non-dilutive strategic sources of capital; to fully execute its commercial and operating plans following receipt of the NDA approval for ZUNVEYL from the FDA. Any additional capital would further support our planned costs to begin commercial activities including launching U.S. sales of ZUNVEYL in AD.

The Company has maintained the cost cutting measures it initiated in the third quarter of 2022 to extend its cash runway and reduce ongoing cash burn. The Company focus has been to streamline R&D programs and has prioritized spend towards the NDA filing and development of ALPHA-1062 in AD. The Company reduced headcount and other operating costs to focus spending on the ALPHA-1062 NDA file and other related development costs. The Company expects to continue to operate under the lower operating burn until further additional capital can be secured. If we are unable to raise adequate funds, we may have to further delay or reduce the scope of or eliminate some or all of our operating and commercialization plans and product development. Any of these actions could have a material adverse effect on our business, results of operations or financial condition.

Income taxes

In assessing the probability of realizing income tax assets, management makes estimates related to expectation of future taxable income, applicable tax opportunities, expected timing of reversals of existing temporary differences and the likelihood that tax positions taken will be sustained upon examination by applicable tax authorities. In making its assessments, management gives additional weight to positive and negative evidence that can be objectively verified.

Impairment of intangible assets

The application of the Company's accounting policy for intangible assets requires judgment in determining whether it is likely that future economic benefits will flow to the Company and whether any impairment indicators exist, which may be based on assumptions about future events or circumstances. Estimates and assumptions may change if new information becomes available. If, after expenditures are capitalized, information becomes available suggesting that the recovery of expenditures is unlikely, the amount capitalized is written off in profit or loss in the period the new information becomes available.

Useful lives of intangible assets

Amortization is recorded on a straight-line basis based upon management's estimate of the useful life and residual value. The estimates are reviewed at least annually and are updated if expectations change as a result of technical obsolescence or legal and other limits to use.

Valuation of debt modification

The Company calculated the debt modification using the net present value of cash flows approach. This approach requires the input of subjective assumptions including the Company's borrowing rate. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss).

Recent Accounting Pronouncements Not Yet Adopted

In August 2020, FASB issued ASU 2020-06, Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, which is intended to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. ASU 2020-06 is effective for the Company for the fiscal year beginning after December 15, 2023. There was no material impact of this new guidance on the accompanying unaudited condensed interim consolidated financial statements.

Emerging Growth Company Status and Smaller Reporting Company Status

We are an emerging growth company, as defined in the JOBS Act. The JOBS Act permits an emerging growth company such as us to take advantage of an extended transition period to comply with new or revised accounting standards. We have elected to avail ourselves of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we can adopt the new or revised standard at the

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time private companies adopt the new or revised standard and may do so until such time that we either (i) irrevocably elect to opt out of such extended transition period or (ii) no longer qualify as an emerging growth company. We may choose to early adopt any new or revised accounting standards whenever such early adoption is permitted for private companies. We will continue to remain an emerging growth company until the earliest of the following: (1) the last day of the fiscal year following June 7, 2024; (2) the last day of the fiscal year in which our total annual gross revenue is equal to or more than \$1.235 billion; (3) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (4) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

DESCRIPTION OF PROPERTIES

The Company does not own or rent any real estate with respect to its corporate head office and laboratory facilities.

Our corporate head office is located at Suite 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8.

MANAGEMENT

The following table sets forth the names, ages and titles of our directors and executive officers.

Name, Age, Position with Alpha Cognition and Municipality of Residence	Principal Occupation
Michael McFadden Age: 57 Chief Executive Officer Since April 12, 2021 and Director since March 28, 2021 <i>Texas, United States</i>	<p>Mr. McFadden brings more than 30 years of successful leadership experience spanning pre-IND drug discovery through the commercialization and has launched over a dozen therapies in neurology, psychiatry, endocrinology and urology. He has over 16 years' experience in neuroscience. Mr. McFadden's principal occupation has been acting Chief Executive Officer of the Company since April 12, 2021. Prior to that Mr. McFadden was Chief Commercial Officer at MPower Health from February 2020 through April 2021, Chief Commercial Officer at Urovant Sciences (Nasdaq: UROV) from January 2018 through November 2019, and SVP Sales and Marketing at Avanir Pharmaceuticals (Nasdaq: AVNR) from April 2015 through January 2017. Prior to these roles, Mr. McFadden held leadership roles at Amylin Pharmaceuticals (Nasdaq: AMLN) and Pharmacia. He serves on advisory boards at MPower Health. We believe that Mr. McFadden is qualified to serve on our board of directors due to his current role as Chief Executive Officer of the Company and his extensive experience in the industry.</p>
Len Mertz Age: 69 Chairman and Director Since March 18, 2021 <i>Texas, United States</i>	<p>Mr. Mertz has been a director since Alpha Cognition's founding and was named Chairman in 2021. Mr. Mertz' principal occupation has been as the Chairman of Shannon West Texas Memorial Hospital, a CMS rated 5-star hospital, with currently budgeted gross revenues exceeding \$1 billion and since January 1982 as a co-founder and partner of Mayne & Mertz, Inc. an oil & gas exploration company. He has over 35 years of experience as a co-founder, board member, or investor in various companies including Triumvira Immunologics and Akido Labs. In addition, he serves on the board of the First National Bank of Mertz. He began his career as a certified public accountant and obtained his BBA in Finance with Highest Honors and his Masters in Professional Accounting both from the University of Texas at Austin.</p> <p>We believe that Mr. Mertz is qualified to serve on our board of directors due to his experience with the Company and his training as a certified public accountant.</p>
Kenneth Cawkell Age: 73 Corporate Secretary and Director Since March 18, 2021 <i>New Westminster, British Columbia</i>	<p>Mr. Cawkell co-founded Cawkell Brodie LLP, a Vancouver based law firm, where he was acting as managing partner from 1987 to 2022, when he retired from practice. Mr. Cawkell was the founder of the Company and serviced Company's interim Chief Executive Officer through its qualifying transaction in March of 2021. He has also served as Corporate Secretary and a consultant to the Company since March 18, 2021 to current. Mr. Cawkell is the founder and CEO of Neurodyn Life Sciences Inc., a private biotech company focused on developing natural based products to treat Alzheimer's and other neurodegenerative diseases. He has been active in the biotech industry within public, private and venture capital markets as a professional advisor and as a principal or investor for over 25 years. We believe that Mr. Cawkell is qualified to serve on our board of directors due to his legal expertise and extensive experience with the Company and in developing treatments for Alzheimer's disease.</p>
John Havens Age: 68 Director Since March 18, 2021 <i>Texas, United States</i>	<p>Since 1978, Mr. Havens' principal occupation has been as the President of Seismic Exchange, Inc. Mr. Havens also has a long history as an entrepreneur as both a founder and significant investor in various industries, with a focus on growth through vertical integration and strategic acquisitions. He has served as Vice Chairman/Board Member of the Houston Astros and as an active member of numerous other business and community boards.</p> <p>We believe that Mr. Havens is qualified to serve on our board of directors due to the breadth of his experience in helping early state companies focus on growth.</p>

Name, Age, Position with Alpha Cognition and Municipality of Residence	Principal Occupation
Phillip Mertz Age: 40 Director Since March 18, 2021 <i>Virginia, United States</i>	<p>Mr. Mertz became a director in 2019. Since 2010, he is a co-founder and partner of Cenizas Capital, an investment firm focused on public and private equity, which has been his principal occupation. He is an initial investor and board member of Secure Open Solutions, a cybersecurity firm that provides compliance services to defense contractors. He also co-founded Py Square, a software development company that makes practical software solutions for the legal industry, and he is a partner in the investment group, Mertz Holdings. Previously he led business development for a natural gas fuel start-up, CNG Energy, and worked as a management consultant with Touchstone Consulting Group in Washington D.C. He graduated from Harvard University in 2006 with an B.A. in Economics.</p> <p>We believe that Mr. Mertz is qualified to serve on our board of directors due to his experience with neurotechnology and neurodegenerative diseases.</p>
Rejeev 'Rob' Bakshi Age: 65 Director Since November 15, 2017 <i>White Rock, British Columbia</i>	<p>Mr. Bakshi has been the Chief Executive Officer of Active Witness Corp. from 2018 to present. Mr. Bakshi was the co-founder of technology company, Silent Witness Enterprises Ltd., which was listed on the TSX and NASDAQ. He oversaw the company's growth strategy before being sold to Honeywell for approximately \$90 million in 2003. Since then, he has been involved with industrial land development, building a Convention Centre in Calgary and other strategic investments. In 2009, Mr. Bakshi began working with a South Korean company to establish Apivio Systems Inc. He led the strategy to turn the business into a Canadian company, putting together an independent board of directors, financing, and corporate governance in his capacity as Executive Chairman. In 2013, he was appointed CEO and was responsible for taking the company public. Apivio Systems Inc. was acquired by Nuri Telecom Company in an all-cash transaction in the spring of 2017. Mr. Bakshi is an accomplished real estate and technology investor and advises both private and public companies. We believe that Mr. Bakshi is qualified to serve on our board of directors due to his experience with NASDAQ and TSX cross-listed companies.</p>
Lauren D'Angelo Age: 46 Chief Commercial Officer since May 4, 2021, and Chief Operating Officer since 2023. <i>Texas, United States</i>	<p>Ms. D'Angelo has more than 20 years of experience leading successful drug commercialization efforts across eight therapeutic areas, including multiple central nervous system therapies. Prior to joining Alpha Cognition in May of 2021, Ms. D'Angelo was Vice President, Marketing and Commercial Strategy at Urovant Sciences, Inc. from October 2017 through May 2021. Ms. D'Angelo has extensive marketing, sales, and operations experience in specialty areas including central nervous system, oncology, gastrointestinal, pain management, respiratory, urology and diabetes. Ms. D'Angelo was recognized as a 2023 PharmaVoice Top 100 Industry Leader, Medical Marketing & Media's (MM+M) 2022 Woman of Distinction, MM+M's 2017 Woman to Watch, and was selected as one of Pharmaceutical Executive's Emerging Pharma Leaders for 2020. Ms. D'Angelo received a B.S. in Management Information Systems from Florida State University and an MBA from the University of Florida.</p>

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Name, Age, Position with Alpha Cognition and Municipality of Residence	Principal Occupation
Henry Du Age: 46 Vice President of Finance and Accounting and interim Chief Financial Officer since 2024 <i>California, United States</i>	Mr. Du brings to the Company over 20 years of experience in corporate accounting and finance, with a strong business background in the life science industry. From November 2022 to October 2024, Mr. Du was Sr. Vice President of Accounting and Administration at Amplify Surgical, a medical device company focused on developing innovative endoscopic surgical techniques and spinal implant technologies, where he led the finance and accounting functions, as well as administrative roles including human resources, payroll, compliance, corporate legal, and investor relations. During his tenure there, he was instrumental in helping the company achieve consistent positive EBITDA and profitability, along with doubling average daily operating liquidity. From September 2021 to November 2022, Mr. Du was also VP of Finance and Senior Corporate Controller at HUYABIO International, a leader in globalizing Chinese pharmaceutical innovation, where he established the commercial accounting policy for the company's product launch in Japan. Prior to HUYABIO, Mr. Du served in leadership roles at Eledon Pharmaceuticals (formerly Novus Therapeutics), a publicly traded clinical-stage biopharmaceutical company from May 2018 to September 2021, United Auto Credit from August 2017 to May 2018, and at Avanir Pharmaceuticals from March 2010 to August 2017.

Family Relationships

There are no family relationships among any of our directors or executive officers, except that Len Mertz is the father of Phillip Mertz.

Arrangements between Officers and Directors

To our knowledge, there is no arrangement or understanding between any of our officers and any other person, including directors, pursuant to which the officer was selected to serve as an officer.

Involvement in Certain Legal Proceedings

Corporate Cease Trade Orders

To our knowledge, no director or executive officer of Alpha Cognition is, as of the date hereof, or was within ten years before the date hereof, a director, chief executive officer or chief financial officer of any company (including Alpha Cognition), that:

- (a) was subject to a cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
- (b) was subject to a cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Mr. Cawkell is a director of Centurion Minerals Ltd. ("Centurion"). Centurion was subject to a cease trade order (the "CTO") issued by the British Columbia Securities Commission on December 5, 2017, for failure to file its audited annual financial statements for the year ended July 31, 2017. Subsequently, Centurion dismissed its auditor on February 13, 2018, as its board of directors lost confidence in the former auditors' ability to complete the audit in a timely fashion, if at all. Centurion engaged a new auditor to complete the audit and filed its audited annual financials for the year ended July 31, 2017, on March 1, 2018 and its first quarter on March 13, 2018. The CTO was revoked on May 3, 2018.

Bankruptcies and Other Proceedings

To Alpha Cognition's knowledge, no director or executive officer of Alpha Cognition, or a shareholder holding a sufficient number of securities of Alpha Cognition to affect materially the control of Alpha Cognition:

- (a) is, as of the date hereof, or has been within the ten years before the date hereof, a director or executive officer of any company (including Alpha Cognition) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) has, within the ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Penalties or Sanctions

To our knowledge, no director or executive officer of Alpha Cognition has been subject to any legal proceeding or other event described in Item 401(f) of Regulation S-K during the past ten years.

Board Composition

The composition of the Board currently consists of the following six members: Rajeev 'Rob' Bakshi, Len Mertz, John Havens, Phillip Mertz, Kenneth Cawkell and Michael McFadden.

Director Independence

Pursuant to the requirements of Item 407(a)(1)(ii) of Regulation S-K under the Exchange Act, the Board has elected to evaluate the independence of each director in accordance with the listing rules of the Nasdaq Stock Market, LLC ("Nasdaq Listing Rules"). The Company is not listed on any Nasdaq market and is not subject to regulation or oversight by Nasdaq. The discussion below regarding independence uses the Nasdaq Listing Rules solely for disclosure purposes herein regarding director independence and committee composition. Pursuant to these rules, a majority of our Board must be "independent directors" within the meaning of the Nasdaq Listing Rules, and all directors who sit on our Audit Committee, Governance and Nomination Committee and Compensation Committee must also be independent directors.

The Nasdaq definition of "independence" includes a series of objective tests, such as the director or director nominee is not, and was not during the last three years, an employee of the Company and has not received certain payments from, or engaged in various types of business dealings with, the Company. In addition, as further required by the Nasdaq Listing Rules, the Board has made a subjective determination as to each independent director that no relationships exist which, in the opinion of the Board, would interfere with such individual's exercise of independent judgment in carrying out his or her responsibilities as a director. In making these determinations, the Board reviewed and discussed information provided by the directors with regard to each director's business and personal activities as they may relate to Company and its management, including the beneficial ownership of our capital stock by each non-employee director, and any transactions involving them described in the section entitled "Certain Relationships and Related Party Transactions."

As a result, the Board has affirmatively determined that each of Rajeev 'Rob' Bakshi, John Havens, Len Mertz and Phillip Mertz are independent in accordance with the Nasdaq Listing Rules.

Other Directorships

The following sets forth the directors of the Company who are directors of other reporting issuers as at December 31, 2024:

Kenneth Cawkell: Westmount Minerals Corp., Portofino Resources Inc., Centurion Minerals Inc. and Well Health Technologies Corp.

Orientation and Continuing Education

Management of the Company takes steps to ensure that its directors and officers are continually updated as to the latest corporate and securities policies which may affect the directors, officers, committee members and the Company as a whole. The Company continually reviews the latest securities rules and policies. Any such changes or new requirements are then brought to the attention of the Company's directors either by way of a director or committee meetings or circulated in a memorandum.

Board Leadership Structure and Role in Risk Oversight

Our Board currently consists of six directors. The Board has appointed a non-executive Chairman of the Board to assist the independent directors in risk oversight. Due to the size of the Board, the independent directors are able to closely monitor the activities of our Company. In addition, the independent directors are able to meet independently with the Company's independent registered public accounting firm without management to discuss the Company's financial statements and related audits. Therefore, the Board has determined that the current structure of the Board with a non-executive Chairman is sufficient for independent oversight at this time. To the extent the composition of the Board changes and/or grows in the future, the Board may re-evaluate this structure.

Management is responsible for the day-to-day management of risks the Company faces, while the Board as a whole has ultimate responsibility for the Company's oversight of risk management. Our Board takes an enterprise-wide approach to risk oversight, designed to support the achievement of organizational objectives, including strategic objectives, to improve long-term organizational performance and enhance stockholder value. A fundamental part of risk oversight is not only understanding the risks a Company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for the Company. As a critical part of this risk management oversight role, our Board encourages full and open communication between management and the Board. Our Board regularly reviews material strategic, operational, financial, compensation and compliance risks with management. In addition our management team regularly reports to the full Board regarding their areas of responsibility and a component of these reports is risk within the area of responsibility and the steps management has taken to monitor and control such exposures. Additional review or reporting on risk is conducted as needed or as requested by our Board.

Ethical Business Conduct

The Board has found that the fiduciary duties placed on individual directors by the Company's governing corporate legislation and the common law and the restrictions placed by applicable corporate legislation on an individual director's participation in decisions of the Board in which the director has an interest have been sufficient to ensure that the Board operates independently of management and in the best interests of the Company. Pursuant to corporate legislation, a director is required to act honestly and in good faith with a view to the best interests of the Company and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances, and disclose to the Board the nature and extent of any interest of the director in any material contract or material transaction, whether made or proposed, if the director is a party to the contract or transaction, is a director or officer (or an individual acting in a similar capacity) of a party to the contract or transaction or has a material interest in a party to the contract or transaction. If the director abstains from voting after disclosure of their interest, the directors approve the contract or transaction and the contract or transaction was reasonable and fair to the Company at the time it was entered into, the contract or transaction is not invalid and the director is not accountable to the Company for any profit realized from the contract or transaction. Otherwise, the director must have acted honestly and in good faith, the contract or transaction must have been reasonable and fair to the Company and the contract or transaction be approved by the shareholders by a special resolution after receiving full disclosure of its terms in order for the director to avoid such liability or to avoid the contract or transaction being found invalid.

Code of Business Conduct and Ethics

In accordance with SEC rules, the Company has adopted a code of business conduct and ethics that applies to the Company's officers, directors, employees, and contractors.

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We have adopted a corporate Code of Business Conduct and Ethics (the "Code") that applies to all our employees including our principal executive officer, principal financial officer, and principal accounting officer and is administered by our Chief Financial Officer and the Chair of the Governance and Nomination Committee. We believe our Code provides written standards for deterring, and is reasonably designed to deter, wrongdoing. The purpose of our Code is to promote:

- honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- full, fair, accurate, timely and understandable disclosure in reports and documents that are filed with, or submitted to, the SEC and in other public communications made by the Company;
- compliance with applicable governmental laws, rules and regulations;
- prompt internal reporting of violations of the Code to an appropriate person or persons identified in the Code; and
- accountability for adherence to the Code.

Our Code is available on our website at www.alphacognition.com. A copy of the Code will be provided to any person without charge upon written request to the Company at its executive offices, attention: Secretary. We intend to disclose on our website any amendment to the Code or waiver from a provision of our Code that applies to any of our principal executive officer, principal financial officer, principal accounting officer, controller, or persons performing similar functions that relates to any element of our Code.

Hedging Policy

The Company's share trading policy prohibits hedging or monetization transactions. The policy sets forth hedging or monetization transactions as transactions that can be accomplished through the use of various financial instruments, including prepaid variable forwards, equity swaps, collars and exchange funds. The policy notes that these transactions may permit continued ownership of the Company's securities obtained through employee benefit plans or otherwise without the full risks and rewards of ownership. When that occurs, a person entering into these types of transactions may no longer have the same objectives as the Company's other shareholders. In addition, under the policy no director or officer of the Company is permitted to purchase financial instruments, including, for greater certainty, prepaid variable forward contracts, equity swaps, collars, or units of exchange funds that are designed to hedge or offset a decrease in market value of any the Company's securities granted as compensation or held, directly or indirectly, by such director or officer.

Governance and Nomination Committee

The Governance and Nomination Committee consists of Len Mertz and John Havens who serves as chairperson of the Governance and Nomination Committee. Specific responsibilities of the Nominating Committee include: (i) identifying, evaluating and selecting, or recommending that the Board approve, nominees for election to the Board; (ii) evaluating, on an annual basis, the performance of the Board and of individual directors; (iii) establishing subcommittees for the purpose of evaluating special or unique matters; (iv) evaluating the adequacy of corporate governance practices and reporting; (v) reviewing management succession plans; and (vi) developing and making recommendations to the Board regarding corporate governance guidelines and matters.

Our Board adopted a written charter for the Governance and Nomination Committee, which is available on the Company's website at www.alphacognition.com.

Nomination of Directors

The Board considers its size each year when it considers the number of directors to recommend to the shareholders for election at the annual meeting of shareholders, taking into account the number required to carry out the Board's duties effectively and to maintain a diversity of views and experience. The policy of our Governance and Nomination Committee is to consider properly submitted recommendations for candidates to the Board from stockholders. Any stockholder recommendations for consideration by the Governance and Nomination Committee should include the

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candidate's name, biographical information, information regarding any relationships between the candidate and the Company within the last three years, a description of all arrangements between the candidate and the recommending stockholder and any other person pursuant to which the candidate is being recommended, a written indication of the candidate's willingness to serve on the Board, any other information required to be provided under securities laws and regulations, and a written indication to provide such other information as the Governance and Nomination Committee may reasonably request. There are no differences in the manner in which the Governance and Nomination Committee evaluates nominees for director based on whether the nominee is recommended by a stockholder or otherwise. Stockholder recommendations to the Board should be sent in writing to the Company's executive offices, attention: Secretary.

Director Qualifications

The Board believes that all directors should have the highest personal integrity and have a record of exceptional ability and judgment. The Board also believes that directors should ideally reflect a mix of experience and other qualifications. There is no firm requirement of minimum qualifications or skills that candidates must possess. The Governance and Nomination Committee evaluates director candidates based on a number of qualifications, including their independence, judgment, leadership ability, expertise in the industry, experience developing and analyzing business strategies, financial literacy, risk management skills, and, for incumbent directors, his or her past performance. While neither the Board nor the Governance and Nomination Committee has adopted a formal policy with regard to the consideration of diversity when evaluating candidates for election to the Board, it is our goal to have a balanced Board, with members whose skills, background and experience are complimentary and, together, cover the variety of areas that impact our business.

The Governance and Nomination Committee initially evaluates a prospective nominee on the basis of his or her resume and other background information that has been made available to the committee. A member of the Governance and Nomination Committee will contact for further review those candidates who the committee believes are qualified, who may fulfill a specific board need and who would otherwise best make a contribution to the Board. If, after further discussions with the candidate, and other further review and consideration as necessary, the Governance and Nomination Committee believes that it has identified a qualified candidate, it will make a recommendation to the Board.

The qualifications of each of the Company's directors are set forth in their respective biographies above.

Diversity

The Board values the benefits that diversity can bring and seeks to maintain a Board comprised of talented and dedicated directors with a diverse mix of experience, skills and backgrounds collectively reflecting the strategic needs of the business and the nature of the environment in which the Company operates.

In identifying qualified candidates for nomination to the Board, the Governance and Nomination Committee will consider prospective candidates based on merit, having regard to those competencies, expertise, skills, background and other qualities identified from time to time by the Board as being important in fostering a diverse and inclusive culture which solicits multiple perspectives and views and is free of conscious or unconscious bias and discrimination.

The Governance and Nomination Committee must give due consideration to characteristics, such as gender, age, ethnicity, disability, sexual orientation and geographic representation, which contribute to board diversity. The Governance and Nomination Committee may, in addition to conducting its own search, engage qualified independent advisors to assist in identifying prospective diverse director candidates that meet the selection criteria established by the Board and that support its diversity objectives. In implementing its responsibilities under this policy, the Governance and Nomination Committee will take into account the Board's diversity objectives and the diverse nature of the business environment in which the Company operates, as well as the need to maintain flexibility to effectively address succession planning and to ensure that the Company continues to attract and retain highly qualified individuals to serve on the Board.

Compensation Committee

The Company's compensation committee (the "Compensation Committee") is comprised of two directors of the Company, Phillip Mertz (Chair), and Rob Bakshi. The Board has determined that Phillip Mertz and Rob Bakshi members of the Compensation Committee are "independent" within the meaning of Rule 5605 of the Nasdaq Listing Rules.

The Compensation Committee is responsible for determining the compensation for the directors and the executive officers. The Compensation Committee reviews the adequacy of remuneration for the executive officers by evaluating their performance in light of the Company's goals and objectives, and by comparing it with other reporting issuers of similar size in the same industry. The Compensation Committee also periodically reviews the adequacy and form of directors' compensation and recommends to the Board a compensation model that appropriately compensates directors for the responsibilities and risks involved with being a director and a member of one or more committees, as applicable. The Compensation Committee is also responsible for reviewing the executive compensation disclosure before the Company discloses this information publicly. The Compensation Committee is also responsible for: (i) ensuring that the mission and strategic direction of the Company is reviewed annually; (ii) ensuring that the Board and each of its committees carry out its functions in accordance with due process; (iii) assessing the effectiveness of the Board as a whole, each committee of the Board, and the contribution of each individual director; (iv) identifying, recruiting, endorsing, appointing, and orienting new directors; (v) reviewing and making compensation related recommendations and determinations regarding senior executives and directors; and (vi) the Company's human resources and compensation policies and processes.

Our Board adopted a written charter for the Compensation Committee, which is available on the Company's website at www.alphacognition.com.

Compensation Committee Interlocks and Insider Participation

During the fiscal year ended December 31, 2023, no member of the Compensation Committee served as an officer or employee of Alpha Cognition. Mr. Bakshi served as Chief Executive Officer of the Company through its qualifying transaction in March of 2021. None of Alpha Cognition's executive officers serve, or have served during the last fiscal year, as a member of the Board, compensation committee, or other board committee performing equivalent functions of any other entity that has one or more executive officers serving as one of Alpha Cognition's directors or on the Compensation Committee.

Audit Committee

We have a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and Nasdaq Listing Rules.

The Audit Committee consists of Len Mertz (Chair), John Havens and Rajeev 'Rob' Bakshi. The Board has determined that Mr. Mertz, Mr. Havens and Mr. Bakshi are "independent" and "financially literate," within the meaning of Rule 5605 of the Nasdaq Listing Rules and Rule 10A-3 of the Exchange Act. Our Board has determined that Len Mertz qualifies as an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K based on education, professional designations held, experience and background.

Our Board adopted a written charter for the Audit Committee, which is available on the Company's website at www.alphacognition.com.

Relevant Education and Experience

Len Mertz — Mr. Mertz has been a director since Alpha Cognition's founding and was named Chairman in 2021. He is also the Chairman of Shannon West Texas Memorial Hospital, a CMS rated 5-star hospital, with currently budgeted gross revenues exceeding \$1 billion. He has over 35 years of experience as a co-founder, board member, or investor in various companies including Triumvira Immunologics and Akido Labs. In addition, he serves on the board of the First

National Bank of Mertzson and is a co-founder of Mayne & Mertz, Inc. an oil & gas exploration company. He began his career as a certified public accountant and obtained his BBA in Finance with Highest Honors and his Masters in Professional Accounting both from the University of Texas at Austin. Mr. Mertz's educational background as a CPA, his experience with First National Bank of Mertzson and his experience as a co-founder, board member and investor in various companies has provided him with an understanding of the accounting principles used by the Company to prepare its financial statements, including the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions. These experiences have provided Mr. Mertz with the skills to analyze and evaluate the Company's financial statements and understand the internal controls and procedures for financial reporting.

John Havens — Since 1978, Mr. Havens has been the President of Seismic Exchange, Inc. Mr. Havens also has a long history as an entrepreneur as both a founder and significant investor in various industries, with a focus on growth through vertical integration and strategic acquisitions. He has served as Vice Chairman/Board Member of the Houston Astros and as an active member of numerous other business and community boards. Mr. Havens' experience working with various public companies in a number of different roles has provided him with an understanding of the accounting principles used by the Company to prepare its financial statements, including the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions. Mr. Havens' experience allows him to analyze and evaluate the Company's financial statements and understand the internal controls and procedures for financial reporting.

Rajeev 'Rob' Bakshi — Mr. Bakshi was the co-founder of technology company, Silent Witness Enterprises Ltd., which was listed on the TSX and NASDAQ. He oversaw the company's growth strategy before being sold to Honeywell for approximately \$90 million in 2003. Since then, he has been involved with industrial land development, building a Convention Centre in Calgary and other strategic investments. In 2009, Mr. Bakshi began working with a South Korean company to establish Apivio Systems Inc. He led the strategy to turn the business into a Canadian company, putting together an independent board of directors, financing, and corporate governance in his capacity as Executive Chairman. In 2013, he was appointed CEO and was responsible for taking the company public. Apivio Systems Inc. was acquired by Nuri Telecom Company in an all-cash transaction in the spring of 2017. Mr. Bakshi is an accomplished real estate and technology investor and advises both private and public companies. Mr. Bakshi's experience developing public companies and advising both private and public companies has provided him with an understanding of the accounting principles used by the Company to prepare its financial statements, including the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions. Mr. Bakshi's experience allows him to analyze and evaluate the Company's financial statements and understand the internal controls and procedures for financial reporting.

Audit Committee Oversight

Since the commencement of the Company's most recently completed fiscal year, the Audit Committee of the Company has not made any recommendations to nominate or compensate an external auditor that were not adopted by the board of directors.

Pre-Approval Policies and Procedures

The Audit Committee has not adopted any specific policies and procedures for the engagement of non-audit services.

EXECUTIVE COMPENSATION

As an emerging growth company under the JOBS Act, we have opted to comply with the executive compensation disclosure rules applicable to “smaller reporting companies” as such term is defined in the rules promulgated under the Securities Act, which permit us to limit reporting of executive compensation to our principal executive officer and our two other most highly compensated executive officers.

The following table contains compensation data for our named executive officers for the current fiscal year. In this section “**Named Executive Officer**” or “**NEO**” means the Principal Executive Officer (President) and each of the two most highly compensated executive officers, other than the Chief Executive Officer, who were serving as executive officers for the year ended December 31, 2023 and whose total salary and bonus exceeds \$100,000, as well as any additional individuals for whom disclosure would have been provided except that the individual was not serving as an officer of Alpha Cognition at the end of the most recently completed financial year end.

The following table sets forth all direct and indirect compensation paid, payable, awarded, granted, given or otherwise provided, directly or indirectly, by Alpha Cognition Inc. and any subsidiary thereof to each Named Executive Officer and each director of Alpha Cognition, in any capacity, including, for greater certainty, all plan and non-plan compensation, direct and indirect pay, remuneration, economic or financial award, reward, benefit, gift or perquisite paid, payable, awarded, granted, given or otherwise provided to the Named Executive Officers or director for services provided and for services to be provided, directly or indirectly, to Alpha Cognition or any subsidiary thereof:

Summary Compensation Table

Name and Position (a)	Year (b)	Salary (\$)(c)	Bonus (\$)(d)	Stock Awards (\$)(e)	Option Awards ^(a) (\$)(f)	Non-Equity Incentive Plan Compensation (\$)(g)	Non-qualified Deferred Compensation Earnings (\$)(h)	All Other Compensation ^(a2) (\$)(i)	Total (\$)(j)
Michael McFadden	2023	\$500,000	\$125,000	\$ —	\$1,507,292 ⁽³⁾⁽⁴⁾	\$ —	\$ —	\$30,186	\$2,162,478
Chief Executive Officer ⁽¹⁾	2022	\$500,000 ⁽¹³⁾	\$483,205 ⁽³⁾	\$ —	\$57,492	\$ —	\$ —	\$28,551	\$1,069,248
Don Kalkofen	2023	\$420,000	\$76,364	\$ —	\$727,617 ⁽⁶⁾⁽⁷⁾	\$ —	\$ —	\$49,735	\$1,273,716
Former Chief Financial Officer ⁽⁵⁾	2022	\$305,455 ⁽¹⁴⁾	\$ —	\$ —	\$381,839	\$ —	\$ —	\$16,350	\$703,644
Lauren D’Angelo	2023	\$410,099	\$89,928	\$ —	\$684,184 ⁽¹⁰⁾⁽¹¹⁾	\$ —	\$ —	\$30,186	\$1,214,397
Chief Commercial Officer and Chief Operating Officer ⁽⁸⁾	2022	\$359,712 ⁽¹⁵⁾	\$195,350 ⁽⁹⁾	\$ —	\$132,673	\$ —	\$ —	\$25,551	\$712,286

Notes:

- (1) Mr. McFadden was appointed as CEO of the Company effective as of April 12, 2021, and as a director of the Company effective as of March 28, 2022. Mr. McFadden received compensation for acting as the CEO of the Company.
- (2) In January 2023, the Company canceled 80,000 outstanding stock options with an exercise price of CAD\$22.50 and issued 80,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (3) Granted 327,830 bonus rights entitled to a cash bonus equal to an amount by which the fair market value of one common share of the Company exceeds \$39.50 multiplied by the number of bonus rights vested. The Officer had earned 65,566 bonus rights.
- (4) In June 2023, the Company granted 240,000 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly instalments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (5) Mr. Kalkofen was appointed as CFO of the Company effective as of April 11, 2022. Mr. Kalkofen resigned effective October 1, 2024.
- (6) In January 2023, the Company canceled 18,000 outstanding stock options with an exercise price of CAD\$23.25 and issued 18,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (7) In June 2023, the Company granted 170,000 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly instalments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (8) Mrs. D’Angelo was appointed as Chief Operating Officer of the Company effective as of September 28, 2023, previously she served as Chief Commercial Officer.

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- (9) Granted 42,258 bonus rights entitled to a cash bonus equal to an amount by which the fair market value of one common share of the Company exceeds \$39.50 multiplied by the number of bonus rights vested. The Officer had earned 29,505 bonus rights.
- (10) In January 2023, the Company canceled 24,000 outstanding stock options with an exercise price of CAD\$22.50 and issued 24,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 6,000 outstanding stock options with an exercise price of CAD\$26.25 and issued 6,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (11) In June 2023, the Company granted 158,000 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (12) Healthcare benefits.
- (13) Includes \$72,917 of deferred compensation paid in 2023.
- (14) Includes \$61,250 of deferred compensation paid in 2023.
- (15) Includes \$46,840 of deferred compensation paid in 2023.

Narrative Disclosure to Summary Compensation Table

The Company's compensation philosophy for its executive officers is designed to attract well -qualified individuals by paying market based base salaries plus short and long-term incentive compensation in the form of stock options or awards under the Long Term Incentive Plan. In making its determinations regarding the various elements of executive compensation, the Board will have access to and will rely on published studies of compensation paid in comparable businesses.

The duties and responsibilities of the Chief Executive Officer are typical of those of a business entity of the Company's size in a similar business and include direct reporting responsibility to the chair of the Board, overseeing activities of all other executives of the Company, representing the Company, providing leadership and responsibility for achieving corporate goals, and implementing corporate policies and initiatives.

The objectives of the Company's executive compensation program are as follows:

- to attract, retain and motivate talented executives who create and sustain the Company's continued success;
- to align the interests of the Company's executives with the interests of the Company's shareholders; and
- to provide total compensation to executives that is competitive with that paid by other companies of comparable size engaged in a similar business in appropriate regions

Overall, the executive compensation program aims to design executive compensation packages that mirror executive compensation packages for executives with similar talents, qualifications and responsibilities at companies with similar financial, operating and industrial characteristics. The Company expects to undergo rapid growth and is committed to retaining its key executives for the next several critical years, while at the same time ensuring that executive compensation is tied to specific corporate goals and objectives. The Company's executive compensation program has been designed to reward executives for reinforcing the Company's business objectives and values, for achieving the Company's performance objectives, and for their individual performance. The executive compensation program consists of a combination of base salary, Long Term Incentive Plan awards and stock option incentives.

Base Salary

The base salary of an executive officer is intended to attract and retain executives by providing a reasonable amount of non-contingent remuneration. The base salary review of any executive officer takes into consideration the current competitive market conditions, experience, proven or expected performance, and the particular skills of the executive officer. Base salary is not evaluated against a formal "peer group."

Stock Options

The Company believes that equity -based compensation in the form of stock options will link the interests of its executive officers with the long-term interests of the Company's shareholders. Stock option awards to executive officers will typically be subject to time-based vesting provisions. The Company believes that such awards will encourage executive officers to focus on long-term company performance and increasing long-term shareholder value, and will serve as a useful retention mechanism by encouraging executive officers to remain employed with the Company.

The Company does not have any formal policy regarding when stock options are to be granted or the size of any given grant, and the Company does not intend to tie such grants directly to any pre-established corporate or individual goals. The Company Board or a committee thereof will, however, consider and evaluate the total compensation package, including base salary and Long Term Incentive Plan awards, received or to be received by a particular executive officer, and will seek to ensure that such total compensation package is fair, reasonable and competitive. When considering an award of options to an executive officer, consideration of the number of options previously granted to the executive may be taken into account.

Employment Agreements

The Company, through its subsidiary Alpha Cognition (USA), Inc., entered into an employment agreement dated February 22, 2021, as amended on March 28, 2022, with Michael McFadden, pursuant to which the Company retained Mr. McFadden to act as CEO of the Company effective as of April 12, 2021. Mr. McFadden was also appointed as a director of the Company effective as of March 28, 2022. Pursuant to the agreement, the Company agreed to pay Mr. McFadden an annual base salary of \$500,000 and to grant Mr. McFadden an equity interest in the Company based on the value of the Company on a sale or merger, or a listing on the Nasdaq exchange. Mr. McFadden is also entitled to an annual bonus based on achievement of certain milestones, up to a maximum of 50% of his base salary. The agreement may be terminated by either party at any time, for any reason. In the event the agreement is terminated by the Company for any reason other than cause, or by Mr. McFadden for good reason, Mr. McFadden will be entitled to receive his base compensation through to the date of termination, together with severance of six months of base compensation, plus three months of half of base compensation, plus three months of one quarter of base compensation, plus the average of actual performance bonuses paid over the last two years. Mr. McFadden will be entitled to keep options which have vested, however any unvested options would be forfeited. Pursuant to the agreement, in the event of a change of control, Mr. McFadden will receive: a) a cash payment equal to his annual base salary; b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and c) continuation of healthcare benefits for twelve months from date of the change of control event.

The Company, through its subsidiary Alpha Cognition (USA), Inc., entered into an employment agreement dated April 11, 2022, as amended on June 15, 2022, with Don Kalkofen, pursuant to which the Company retained Mr. Kalkofen to act as CFO of the Company effective as of April 11, 2022. Pursuant to the agreement, the Company agreed to pay Mr. Kalkofen an annual base salary of \$420,000 and Mr. Kalkofen was granted 22,500 options. In the event the agreement is terminated by the Company for any reason other than cause, or by Mr. Kalkofen for good reason, Mr. Kalkofen will be entitled to receive his base compensation through to the date of termination. Mr. Kalkofen will be entitled to keep options which have vested, however any unvested options would be forfeited. Pursuant to the agreement, in the event of a change of control, Mr. Kalkofen will receive: a) a cash payment equal to his annual base salary; b) a cash bonus equal to 50% of his annual base salary; and c) continuation of healthcare benefits for twelve months from date of change of control event. Mr. Kalkofen resigned effective October 1, 2024 and his employment agreement is no longer effective.

The Company entered into an employment agreement with Lauren D'Angelo pursuant to which the Company retained Ms. D'Angelo to act as the Chief Commercial Officer effective as of May 4, 2021. Ms. D'Angelo was promoted to Chief Operating Officer as of September 28, 2023. Pursuant to the agreement, the Company agreed to pay Ms. D'Angelo an annual base salary which is currently \$420,000 and Ms. D'Angelo is entitled to an annual bonus based on criteria established by the CEO and approved by the Board, with the target bonus to be 50% of base salary. Ms. D'Angelo is also entitled to receive options. The agreement may be terminated by either party at any time, for any reason, with or without advance notice or cause. Pursuant to the agreement, in the event of a change of control, Ms. D'Angelo will receive: a) a cash payment equal to the annual base salary; b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and c) continuation of healthcare benefits for twelve months from date of change of control event.

The Company entered into an employment agreement with Henry Du pursuant to which the Company retained Mr. Du to act as the Vice President of Finance and Accounting and interim Chief Financial Officer effective October 21, 2024. Pursuant to the agreement, the Company agreed to pay Mr. Du an annual base salary which is currently \$275,000 and Mr. Du will be eligible for a yearly bonus set at 40% of his base salary. In addition to his base compensation, Mr. Du received an initial grant of 32,000 stock options to purchase shares of the Company's common stock which will vest equally on a quarterly basis over a 12-quarter period, beginning on October 21, 2024 (the "Stock Options"). The Stock Options were granted pursuant to the Company's 2023 Stock Option Plan.

Outstanding Equity Awards at Fiscal Year-End

A summary of the number and the value of the outstanding equity awards as of December 31, 2023, held by the named executive officers is set out in the table below.

	Option Awards				
	Option Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Michael McFadden	1/18/2023 ⁽¹⁾	29,615	11,837	\$ 5.25	1/18/2033
	1/18/2023 ⁽²⁾	37,052	1,497	\$ 5.25	1/18/2033
	6/8/2023 ⁽¹⁾	102,188	106,936	\$ 4.25	6/8/2033
	6/8/2023 ⁽²⁾		30,877	\$ 4.25	6/8/2033
Donald Kalkofen	1/18/2023 ⁽²⁾	3,550	6,750	\$ 5.25	1/18/2033
	6/8/2023 ⁽¹⁾	38,857	69,600	\$ 4.25	6/8/2033
	6/8/2023 ⁽²⁾	20,268	28,016	\$ 4.25	6/8/2033
Lauren D'Angelo	1/18/2023 ⁽²⁾	19,999	4,000	\$ 5.25	1/18/2033
	1/18/2023 ⁽²⁾	3,750	2,250	\$ 5.25	2/14/2033
	6/8/2023 ⁽¹⁾	41,236	55,374	\$ 4.25	6/8/2033
	6/8/2023 ⁽²⁾	26,037	35,353	\$ 4.25	6/8/2033

Notes:

- (1) Non-qualified stock option grant.
(2) Incentive stock option grant.

Director Compensation

The following table sets forth the compensation granted to our directors who are not also executive officers for the year ended December 31, 2023. Compensation to directors that are also executive officers is detailed above and is not included in this table.

Name (a)	Fees Earned or Paid in Cash (\$) (b)	Stock Awards (\$) (c)	Option Awards (\$) (d)	Non-Equity Incentive Plan Compensation (\$) (e)	Nonqualified Deferred Compensation Earnings (\$) (f)	All Other Compensation (\$) (g)	Total (\$) (h)
Len Mertz	\$ —	\$ —	93,202 ⁽¹⁾ (2) \$	—	\$ —	—	\$ 93,202
John Havens	\$ —	\$ —	74,812 ⁽³⁾ (4) \$	—	\$ —	—	\$ 74,812
Phillip Mertz	\$ —	\$ —	61,990 ⁽⁵⁾ (6) \$	—	\$ —	—	\$ 61,990
Rajeev 'Rob' Bakshi	\$ —	\$ —	61,990 ⁽⁷⁾ (8) \$	—	\$ —	—	\$ 61,990
Ken Cawkell	\$97,230 ⁽¹⁰⁾	\$ —	\$55,807 ⁽⁹⁾	\$ —	\$ —	—	\$153,037

Notes:

- (1) In January 2023, the Company canceled 4,000 outstanding stock options with an exercise price of CAD\$16.00 and issued 4,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 6,000 outstanding stock options with an exercise price of CAD\$28.00 and issued 6,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (2) In June 2023, the Company granted 20,000 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly instalments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (3) In January 2023, the Company canceled 4,000 outstanding stock options with an exercise price of CAD\$16.00 and issued 4,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31,

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2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 9,600 outstanding stock options with an exercise price of CAD\$28.00 and issued 9,600 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (4) In June 2023, the Company granted 16,000 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
 - (5) In January 2023, the Company canceled 4,000 outstanding stock options with an exercise price of CAD\$16.00 and issued 4,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 8,000 outstanding stock options with an exercise price of CAD\$28.00 and issued 8,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged.
 - (6) In June 2023, the Company granted 13,200 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
 - (7) In January 2023, the Company canceled 4,000 outstanding stock options with an exercise price of CAD\$16.00 and issued 4,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 8,000 outstanding stock options with an exercise price of CAD\$28.00 and issued 8,000 new options with an exercise price of CAD\$7.00 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged.
 - (8) In June 2023, the Company granted 13,200 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
 - (9) In June 2023, the Company granted 13,200 Common Share options with an exercise price of CAD\$5.50 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
 - (10) Mr. Cawkell provided monthly consulting services to the Company totaling \$43,230 during 2023. On April 30, 2023, the Company amended the agreement to an hourly fee of \$400 for further services rendered. The amendment included a payment of \$54,000 for the monthly contract termination fee.

Narrative Disclosure to Director Compensation Table

Due to the Company being in the development stage and not currently generating revenue, our Board has not adopted a compensation policy for the directors and directors are not currently paid any cash fees in relation to their service on the Board or its committees. Instead, the Compensation Committee periodically reviews director compensation matters and grants options in the Company based on their assessment of fair compensation for services rendered to the Board. The grant of options is not conducted pursuant to a fixed schedule and is completely at the discretion of the Compensation Committee.

PRINCIPAL STOCKHOLDERS

The following table sets forth information concerning beneficial ownership of our capital stock outstanding as of the date of this prospectus, by: (1) each of our directors and nominees to serve as director; (2) each of our named executive officers; and (3) our current directors and executive officers as a group. As of the date hereof, we are not aware of any stockholders that beneficially own 5% or more of our common shares.

As of December 31, 2024 there were 16,019,788 common shares issued and outstanding and 316,655 Class B preferred Series A shares issued and outstanding. Each common share entitles the holder thereof to one vote. Each share of Class B preferred Series A shares entitles the holder thereof to one vote.

The information regarding beneficial ownership of our capital stock has been presented in accordance with the rules of the SEC. Under these rules, a person may be deemed to beneficially own any shares of capital stock as to which such person, directly or indirectly, has or shares voting power or investment power, and as to which such person has the right to acquire voting or investment power within 60 days through the exercise of any stock option or other right. The percentage of beneficial ownership as to any person as of a particular date is calculated by dividing (1) (i) the number of shares beneficially owned by such person plus (ii) the number of shares as to which such person has the right to acquire voting or investment power within 60 days by (2) the total number of shares outstanding as of such date, plus any shares that such person has the right to acquire from us within 60 days. Including those shares in the tables does not, however, constitute an admission that the named stockholder is a direct or indirect beneficial owner of those shares. Unless otherwise indicated, each person or entity named in the table has sole voting power and investment power (or shares that power with that person's spouse) with respect to all shares of capital stock listed as owned by that person or entity, subject to applicable community property laws.

	Amount of Beneficial Ownership			Percent of Class B Preferred Series A Shares ⁽¹⁾	Percent of Total Voting Stock ⁽¹⁾
Name of Beneficial Owner	Common Shares	Class B Preferred Series A Shares	Percent of Common Shares ⁽¹⁾		
Named Executive Officers and Directors					
Len Mertz, Chairman of the Board ⁽²⁾	257,607	60,015	1.6%	19.0%	2.1%
Ken Cawkell, Director ⁽³⁾	384,522	80,000	2.4%	25.3%	2.9%
John Havens, Director ⁽⁴⁾	306,652	—	1.9%		2.0%
Phillip Mertz, Director ⁽⁵⁾	80,913	44,160	*	13.9%	*
Michael McFadden, Chief Executive Officer ⁽⁶⁾	207,737	—	1.3%	—	*
Lauren D'Angelo, Chief Operating Officer ⁽⁷⁾	102,831	—	*	—	*
Rajeev 'Rob' Bakshi, Director ⁽⁸⁾	29,963	—	*	—	*
Henry Du, Vice President of Finance and Accounting and interim Chief Financial Officer	0	—	0%	—	0%
Donald Kalkofen, Former Chief Financial Officer ⁽⁹⁾	99,086	—	*	—	*
All directors and officers as a group (nine persons)	1,469,311	184,175	8.8%	58.2%	9.8%

Notes:

* — less than 1%

Unless otherwise noted, the address of each of the persons listed above is 1200-750 West Pender Street, Vancouver, BC, V6C, 2T8.

- (1) The percentage is calculated on a partially diluted basis and based on 16,019,788 shares of Common Stock issued and outstanding and 316,655 Class B Preferred Series A Shares issued and outstanding as of December 31, 2024, plus shares persons have the right to acquire within 60 days of December 31, 2024.
- (2) 232,220 common shares, 60,015 preferred class B shares, 25,387 vested stock options
- (3) 218,476 common shares, 80,000 preferred class B shares, 20,062 warrants, 6,342 vested stock options and 139,642 vested performance shares
- (4) 285,587 common shares, and 21,065 vested stock options
- (5) 62,793 common shares, 44,160 preferred class B shares, 18,120 vested stock options

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- (6) 14,142 common shares, 2,727 warrants, and 190,868 vested stock options
- (7) 102,831 vested stock options
- (8) 11,843 common shares, and 18,120 vested stock options
- (9) 14,700 common shares, and 84,386 vested stock options

Change in Control

We are not aware of any arrangement that might result in a change in control in the future. We have no knowledge of any arrangements, including any pledge by any person of our securities, the operation of which may at a subsequent date result in a change in Alpha Cognition's control.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our executive officers and directors which are described elsewhere in this prospectus, see “Executive Compensation — Narrative Disclosure to Summary Compensation Table — *Employment Agreements*,” below we describe transactions since January 1, 2022 to which we were or will be a participant and in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding voting securities, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest.

Transactions with related persons

In March 2015, the Company issued a promissory note of \$1,400,000 to NLS, a related party through a common director, for the acquisition of the ALPHA-1062 Technology (“NLS Promissory Note”). In April 2015, the Company and NLS entered into an amendment to the License Agreement pursuant to which the interest rate was reduced to 2% and the maturity date was extended to December 31, 2022, with interest only payments commencing April 1, 2019, at the rate of \$2,000 per month. In March 2023, the Company and NLS entered into a second amending agreement pursuant to which the interest rate was increased to 5.5% and the maturity date was extended to July 15, 2024, with monthly interest only payments required. The Company may pay all or any portion of the note and accrued interest prior to the maturity date. As at September 30, 2023, the Company owed NLS \$1,211,463 for an outstanding promissory note.

Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 15, 2024, to July 15, 2025. Additionally, \$300,000 is now due on December 31, 2024, with the remaining principal balance due at maturity.

On July 7, 2023, the Company entered into a loan agreement with Alpha Seven a related party through a common director and officers, to advance an amount up to \$150,000. The outstanding balance has an interest rate of 12% per annum, a term of 12 months, and is unsecured. To date the Company has advanced \$55,000.

On September 24, 2024, the Company issued convertible notes and accompanying warrants pursuant to the closing of its bridge financing transaction. Two holders of 5% or more of our outstanding securities participated in the financing. Manchester Explorer, L.P. purchased \$750,000 in principal amount of convertible notes and received warrants exercisable for 71,090 common shares. Nutie Dowdle purchase \$250,000 in principal amount of convertible notes and received warrants exercisable for 23,697 common shares.

Indemnification

Our articles contain provisions limiting the liability of directors and provide that we will indemnify the directors and executive officers to the fullest extent permitted under British Columbia law. Our articles also provide the Board with discretion to indemnify the other officers, employees, and agents when determined appropriate by the Board. In addition, we entered into an indemnification agreement with each of our directors and executive officers, which requires us to indemnify them.

Related Person Transactions Policy and Procedure

Our Code of Ethics requires we avoid, wherever possible, all related party transactions that could result in actual or potential conflicts of interests, except under guidelines approved by the Board (or the audit committee). Related-party transactions are defined as transactions in which (1) the aggregate amount involved will or may be expected to exceed \$120,000 in any calendar year, (2) Alpha Cognition or any of its subsidiaries is a participant, and (3) any (a) executive officer, director or nominee for election as a director, (b) greater than 5% beneficial owner of our common shares, or (c) immediate family member, of the persons referred to in clauses (a) and (b), has or will have a direct or indirect

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material interest (other than solely as a result of being a director or a less than 10% beneficial owner of another entity). A conflict of interest situation can arise when a person takes actions or has interests that may make it difficult to perform his or her work objectively and effectively. Conflicts of interest may also arise if a person, or a member of his or her family, receives improper personal benefits as a result of his or her position.

Our audit committee, pursuant to its written charter, is responsible for reviewing and approving related - party transactions to the extent we enter into such transactions. The audit committee will consider all relevant factors when determining whether to approve a related party transaction, including whether the related party transaction is on terms no less favorable to us than terms generally available from an unaffiliated third-party under the same or similar circumstances and the extent of the related party's interest in the transaction.

DESCRIPTION OF SHARE CAPITAL

Common Shares

The authorized capital of the Company consists of an unlimited number of Common Shares without par value, an unlimited number of Class A restricted voting shares ("Restricted Shares") and an unlimited number of Class B Preferred Series A shares ("Preferred Shares"). As of December 31, 2024, there were 16,019,788 common shares issued and outstanding and 316,655 Preferred Shares issued and outstanding.

There are options outstanding to purchase up to 965,975 common shares at an average weighted exercise price of \$4.45. There are warrants outstanding to purchase up to 3,635,962 common shares at an average weighted exercise price of \$7.17. There are performance shares outstanding to purchase up to 265,642 common shares at an exercise price of \$0.25. Holders of Common Shares are entitled to one vote per Common Share at all meetings of shareholders, to receive dividends as and when declared by our Board of Directors and to receive a *pro rata* share of the assets of the Company available for distribution to the shareholders in the event of the liquidation, dissolution or winding-up of the Company. There are no pre-emptive, conversion or redemption rights attached to the Common Shares.

Holders of Common Shares do not have cumulative voting rights. Therefore, holders of a majority of the Common Shares voting for the election of directors can elect all of the directors. Holders of the Common Shares representing 33 1/3% the voting power of the capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of holders of Common Shares. A vote by two-thirds of the votes cast on a resolution are required to effectuate certain special resolutions at Alpha Cognition's annual general meeting. There are no provisions for sinking or purchase funds, for permitting or restricting the issuance of additional securities and any other material restrictions, and for requiring a holder of Common Shares to contribute additional capital.

Class A Restricted Voting Shares

The Company issued Restricted Shares to certain holders of common shares of Alpha Canada who are resident in the United States in connection with the Company's Business Combination to allow the Company to maintain its status as a Foreign Private Issuer. As of January 1, 2023, the Company no longer qualifies as a Foreign Private Issuer. On August 29, 2023, the Company converted all 280,000 outstanding Restricted Shares to Common Shares by resolution of the Board. There are currently no Restricted Shares issued and outstanding. The class of Restricted Shares differs from the Common Shares in that they do not entitle the holder to exercise voting rights in respect of the election of directors of the Company.

The Restricted Shares include the following restrictions, conditions and limitations:

- (1) The holders of the Restricted Shares are entitled to receive notice of and attend all meetings of the shareholders of the Company and are entitled to vote at meetings of the holders of Common Shares, except those holders of Restricted Shares are not entitled to vote for the election or removal of directors of the Company.
- (2) The holders of Restricted Shares are entitled to receive dividends as and when declared by the Board of the Company, provided that no dividend may be declared or paid in respect of Restricted Shares unless concurrently therewith the same dividend is declared or paid on the Common Shares.
- (3) The holders of Restricted Shares are entitled, in the event of any liquidation, dissolution or winding-up, whether voluntary or involuntary, or any other distribution of the assets of the Company among its shareholders for the purpose of winding up its affairs, to share ratably, together with the holders of the Common Shares, in such assets of the Company as are available for distribution.
- (4) Restricted Shares may only be transferred pursuant to an offer to purchase Restricted Shares made to all of the holders of the Restricted Shares.
- (5) If an offer is made to purchase all or substantially all of the Common Shares, each Restricted Share shall be deemed converted into one Common Share concurrent with closing of the offer.

Each Restricted Share may be convertible into one Common Share at the option of the holder of the Restricted Share at any time: (i) if the Company enters into a binding agreement that would result in a change of control; or (ii) if a meeting of shareholders is called to elect directors who are not nominees of the Company or management of the Company or if a meeting of shareholders is called at which a contested election of directors will be considered.

Class B Preferred Series A Shares

The Class B Preferred Series A Shares were issued to certain founders of Alpha Canada in connection with the Company's Business Combination.

The Class B Preferred Series A Shares include the following restrictions, conditions and limitations:

- (1) The Class B Preferred Series A Shares have a deemed issue price of \$6.25 ("Deemed Issue Price").
- (2) The holders of the Class B Preferred Series A Shares will be entitled to receive notice of and attend all meetings of the shareholders of the Company and will be entitled to vote at meetings of the holders of Common Shares. The holders of Class B Preferred Series A Shares will vote together with holders of Common Shares and Restricted Shares as a single class.
- (3) The holders of Class B Preferred Series A Shares will be entitled to receive dividends as and when declared by the Board. The Class B Preferred Series A Shares rank in priority to the Common Shares and Restricted Shares for payment of dividends. Dividends on the Class B Preferred Series A Shares are non-cumulative. If the holders of the Class B Preferred Series A Shares receive dividends in an aggregate amount equal to or greater than the Deemed Issue Price, the Class B Preferred Series A Shares shall be automatically converted to Common Shares.
- (4) In the event of any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of the Class B Preferred Series A Shares shall be entitled to receive out of the assets and funds of the Company, prior and in preference to any distribution of any of the assets or funds of the Company to the holders of the Common Shares and Restricted Shares, an amount per Preferred Share equal to two times the Deemed Issue Price of the Class B Preferred Series A Shares (as appropriately adjusted for any stock dividends, combinations or splits) plus all accrued or declared but unpaid dividends on such Class B Preferred Series A Shares (the "Liquidation Preference"). After payment in full of the Liquidation Preference has been made to the holders of the Class B Preferred Series A Shares, all remaining assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Class B Preferred Series A Shares, Common Shares and Restricted Shares. Upon payment of the Liquidation Preference, each Class B Preferred Series A Shares will convert into one Common Share.
- (5) Each Class B Preferred Series A Shares shall, at the option of the holder, be convertible into Common Shares at the rate of one Common Share for each Preferred Share. All of the Class B Preferred Series A Shares will be automatically converted to Common Shares if any of the following events occur:
 - (a) upon the completion of an initial public offering, or a reverse take-over with a qualifying secondary offering, pursuant to which the Common Shares are listed for trading on the New York Stock Exchange, NYSE Amex, the NASDAQ National Market or SmallCap Quotation System or a successor to any of the foregoing, raising at least \$40 million, and a price per share which values the Company at \$160 million or more, prior to listing;
 - (b) a third party makes a bona fide offer to acquire 100% of the Common Shares, or execute a merger or amalgamation in which effective control of the Company is transferred, and such offer has been approved by the Board of the Company and its shareholders, such that shareholders receive proceeds from the transaction of at least \$160 million in the form of shares or cash or a combination of both;
 - (c) a third party makes a bona fide offer to acquire all or substantially all of the Company's assets, for sale proceeds of at least \$180 million and such offer has been approved by the Board and its shareholders, and provided that the shareholders on closing receive proceeds from the transaction by way of dividend and return of capital or otherwise of at least \$160 million; or

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- (d) a third party makes a bona fide offer to acquire certain specific Company asset(s), for sale proceeds of at least \$180 million, and provided that the provision of subsection (c) is not triggered, and such offer has been approved by the Board and provided that the shareholders on closing receive proceeds from the transaction by way of dividend, return of capital or otherwise of at least \$160 million,

If the Class B Preferred Series A Shares are subject to automatic conversion as a result of the occurrence of one of the above events, prior to such conversion they shall be entitled to receive a dividend per Preferred Share equal to the Deemed Issue Price.

Warrants

On September 24, 2024, we sold warrants to purchase 430,835 common shares of the Company at an exercise price of \$10.55 per share for a five-year term. Each buyer of convertible notes received warrants sufficient to purchase such number of common shares equal to the principal amount of convertible notes such buyer purchased divided by then effective conversion price of the convertible notes.

Buyers received an additional 215,418 warrants with identical terms upon the closing of our public offering on November 13, 2024.

The exercise price of the warrants was automatically amended to \$7.18 per share upon the closing of our public offering on November 13, 2024.

Listing

Our common stock is listed on the Nasdaq under the symbol "ACOG."

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is Computershare Investor Services Inc. with its principal office at 510 Burrard Street, 3rd Floor, Vancouver, British Columbia V6C 3B9.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides details of compensation plans under which equity securities of Alpha Cognition are authorized for issuance as of December 31, 2023. A description of the significant terms of each of the equity compensation plans of Alpha Cognition follows the table below:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights ⁽¹⁾ (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by securityholders ⁽²⁾ (3)(4)(5)	1,099,730	\$ 3.50	308,116
Equity compensation plans not approved by securityholders	—	\$ —	—
Total	1,099,730	\$ 3.50	308,116

Notes:

- (1) The exercise price for some options and Performance Shares is expressed in United States dollars.
- (2) The total number of securities which may be issued under the 2023 Plan is, at any time, 20% of the Company's issued and outstanding Common Shares and Restricted Shares at such time. As of December 31, 2023, the Company has a total of 4,728,359 Common Shares and no Restricted Shares issued and outstanding.
- (3) 189,332 shares are issued and remain outstanding under the 2022 Stock Option Plan, at an average exercise price of \$5.25 per share.

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- (4) 637,556 shares are issued and remain outstanding under the 2023 Stock Option Plan, at an average exercise price of \$4.25 per share.
- (5) 272,842 Performance Shares are issued and remain outstanding at an exercise price of \$0.25, per share. These Performance Shares were issued pursuant to the Legacy Compensation Plan (as defined below).

Stock option plans and other incentive plans

The Company currently has three forms of incentive plans for its directors, officers, employees and consultants, being: (i) option-based awards pursuant to the 2023 stock option plan (the "**2023 Plan**"); (ii) non-equity based awards in the form of cash bonuses, pursuant to the Company's cash bonus policy (the "**Cash Bonus Policy**"); and (iii) cash-settled share-based payment awards pursuant to the Company's bonus rights plan (the "**Bonus Rights Plan**").

2023 Stock Option Plan

The 2023 Plan was approved by the Board on April 13, 2023 and approved by the shareholders of the Company at their annual general meeting held on June 27, 2023. The purpose of the 2023 Plan is to provide an incentive to directors, senior officers, employees or consultants of the Company or any of its subsidiaries, to acquire a proprietary interest in the Company, to continue their participation in the affairs of the Company and to increase their efforts on behalf of the Company.

The following summary of the material terms of the 2023 Plan does not purport to be complete and is qualified in its entirety by reference to the 2023 Plan.

Eligible Participants. Options may be granted under the 2023 Plan to directors and senior officers of the Company or its subsidiaries, management company employees (collectively, the "Directors"), employees of the Company or its subsidiaries (collectively, the "Employees") or consultants of the Company, its subsidiaries, or its subsidiaries of subsidiaries (collectively, the "Consultants"). The Board, in its discretion, determines which of the Directors, Employees or Consultants will be awarded options under the 2023 Plan.

Number of Shares Reserved. The number of Common Shares which may be issued pursuant to options granted under the 2023 Plan may not exceed 20% of the issued and outstanding Common Shares and Restricted Shares at the date of granting of options. Options that are exercised, cancelled or expire prior to exercise continue to be issuable under the 2023 Plan.

Exercise Price. The exercise price of options granted under the 2023 Plan will be determined by the Board at the time of grant, subject to the following:

- (a) if the Common Shares are listed on the CSE or any other stock exchange on which the Common Shares are listed for trading, the exercise price will not be lower than the greater of the last closing price for the Common Shares as quoted on the CSE or any other stock exchange on which the Common Shares are listed for trading: (i) on the trading day prior to the date of grant; and (ii) the date of grant; or
- (b) if the Common Shares are not listed on a stock exchange, the price will be determined solely by the Board.

Term of Options. Subject to the termination and change of control provisions noted below, the term of any options granted under the 2023 Plan is determined by the Board and may not exceed ten (10) years from the date of grant.

Vesting. All options granted pursuant to the 2023 Plan will be subject to such vesting requirements as may be imposed by the Board. In the event of a Change of Control, as defined in the 2023 Plan, all unvested options will vest immediately.

Termination. Any options granted pursuant to the 2023 Plan will terminate upon the earliest of:

- (a) the end of the term of the option;
- (b) on the date the holder ceases to be eligible to hold the option (the "Cessation Date"), if the Cessation Date is as a result of dismissal for cause;
- (c) one year from the date of death or disability, if the Cessation Date is as a result of death or disability;
- (d) 90 days from the Cessation Date, if the Cessation Date is as a result of a reason other than death, disability or cause; or

- (e) on such other date as fixed by the Board, provided that the date is no more than one year from the Cessation Date, if the Cessation Date is as a result of a reason other than death, disability or cause.

Exercise of Options. The exercise price of an option must be paid in cash, other than as described below as determined by the Board:

- (a) **Cashless Exercise ("Cashless Exercise").** The Company may make an arrangement with a brokerage firm pursuant to which the brokerage firm will loan money to an optionee to purchase the Common Shares issuable upon exercise of their options. The brokerage firm then sells a sufficient number of Common Shares to cover the exercise price of the options in order to repay the loan made to the optionee. The brokerage firm receives an equivalent number of Common Shares from the exercise of the options and the optionee then receives the balance of the Common Shares or the cash proceeds from the balance of such Common Shares.
- (b) **Net Exercise ("Net Exercise").** The Company may accept the exercise of options without the optionee making any cash payment so the Company does not receive any cash from the exercise of the subject options, and instead the optionee receives only the number of Common Shares that is the equal to the quotient obtained by dividing:
 - (i) the product of the number of options being exercised multiplied by the difference between the volume weighted average price ("VWAP") of the Common Shares and the exercise price of the options; by
 - (ii) the VWAP of the Common Shares.

In the event of a Cashless Exercise or Net Exercise, the number of options exercised, surrendered or converted, and not the number of Common Shares actually issued by the Company, must be included in calculating the limits set forth in Section 5(a) of the 2023 Plan.

The 2023 Plan also contains provisions permitting the Company to issue options that qualify as "Incentive Stock Options" under Section 422 of the U.S. Internal Revenue Code of 1986, as amended.

Cash Bonus Policy

The Company maintains a bonus plan. The Board and the Compensation Committee administer the Cash Bonus Policy and may grant discretionary cash bonuses to eligible participants.

Bonus Rights Plan

The Company implemented its Bonus Rights Plan as a cash incentive program that is formula -based and measured against pre-determined performance targets, including financial and individual performance measures. The Board administers the Bonus Rights Plan and may grant bonus rights to eligible participants. The grant is conditional on the eligible participant executing a grant agreement (a "**Grant Agreement**") and such ancillary documents as the Board may determine to be appropriate. Each Grant Agreement evidencing an award of bonus rights will set forth: (i) the grant date; (ii) the number of bonus rights; (iii) the grant price; (iv) any vesting conditions and vesting dates; (v) the applicable settlement date; and (vi) the applicable expiry date, and may specify such other terms and conditions consistent with the terms of the Bonus Rights Plan as the Board determines. In all cases, bonus rights will be in addition to, and not in substitution for or in lieu of, ordinary salary and wages payable to a participant in respect of his or her services to the Company.

These bonus rights are cash-settled share-based payment awards recognized over the vesting period and are revalued at each reporting date with the amount recognized included in management fees and salaries on the Company's consolidated statement of loss and comprehensive loss.

On the settlement date (as specified in the Grant Agreement and which may not be later than the expiry date) the participant will receive, with respect to each vested bonus right, an amount (the "**Settlement Amount**") equal to (and without any interest thereon) the excess, if any, of (x) the Fair Market Value of a Common Share on the vesting date over (y) the applicable grant price. The Settlement Amount will be paid in the form of a lump-sum cash payment (net of applicable withholding taxes). Upon settlement of such bonus rights, the corresponding number of bonus rights credited to the participant's bonus right account will be cancelled and the participant will have no further rights, title or interest with respect thereto.

The Bonus Rights Plan is not subject to shareholder approval.

2022 Stock Option Plan

The 2022 Plan was previously adopted by the board and approved by shareholders on July 19, 2022, and pursuant to which incentive stock options were granted to certain Directors, Employees and Consultants (the "**2022 Options**"). In connection with listing of the Common Shares on the CSE, the Company adopted the 2023 Plan and determined that the 2022 Plan be closed to new grants. The outstanding 2022 Options issued prior to the adoption of the 2023 Plan are not included in the maximum number of stock options available for grant pursuant to the 2023 Plan and are not subject to the terms of the 2023 Plan, and such outstanding 2022 Options will continue to be governed by the 2022 Plan.

The following is a summary of the material terms of the 2022 Plan:

Eligible Participants. Options were granted pursuant to the 2022 Plan to certain Directors, Employees and Consultants. The Board, in its discretion, determined which of the Directors, Employees or Consultants were awarded 2022 Options under the 2022 Plan.

Number of Shares Reserved. The number of Common Shares issuable pursuant to options granted under the 2022 Plan may not exceed 10% of the issued and outstanding Common Shares and Restricted Shares at the date of granting of 2022 Options.

Limitations. Under the 2022 Plan, the aggregate number of options granted to any one person (including companies wholly-owned by that person) in a 12-month period must not exceed 5% of the issued and outstanding Common Shares of the Company, calculated on the date the option is granted. The aggregate number of options granted to any one Consultant in a 12-month period must not exceed 2% of the issued and outstanding Common Shares of the Company, calculated at the date the option is granted. The aggregate number of options granted to all persons retained to provide investor relations services to the Company (including Consultants and Employees or directors or officers whose role and duties primarily consist of providing investor relations services) must not exceed 2% of the issued and outstanding Common Shares of the Company in any 12-month period, calculated at the date an option is granted to any such person. Disinterested shareholder approval was required for any grant of options which would result in the number of options granted to Insiders (as defined in the *Securities Act* (British Columbia)) as a group at any point in time or within a 12 month period exceeding 10% of the issued and outstanding Common Shares of the Company.

Exercise Price. The exercise price of options granted under the 2022 Plan was determined by the Board, in accordance with the policies of the TSX Venture Exchange. The exercise price of 2022 Options granted to Insiders may not be decreased without disinterested Shareholder approval at the time of the proposed amendment.

Term of Options. Subject to the termination and change of control provisions noted below, the term of any 2022 Options were determined by the Board and may not exceed ten (10) years from the date of grant. Disinterested Shareholder approval will be required for any extension to 2022 Options granted to individuals that are Insiders at the time of the proposed amendment.

Vesting. All 2022 Options are subject to such vesting requirements as may be prescribed by the policies of the TSX Venture Exchange, if applicable, or as may be imposed by the Board. 2022 Options issued to persons retained to provide investor relations activities must vest in stages over 12 months with no more than one-quarter of the options vesting in any three month period. In the event of a Change of Control, as defined in the 2022 Plan, all unvested 2022 Options will vest immediately.

Dividend entitlement. The 2022 Plan does not include any dividend entitlement to participants. If participants were entitled to receive options in lieu of dividends declared by the Company, and if the Company did not have sufficient unallocated options available to satisfy the obligation, then the Company may settle those entitlements with cash.

Termination. Any 2022 Options granted pursuant to the 2022 Plan will terminate upon the earliest of:

- (a) the end of the term of the 2022 Option;
- (b) on the Cessation Date, if the Cessation Date is as a result of dismissal for cause;
- (c) one year from the date of death or disability, if the Cessation Date is as a result of death or disability;

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- (d) 90 days from the Cessation Date, if the Cessation Date is as a result of a reason other than death, disability or cause; or
- (e) on such other date as fixed by the Board, provided that the date is no more than one year from the Cessation Date, if the Cessation Date is as a result of a reason other than death, disability or cause.

Exercise of 2022 Options. The exercise price of an option must be paid in cash, other than as described below as determined by the Board:

- (a) Cashless Exercise (as defined under the heading "2023 Stock Option Plan" above); or
- (b) Net Exercise (as defined under the heading "2023 Stock Option Plan" above).

In the event of a Cashless Exercise or Net Exercise, the number of 2022 Options exercised, surrendered or converted, and not the number of Common Shares actually issued by the Company, must be included in calculating the limits set forth in Section 5(a) and Sections 6(f)(i)-(iii) of the 2022 Plan.

The 2022 Plan also contains provisions permitting the Company to issue 2022 Options that qualify as "Incentive Stock Options" under Section 422 of the U.S. Internal Revenue Code of 1986, as amended.

Legacy Compensation Plan

Prior to the completion of the Company's Business Combination, the Company's subsidiary, Alpha Canada, issued performance shares to certain officers and employees of Alpha Canada in lieu of salaries, with vesting subject to performance milestones, pursuant to Alpha Canada's security compensation plan (the "**Legacy Compensation Plan**"). Upon completion of the Business Combination each performance share of Alpha Canada issued pursuant to the Legacy Compensation Plan was assumed by the Company and issued as a performance share of the Company (the "**Performance Shares**") with the same exercise price and term to expiry as the Alpha Canada performance shares so assumed.

On September 2, 2020, Alpha Canada declared the Legacy Compensation Plan closed to new grants. The Performance Shares continue to be governed by the Legacy Compensation Plan, including any vesting terms of the Performance Shares.

The following is a summary of the material terms of the Legacy Compensation Plan and the vesting provisions of the Performance Shares:

Administration. The Legacy Compensation Plan is administered by the board of directors of Alpha Canada, who, subject to the provisions of the Legacy Compensation Plan, may establish from time to time such rules and regulations, make such determinations and to take such steps in connection with the Legacy Compensation Plan as in the opinion of the board of directors of Alpha Canada are necessary or desirable for the proper administration of the Legacy Compensation Plan. No further grants may be made pursuant to the Legacy Compensation Plan.

Transferability. The Performance Shares are non-assignable and non-transferable.

Termination. Each Performance Share granted pursuant to the Legacy Compensation Plan will expire automatically on the earlier of:

- (a) the date on which such Performance Share is exercised;
- (b) the expiry date of such Performance Share as determined by the board of directors;
- (c) subject to sub-paragraph (f), after one year, or such longer period as the board of directors of Alpha Canada may determine from time to time, from the date on which the recipient of the Performance Share is no longer a director of Alpha Canada or an affiliate of Alpha Canada;

- (d) the date not less than 90 days nor more than one year, as is determined by the board of directors of Alpha Canada at the time the Performance Share is granted, from the date of retirement or termination of employment, other than for just cause, of a holder who is an employee, officer or consultant of Alpha Canada or an affiliate of Alpha Canada, and provided further that the agreement respecting such Performance Share:
 - (i) may permit the holder to apply to the board of directors of Alpha Canada, at any time during the term of the Performance Share and prior to expiry, to extend the expiry date up to but not beyond one year following the date of retirement or termination; and
 - (ii) may further provide for a longer term as determined by the board of directors of Alpha Canada at the time of the grant, where the retirement or termination occurs within such period of time following a change of control as is determined by the board of directors of Alpha Canada in each case, provided that such change of control period shall not extend beyond one year following the date of retirement or termination;
- (e) where the holder's position as an employee, officer, consultant or director of Alpha Canada or an affiliate of Alpha Canada is removed or terminated for just cause, the date of such termination for just cause; or
- (f) where the holder ceases to be an employee, officer, consultant or director of Alpha Canada by reason of the death or disability of such holder, one year following the date of the death or the date of termination by reason of disability of such holder.

Vesting. An aggregate of 21,000 Performance Shares remain subject to vesting upon the following criteria having been met:

1. filing of a second IND with the FDA, or the filing of a second IND -equivalent in a jurisdiction other than the United States; and
2. grant of the first Orphan Drug Designation for ALPHA -602. Orphan Drug Designation is a program that provides orphan status to drugs and biologics which are defined as those intended for the treatment, prevention or diagnosis of a rare disease or condition, which is one that affects less than 200,000 persons in the United States or meets cost recovery provisions of the *Orphan Drug Act* (United States).

Any unvested Performance Shares will vest in the percentages identified in the September 1, 2018, and June 1 2019 Option Grant Scaling formulas in the event the Company experiences a Value Transaction defined as a M&A, financing transaction or alternatively a sale or license of the Company's assets. For example, 100% of the unvested Performance Shares would vest if the actual or implied value of the transaction was \$130 million or greater.

Notwithstanding the above, any unvested Performance Shares will immediately vest in full upon a change of control, being an occurrence when either a person becomes a control person, or a majority of the directors elected at any annual or extraordinary general meeting of shareholders of the Company are not individuals nominated by the Board. In addition, any unvested Performance Shares will immediately vest in full upon termination of the Performance Shares by Alpha Canada without just cause or by the optionee with good reason.

Exchange Controls

There are no governmental laws, decrees or regulations in Canada that restrict the export or import of capital, including foreign exchange controls, or that affect the remittance of dividends, interest or other payments to non-resident holders of the securities of Alpha Cognition, other than Canadian withholding tax. See "Material Canadian Federal Income Tax Considerations" below.

Registration Rights

Private Placement of Units

Pursuant to the Private Placement Subscription Agreement for Securities pursuant to which we sold the Units, we also granted the investors certain piggy-back registration rights, pursuant to which, for a period of one (1) year following the closing the private placement, if the Company's files a registration statement under the Securities Act registering

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a public offering of its common shares (including common shares issuable upon conversion or exercise of other securities), the Company shall promptly give written notice of such proposed registration to all holders of common shares issued as part of the Q2 2023 PP or holders of common shares underlying warrants issued in the Q2 2023 PP and offer to include such common shares in the registration statement for resale by such holders. Each holder has ten (10) days from receipt of such notice to request that the Company include their shares in the registration statement for resale.

Upon receipt of a notice to participate from a holder, the Company agreed to use best efforts to cause all such common shares to be registered in the registration statement, to bring such registration statement effective and to maintain the effectiveness of the registration statement for a period of nine months.

Pursuant to an agreement signed by the selling stockholders in March and April 2024, certain warrant holders agreed to waive their registration rights in relation to the common shares underlying warrants issued in the Q2 2023 PP through March 31, 2025. The Company has agreed that on or prior to March 31, 2025, the Company will file a registration statement registering the resale of the common shares underlying the warrants issued in the Q2 2023 PP.

We have also agreed with Spartan and certain of its affiliates to register certain of the compensation shares granted to them in relation to the Q2 2023 PP. The Company has agreed that on or prior to March 31, 2025, the Company will file a registration statement registering the resale of the remaining compensation shares granted to Spartan and its affiliates in relation to the Q2 2023 PP.

Convertible Note Offering

Pursuant to the Company's placement of Convertible Notes and related warrants, the Company granted registration rights pursuant to a registration rights agreement dated September 24, 2024. Under the registration rights agreement the Company agreed to file within 30 days of September 24, 2024, a registration statement on Form S-3 (or other available form) registering for resale by the purchasers of the Convertible Notes, the common shares issuable upon conversion of the Convertible Notes and upon exercise of the warrants accompanying the Convertible Notes. On October 16, 2024, the Company filed a resale registration statement registering for resale 866,716 common share issuance upon conversion of the Convertible Notes and exercise of the warrants for resale by the selling stockholder named therein. The Company may be required to file a post-effective amendment to the resale registration statement to register additional common shares for resale by the selling stockholders named therein to register: (i) 215,403 common shares underlying warrants issuable to such selling stockholders upon completion of a Qualified Offering (as described above), (ii) additional common shares held by such selling stockholders upon mandatory conversion of the Convertible Notes upon the closing of a Qualified Offering if the offering price per share in the Qualified Offering is less than the conversion price of the Convertible Notes and (iii) additional common shares underlying any warrants issued to the selling stockholders as a result of the mandatory conversion of the Convertible Notes upon the closing of a Qualified Offering.

PLAN OF DISTRIBUTION

We are registering the common shares issuable upon conversion of the notes and exercise of the warrants to permit the resale of these common shares by the holders of the notes and warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the common shares, although we will receive the exercise price of any Warrants not exercised by the selling stockholders on a cashless exercise basis. We will bear all fees and expenses incident to our obligation to register the common shares.

The selling stockholders may sell all or a portion of the common shares held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the common shares are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The common shares may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the Registration Statement is declared effective by the SEC;
- broker-dealers may agree with a selling security holder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell common shares under Rule 144 promulgated under the Securities Act of 1933, as amended, if available, rather than under this prospectus. In addition, the selling stockholders may transfer the common shares by other means not described in this prospectus. If the selling stockholders effect such transactions by selling common shares to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the common shares for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the common shares or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the common shares in the course of hedging in positions they assume. The selling stockholders may also sell common shares short and deliver common shares covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge common shares to broker-dealers that in turn may sell such shares.

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The selling stockholders may pledge or grant a security interest in some or all of the notes, warrants or common shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the common shares from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the common shares in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholders and any broker-dealer participating in the distribution of the common shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the common shares is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of common shares being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the common shares may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the common shares may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the common shares registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the common shares by the selling stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the common shares to engage in market-making activities with respect to the common shares. All of the foregoing may affect the marketability of the common shares and the ability of any person or entity to engage in market-making activities with respect to the common shares.

We will pay all expenses of the registration of the common shares pursuant to the registration rights agreement, estimated to be \$15,000 in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreements or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

DESCRIPTION OF PRIVATE PLACEMENT

The common shares offered for resale consist of (i) 801,413 common shares issued upon conversion of \$4,545,000.00 USD principal amount of convertible notes of the Company at a conversion price of \$5.75 per share and (ii) 646,253 common shares issuable upon exercise of warrants exercisable on or before September 24, 2029 at an exercise price of \$7.19 per share, in each case, issued to our selling stockholders. The selling stockholders acquired their convertible notes and warrants from us in a private placement transaction that closed on September 24, 2024. Under the private placement, the Company issued approximately \$4.545 million of convertible notes and 430,835 warrants to purchase 430,835 common shares. The securities were issued to the selling stockholders pursuant to the exemption under Rule 506(b) of Regulation D based, in part, on the representations made by the investors.

Subsequently, on November 13, 2024, as a result of the completion of the public offering, the Company's convertible notes automatically converted pursuant to their terms into 801,413 common shares at a conversion price of \$5.75 being the public offering price per share in the public offering. Additionally, the Company issued an additional 215,418 warrants exercisable to acquire 215,418 Common Shares at an exercise price of \$7.19 per share and the exercise price of the Company's existing 430,835 warrants issued in connection with the offering of the convertible notes was repriced from \$10.55 per share to \$7.19 per share.

SELLING STOCKHOLDERS

The common shares being offered by the selling stockholders are those issued to the selling stockholders upon conversion of the convertible notes and issuable to the selling stockholders upon exercise of the warrants. For additional information regarding the issuance and conversion of the notes and the issuance of the warrants, see "Private Placement" above. We are registering the common shares in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the notes, conversion of the notes into common shares and the ownership of the warrants issued pursuant to the Securities Purchase Agreement, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder) of the common shares held by each of the selling stockholders. The second column lists the number of common shares beneficially owned by the selling stockholders, based on their respective ownership of common shares and warrants, as of December 31, 2024, assuming exercise of the warrants held by each such selling stockholder on that date but taking account of any limitations on exercise set forth therein.

The third column lists the common shares being offered by this prospectus by the selling stockholders and does not take in account any limitations on exercise of the warrants set forth therein.

In accordance with the terms of a registration rights agreement with the holders of the notes and the warrants, this prospectus generally covers the resale of the sum of (i) the number of common shares issued pursuant to the conversion of the Notes, including payment of interest on the notes through the date of conversion, and (ii) the maximum number of common shares issued or issuable upon exercise of the warrants, determined as if the outstanding warrants were exercised in full (without regard to any limitations on exercise contained therein solely for the purpose of such calculation) at the exercise price calculated as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. Because the exercise price of the warrants may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the warrants, a selling stockholder may not exercise the warrants to the extent (but only to the extent) such selling stockholder or any of its affiliates would beneficially own a number of shares of our common stock which would exceed 4.99% of the outstanding shares of the Company. The number of shares in the second column

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reflects these limitations. The selling stockholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.”

Name of Selling Stockholder	Number of Common Shares Owned Prior to Offering ⁽¹⁾	Maximum Number of Common Shares be Sold Pursuant to this Prospectus ⁽¹⁾	Number of Common Shares Owned After the Offering ⁽¹⁾	Percentage of Common Shares Owned After the Offering ⁽²⁾
Kestrel Flight Fund LLC ⁽³⁾	79,630	79,630	—	0%
Manchester Explorer, L.P. ⁽⁴⁾	828,759	238,889	589,870	3.6%
District 2 Capital Fund LP ⁽⁵⁾	95,555	95,555	—	0%
Bigger Capital Fund, LP ⁽⁶⁾	95,555	95,555	—	0%
Dirk Horn ⁽⁷⁾	47,778	47,778	—	0%
Konrad Habsburg ⁽⁸⁾	7,963	7,963	—	0%
Clive Anthony Caunter ⁽⁹⁾	31,852	31,852	—	0%
Berkeley Greenwood ⁽¹⁰⁾	6,970	6,370	600	*
Maryam Ettehadieh as Trustee of The Leila Ettehadieh Family Trust ⁽¹¹⁾	31,852	31,852	—	0%
Maryam Ettehadieh as Trustee of The Maryam Ettehadieh Family Trust ⁽¹²⁾	31,852	31,852	—	0%
Pepper Grove Holdings Limited ⁽¹³⁾	47,778	47,778	—	0%
Christopher Davis ⁽¹⁴⁾	113,070	47,778	65,292	*
aurence Lytton ⁽¹⁵⁾	63,704	63,704	—	0%
John Nutie Dowdle ⁽¹⁶⁾	532,418	79,630	452,788	2.8%
Cool Blue Capital Management, LLC ⁽¹⁷⁾	138,688	47,778	90,910	*
The Flying S Ranch Trust ⁽¹⁸⁾	138,688	47,778	90,910	*
Dr. Vijay Singh ⁽¹⁹⁾	304,032	95,555	208,477	1.3%
Solas Capital Partners, LP ⁽²⁰⁾	22,901	22,901	—	0%
Solas Capital Partners II, LP ⁽²¹⁾	24,499	24,499	—	0%
Blackwell Partners LLC – Series A ⁽²²⁾	271,118	271,118	—	0%
Mary Carroll ⁽²³⁾	15,926	15,926	—	0%
Chantecler Capital S.A. ⁽²⁴⁾	15,926	15,926	—	0%
TOTAL	2,946,513	1,447,666	1,498,847	—

* Less than 1%

(1) Represents all shares offered by such Selling Stockholder under this prospectus and assumes the Selling Stockholder sells all shares.

(2) Based on 16,019,788 common shares outstanding as of December 31, 2024.

(3) The named entity has its principal place of business at 149 Meadowbrook Rd, Weston, MA 02493 and Albert Hanser III, the managing partner of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 43,478 common shares issued under convertible notes, 23,698 common shares issuable upon exercise of warrants and 604 interest shares and 11,849 additional warrants.

(4) The named entity has its principal place of business at 2 Calle Candina #1701, San Juan, PR 00907 and James Besser, the Managing Member of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 130,435 common shares issued under convertible notes, 71,095 common shares issuable upon exercise of warrants and 1,812 interest shares and 35,547 additional warrants. Beneficial ownership includes 379,343 common shares and 210,527 shares issuable upon exercise of warrants not being offered for sale under this prospectus. Beneficial ownership is subject to a blocker agreement limiting voting and investment control over such shares to 4.999% of the Company's issued and outstanding voting securities at any time, including any common shares acquirable by Manchester Company LLC & Affiliates upon exercise, conversion or exchange of warrants, stock options, convertible notes or preferred stock or other similar securities.

(5) The named entity has its principal place of business 14 Wall St, Huntington, NY 11743 and Michael Bigger, the managing member of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 52,174 common shares issued under convertible notes, 28,438 common shares issuable upon exercise of warrants and 725 interest shares and 14,219 additional warrants.

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- (6) The named entity has its principal place of business at 11700 W Charleston BLVD 170-659, Las Vegas, NV 89135 and Michael Bigger, the managing member of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 52,174 common shares issued under convertible notes, 28,438 common shares issuable upon exercise of warrants and 725 interest shares and 14,219 additional warrants.
- (7) The named individual is resident in Texas and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 26,087 common shares issued under convertible notes, 14,219 common shares issuable upon exercise of warrants and 362 interest shares and 7,110 additional warrants.
- (8) The named individual is resident in the United Kingdom and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 4,348 common shares issued under convertible notes, 2,370 common shares issuable upon exercise of warrants and 60 interest shares and 1,185 additional warrants.
- (9) The named individual is resident in the United Kingdom and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 17,391 common shares issued under convertible notes, 9,479 common shares issuable upon exercise of warrants and 242 interest shares and 4,740 additional warrants.
- (10) The named individual is resident in the United Kingdom and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 3,478 common shares issued under convertible notes, 1,896 common shares issuable upon exercise of warrants and 48 interest shares and 948 additional warrants. Beneficial ownership includes 600 common shares not being offered for sale under this prospectus.
- (11) The named trust has its principal place of business in 65 South Edwardes Square, London W8 6HL, United Kingdom and Maryam Ettehadieh, the trustee of the trust, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 17,391 common shares issued under convertible notes and 9,479 common shares issuable upon exercise of warrants and 242 interest shares and 4,740 additional warrants.
- (12) The named trust has its principal place of business in 65 South Edwardes Square, London W8 6HL, United Kingdom and Maryam Ettehadieh, the trustee of the trust, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 17,391 common shares issued under convertible notes, 9,479 common shares issuable upon exercise of warrants and 242 interest shares and 4,740 additional warrants.
- (13) The named entity has its principal place of business in Wessex House, 2nd Floor, 45 Reid Street, Hamilton HM 12, Bermuda and Simon Ever Jonathan John Haggiag exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 26,087 common shares issued under convertible notes, 14,219 common shares issuable upon exercise of warrants and 362 interest shares and 7,110 additional warrants.
- (14) The named individual is resident in the United Kingdom and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 26,087 common shares issued under convertible notes, 14,219 common shares issuable upon exercise of warrants and 362 interest shares and 7,110 additional warrants. Beneficial ownership includes 65,292 common shares not being offered for sale under this prospectus.
- (15) The named individual is resident in New York and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 34,783 common shares issued under convertible notes, 18,959 common shares issuable upon exercise of warrants and 483 interest shares and 9,479 additional warrants.
- (16) The named individual is resident in Mississippi and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 43,478 common shares issued under convertible notes, 23,698 common shares issuable upon exercise of warrants and 604 interest shares and 11,849 additional warrants. Beneficial ownership includes 230,712 common shares, 36,364 of which are held through Axos Clearing Cust FBO Nutie Dowdle IRA, and 185,712 common shares underlying warrants not being offered for sale under this prospectus.
- (17) The named entity has its principal place of business in 100 S Riverfront Dr. Jenks, OK 74037 and Brent Orr, the managing member of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 26,087 common shares issued under convertible notes, 14,219 common shares issuable upon exercise of warrants and 362 interest shares and 7,110 additional warrants. Beneficial ownership includes 90,910 common shares not being offered for sale under this prospectus jointly held through a joint business venture with Ryan Shay.
- (18) The named trust has its principal place of business in 1210 RS 877 Rd., St. Francis, KS 67756 and Ryan Shay, the trustee of the trust, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 26,087 common shares issued under convertible notes, 14,219 common shares issued upon exercise of warrants and 362 interest shares and 7,110 additional warrants. Beneficial ownership includes 90,910 shares issuable upon exercise of warrants not being offered for sale under this prospectus jointly held through a joint business venture with Brent Orr.
- (19) The named individual is resident in New Jersey and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 52,174 common shares issued under convertible notes, 28,438 common shares issuable upon exercise of warrants and 725 interest shares and 14,219 additional warrants. Beneficial ownership includes 113,330 common shares and 95,148 common shares issuable upon exercise of warrant not being offered for sale under this prospectus.
- (20) The named entity has its principal place of business in 1063 Post Road, 2nd Floor, Darien, CT 06820 and Tucker Golden, the managing member of the general partner of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 12,504 common shares issued under convertible notes, 6,816 common shares issuable upon exercise of warrants and 174 interest shares and 3,408 additional warrants.

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- (21) The named entity has its principal place of business in 1063 Post Road, 2nd Floor, Darien, CT 06820 and Tucker Golden, the managing member of the general partner of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 13,377 common shares issued under convertible notes, 7,291 common shares issuable upon exercise of warrants and 186 interest shares and 3,646 additional warrants.
- (22) The named entity has its principal place of business in 280 S. Magnum Street, Suite 210, Durham, NC 27701 and Neil F. Triplett of the entity, exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 148,032 common shares issued under convertible notes, 80,687 common shares issuable upon exercise of warrants and 2,056 interest shares and 40,343 additional warrants.
- (23) The named individual is resident in Ireland and exercises voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 8,696 common shares issued under convertible notes, 4,740 common shares issuable upon exercise of warrants and 121 interest shares and 2,370 additional warrants.
- (24) The named entity has its principal place of business in 3rd Floor, 62/64 Irish Town, GX11 1AA, Gibraltar and Charles Bottaro and Paul Stych, the directors of the entity, exercise shared voting and dispositive power over the shares being offered under this prospectus. Beneficial ownership includes 8,696 common shares issued under convertible notes, 118,492 common shares issuable upon exercise of warrants and 121 interest shares and 2,370 additional warrants.

MATERIAL CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following summarizes the principal Canadian federal income tax consequences applicable to the holding and disposition of common shares in the capital of the Company by a United States resident, and who holds common shares solely as capital property, referred to in this summary as a "U.S. Resident". This summary is based on the current provisions of the *Income Tax Act* (Canada) (the "Tax Act"), the regulations thereunder, all amendments thereto publicly proposed by the government of Canada, the published administrative practices of Revenue Canada, Customs, Excise and Taxation, and the current provisions of the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the "Canada-U.S. Tax Convention"). Except as otherwise expressly provided, this summary does not take into account any provincial, territorial or foreign (including without limitation, any United States) tax law or treaty. It has been assumed that all currently proposed amendments will be enacted substantially as proposed and that there is no other relevant change in any governing law or practice, although no assurance can be given in these respects.

Each U.S. Resident is advised to obtain tax and legal advice applicable to such U.S. Resident's particular circumstances.

Every U.S. Resident is liable to pay a Canadian withholding tax on every dividend that is or is deemed to be paid or credited to the U.S. Resident on the U.S. Resident's common shares. The statutory rate of withholding tax is 25% of the gross amount of the dividend paid. The Canada-U.S. Tax Convention reduces the statutory rate with respect to dividends paid to a U.S. Resident, if that U.S. Resident is eligible for benefits under the Canada-U.S. Tax Convention. Where applicable, the general rate of withholding tax under the Canada-U.S. Tax Convention is 15% of the gross amount of the dividend, but if the U.S. Resident is a company that owns at least 10% of the voting stock of the Company and beneficially owns the dividend, the rate of withholding tax is 5% for dividends paid or credited to such corporate U.S. Resident. The Company is required to withhold the applicable tax from the dividend payable to the U.S. Resident, and to remit the tax to the Receiver General of Canada for the account of the U. S. Holder.

A non-resident Holder generally will not be subject to tax under the Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a common share unless the common share constitutes "taxable Canadian property" of the U.S. Resident for purposes of the Tax Act and the gain is not exempt from tax pursuant to the terms of the Canada-U.S. Tax Convention.

Provided that the common shares are listed on a "designated stock exchange" for purposes of the Tax Act (which currently includes the TSX) at the time of disposition, the common shares generally will not constitute "taxable Canadian property" of a U.S. Resident, unless at any time during the 60 month period immediately preceding the disposition: (i) the U.S. Resident, persons with whom the U.S. Resident did not deal at "arm's length" for the purposes of the Tax Act, or the U.S. Resident together with all such persons, owned 25% or more of the issued shares of any class of the Company and; (ii) more than 50% of the fair market value of the common shares was derived directly or indirectly from one or any combination of real or immovable property situated in Canada, "Canadian resource properties" (as defined in the Tax Act), "timber resource properties" (as defined in the Tax Act), or options in respect of, or interests in, or for civil law rights in, such property whether or not such property exists.

Certain withholding and reporting obligations will also generally apply in connection with the disposition of common shares by a U.S. Resident that constitutes, or are deemed to constitute, "taxable Canadian property" (and are not "treaty-protected property" as defined in the Tax Act).

U.S. Residents who may hold common shares as "taxable Canadian property" should consult their own tax advisors.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of material U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of common shares of the Company.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from and relating to the acquisition, ownership, and disposition of common shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including specific tax consequences to a U.S. Holder under an applicable income tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any U.S. Holder. This summary does not address the U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of common shares. In addition, except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal net investment income, U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of common shares.

No legal opinion from U.S. legal counsel or ruling from the Internal Revenue Service (the "IRS") has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the conclusions described in this summary.

Scope of this Summary

Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations (whether final, temporary, or proposed), published rulings of the IRS, published administrative positions of the IRS, the Canada-U.S. Tax Convention, and U.S. court decisions that are applicable and, in each case, as in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis which could affect the U.S. federal income tax considerations described in this summary. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

U.S. Holders

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of common shares that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the U.S.;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) organized under the laws of the U.S., any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the U.S. and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Non-U.S. Holders

For purposes of this summary, a "non-U.S. Holder" is a beneficial owner of common shares that is not a U.S. Holder or is a partnership. This summary does not address the U.S. federal income tax consequences to non-U.S. Holders arising from and relating to the acquisition, ownership, and disposition of common shares. Accordingly, a non-U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences (including the potential application of and operation of any income tax treaties) relating to the acquisition, ownership, and disposition of common shares.

U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders that: (a) are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) have a "functional currency" other than the U.S. dollar; (e) own common shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (f) acquired common shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold common shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are subject to special tax accounting rules; (i) own, have owned or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or the value of the outstanding shares of the Company; (j) are U.S. expatriates or former long-term residents of the U.S.; or (k) are subject to taxing jurisdictions other than, or in addition to, the U.S. U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders described immediately above, should consult their own tax advisor regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of common shares.

If an entity or arrangement that is classified as a partnership (or other "pass-through" entity) for U.S. federal income tax purposes holds common shares, the U.S. federal income tax consequences to such partnership and the partners (or owners) of such partnership generally will depend on the activities of the partnership and the status of such partners (or owners). This summary does not address the tax consequences to any such partnership or partner (or owner). Partners (or owners) of entities or arrangements that are classified as partnerships or as "pass-through" entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership, and disposition of common shares.

Passive Foreign Investment Company Rules

If the Company were to constitute a "passive foreign investment company" under the meaning of Section 1297 of the Code, or a "PFIC", as defined below, for any year during a U.S. Holder's holding period, then certain different and potentially adverse rules will affect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership and disposition of common shares. In addition, in any year in which the Company is classified as a PFIC, such holder will be required to file an annual report with the IRS containing such information as Treasury Regulations or other IRS guidance may require. A failure to satisfy such reporting requirements may result in an extension of the time period during which the IRS can assess a tax. U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file an IRS Form 8621.

PFIC Status of the Company

The Company generally will be a PFIC if, for a tax year, (a) 75% or more of the gross income of the Company is passive income (the "income test"), or (b) 50% or more of the value of the Company's assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets (the "asset test"). "Gross income" generally includes all sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and "passive income" generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions.

Active business gains arising from the sale of commodities generally are excluded from passive income if substantially all (85% or more) of a foreign corporation's commodities are stock in trade of such foreign corporation or other property of a kind which would properly be included in inventory of such foreign corporation, or property held by such foreign corporation primarily for sale to customers in the ordinary course of business and certain other requirements are satisfied.

For purposes of the PFIC income test and asset test described above, if the Company owns, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, the Company will be treated as if it (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and asset test described above, and assuming certain other requirements are met, "passive income" does not include certain interest, dividends, rents, or royalties that are received or accrued by the Company from certain "related persons" (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income.

In addition, under certain attribution rules, if the Company is a PFIC, U.S. Holders will be deemed to own their proportionate share of the stock of any subsidiary of the Company that is also a PFIC, or a "Subsidiary PFIC", and will be subject to U.S. federal income tax on their proportionate share of, (a) a distribution on the stock of a Subsidiary PFIC, and (b) a disposition or deemed disposition of the stock of a Subsidiary PFIC, both as if such U.S. Holders directly held the shares of such Subsidiary PFIC.

The Company does believe that it was classified as a PFIC during its most recently ended tax year, and will likely be a PFIC in future tax years. No opinion of legal counsel or ruling from the IRS concerning the status of the Company as a PFIC has been obtained or is currently planned to be requested. The determination of whether any corporation was, or will be, a PFIC for a tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether any corporation will be a PFIC for any tax year depends on the assets and income of such corporation over the course of each such tax year and, as a result, cannot be predicted with certainty as of the date of this document. Accordingly, there can be no assurance that the IRS will not challenge any determination made by the Company (or a Subsidiary PFIC) concerning its PFIC status. Each U.S. Holder should consult its own tax advisor regarding the PFIC status of the Company and any Subsidiary PFIC.

Default PFIC Rules Under Section 1291 of the Code

If the Company is a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the acquisition, ownership, and disposition of common shares will depend on whether such U.S. Holder makes an election to treat the Company and each Subsidiary PFIC, if any, as a "qualified electing fund", or "QEF", under Section 1295 of the Code, or a "QEF Election", or a mark-to-market election under Section 1296 of the Code, or a "Mark-to-Market Election". A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election will be referred to in this summary as a "Non-Electing U.S. Holder".

A Non-Electing U.S. Holder will be subject to the rules of Section 1291 of the Code with respect to, (a) any gain recognized on the sale or other taxable disposition of common shares, and (b) any excess distribution received on our common shares. A distribution generally will be an "excess distribution" to the extent that such distribution (together with all other distributions received in the current tax year) exceeds 125% of the average distributions received during the three preceding tax years (or during a U.S. Holder's holding period for our common shares, if shorter).

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of common shares (including an indirect disposition of the stock of any Subsidiary PFIC), and any "excess distribution" received on common shares, must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the respective common shares. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years before the entity became a PFIC, if any, would be taxed as ordinary income. The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax rate applicable to ordinary income in each such year, and an interest charge would be imposed on the tax liability for each such year, calculated as if such tax liability had been due in each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as "personal interest", which is not deductible.

If the Company is a PFIC for any tax year during which a Non-Electing U.S. Holder holds common shares, the Company will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether the Company ceases to be a PFIC in one or more subsequent tax years. A Non-Electing U.S. Holder may terminate this deemed PFIC status by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code discussed above), but not loss, as if such common shares were sold on the last day of the last tax year for which the Company was a PFIC.

QEF Election

A U.S. Holder that makes a timely and effective QEF Election for the first tax year in which its holding period of its common shares begins generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to its common shares. A U.S. Holder that makes a timely and effective QEF Election will be subject to U.S. federal income tax on such U.S. Holder's pro rata share of, (a) the net capital gain of the Company, which will be taxed as long-term capital gain to such U.S. Holder, and (b) the ordinary earnings of the Company, which will be taxed as ordinary income to such U.S. Holder. Generally, "net capital gain" is the excess of (i) net long-term capital gain over (ii) net short-term capital loss, and "ordinary earnings" are the excess of (i) "earnings and profits" over (ii) net capital gain. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each tax year in which the Company is a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by the Company. However, for any tax year in which the Company is a PFIC and has no net income or gain, U.S. Holders that have made a QEF Election would not have any income inclusions as a result of the QEF Election. If a U.S. Holder that made a QEF Election has an income inclusion, such U.S. Holder may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as "personal interest", which is not deductible.

A U.S. Holder that makes a timely and effective QEF Election with respect to the Company generally, (a) may receive a tax-free distribution from the Company to the extent that such distribution represents "earnings and profits" of the Company that were previously included in income by the U.S. Holder because of such QEF Election, and (b) will adjust such U.S. Holder's tax basis in our common shares to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, a U.S. Holder that makes a QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of common shares.

The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as "timely" if such QEF Election is made for the first year in the U.S. Holder's holding period for our common shares in which the Company was a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year. If a U.S. Holder does not make a timely and effective QEF Election for the first year in the U.S. Holder's holding period for our common shares, the U.S. Holder may still be able to make a timely and effective QEF Election in a subsequent year if such U.S. Holder also makes a "purging" election to recognize gain (which will be taxed under the rules of Section 1291 of the Code discussed above) as if such common shares were sold for their fair market value on the day the QEF Election is effective.

A QEF Election will apply to the tax year for which such QEF Election is timely made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If a U.S. Holder makes a QEF Election and, in a subsequent tax year, the Company ceases to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which the Company is not a PFIC. Accordingly, if the Company becomes a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during any subsequent tax year in which the Company qualifies as a PFIC.

U.S. Holders should be aware that there can be no assurance that the Company will satisfy record keeping requirements that apply to a QEF, or that the Company will supply U.S. Holders with information that such U.S. Holders require to report under the QEF rules, in the event that the Company is a PFIC and a U.S. Holder wishes to make a QEF Election. Thus, U.S. Holders may not be able to make a QEF Election with respect to their common shares. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a QEF Election.

A U.S. Holder makes a QEF Election by attaching a completed IRS Form 8621, including a PFIC Annual Information Statement, to a timely filed U.S. federal income tax return. However, if the Company does not provide the required information with regard to the Company or any of its Subsidiary PFICs, U.S. Holders will not be able to make a QEF Election for such entity and will continue to be subject to the rules of Section 1291 of the Code discussed above that apply to Non-Electing U.S. Holders with respect to the taxation of gains and excess distributions.

Mark-to-Market Election

A U.S. Holder may make a Mark -to-Market Election only if the common shares are marketable stock. Our common shares generally will be "marketable stock" if our common shares are regularly traded on, (a) a national securities exchange that is registered with the SEC, (b) the national market system established pursuant to section 11A of the U.S. Exchange Act, or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that, (i) such foreign exchange has trading volume, listing, financial disclosure, and meets other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced, and (ii) the rules of such foreign exchange ensure active trading of listed stocks. If our common shares are traded on such a qualified exchange or other market, our common shares generally will be "regularly traded" for any calendar year during which our common shares are traded, other than in de minimis quantities, on at least 15 days during each calendar quarter.

A U.S. Holder that makes a Mark -to-Market Election with respect to its common shares generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to such common shares. However, if a U.S. Holder does not make a Mark-to-Market Election beginning in the first tax year of such U.S. Holder's holding period for our common shares or such U.S. Holder has not made a timely QEF Election, the rules of Section 1291 of the Code discussed above will apply to certain dispositions of, and distributions on, our common shares.

A U.S. Holder that makes a Mark -to-Market Election will include in ordinary income, for each tax year in which the Company is a PFIC, an amount equal to the excess, if any, of (i) the fair market value of our common shares, as of the close of such tax year over (ii) such U.S. Holder's tax basis in such common shares. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the excess, if any, of (i) such U.S. Holder's adjusted tax basis in our common shares, over (ii) the fair market value of such common shares (but only to the extent of the net amount of previously included income as a result of the Mark-to-Market Election for prior tax years).

A U.S. Holder that makes a Mark -to-Market Election generally also will adjust such U.S. Holder's tax basis in our common shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of common shares, a U.S. Holder that makes a Mark-to-Market Election will recognize ordinary income or ordinary loss (not to exceed the excess, if any, of (i) the amount included in ordinary income because of such Mark-to-Market Election for prior tax years over (ii) the amount allowed as a deduction because of such Mark-to-Market Election for prior tax years).

A U.S. Holder makes a Mark -to-Market Election by attaching a completed IRS Form 8621 to a timely filed U.S. federal income tax return. A Mark-to-Market Election applies to the tax year in which such Mark-to-Market Election is made and to each subsequent tax year, unless our common shares cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark -to-Market Election with respect to our common shares, no such election may be made with respect to the stock of any Subsidiary PFIC that a U.S. Holder is treated as owning, because such stock is not marketable. Hence, the Mark-to-Market Election will not be effective to eliminate the application of the default rules of Section 1291 of the Code described above with respect to deemed dispositions of Subsidiary PFIC stock or distributions from a Subsidiary PFIC.

Other PFIC Rules

Under Section 1291(f) of the Code, the IRS has issued proposed Treasury Regulations that, subject to certain exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of common shares that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which common shares are transferred.

Certain additional adverse rules will apply with respect to a U.S. Holder if the Company is a PFIC, regardless of whether such U.S. Holder makes a QEF Election. For example under Section 1298(b) (6) of the Code, a U.S. Holder that uses common shares as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such common shares.

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Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with their own tax advisor regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisor regarding the PFIC rules and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares.

Ownership and Disposition of Common Shares

The following discussion is subject to the rules described above under the heading "*Passive Foreign Investment Company Rules*".

Distributions on Common Shares

Subject to the PFIC rules discussed above, a U.S. Holder that receives a distribution, including a constructive distribution, with respect to our common shares will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of the current or accumulated "earnings and profits" of the Company, as computed for U.S. federal income tax purposes. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates if the Company is a PFIC. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in our common shares and thereafter as gain from the sale or exchange of such common shares. See the section entitled "Sale or Other Taxable Disposition of common shares" below. However, the Company may not maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder should therefore assume that any distribution by the Company with respect to our common shares will constitute ordinary dividend income. Dividends received on common shares generally will not be eligible for the "dividends received deduction". Subject to applicable limitations and provided the Company is eligible for the benefits of the Canada-U.S. Tax Convention or the common shares are readily tradable on a United States securities market, dividends paid by the Company to non-corporate U.S. Holders generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that the Company not be classified as a PFIC in the tax year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of Common Shares

Subject to the PFIC rules discussed above, upon the sale or other taxable disposition of common shares, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between the amount of cash plus the fair market value of any property received and such U.S. Holder's tax basis in such common shares sold or otherwise disposed of. Subject to the PFIC rules discussed above, gain or loss recognized on such sale or other disposition generally will be long-term capital gain or loss if, at the time of the sale or other disposition, our common shares have been held for more than one year.

Preferential tax rates apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gain of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

Additional Considerations

Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange or other taxable disposition of common shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). A U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who converts or otherwise disposes of the foreign currency after the date of receipt

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may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Different rules apply to U.S. Holders who use the accrual method with respect to foreign currency. Each U.S. Holder should consult its own U.S. tax advisors regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on our common shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income that is subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

The foreign tax credit rules are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, each U.S. Holder should consult its own U.S. tax advisor regarding the foreign tax credit rules.

Backup Withholding and Information Reporting

Under U.S. federal income tax law and Treasury Regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on individuals who are U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a foreign entity. U.S. Holders may be subject to these reporting requirements unless their common shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult with their own tax advisors regarding the requirements of filing information returns, including the requirement to file an IRS Form 8938.

Payments made within the U.S. or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of, common shares will generally be subject to information reporting and backup withholding tax, at the rate of 24%, if a U.S. Holder, (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons generally are excluded from these information reporting and backup withholding rules. Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner.

The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisors regarding the information reporting and backup withholding rules.

LEGAL MATTERS

The validity of the issuance of the common shares offered by this prospectus will be passed upon for us by Morton Law LLP.

EXPERTS

The financial statements of Alpha Cognition Inc. for the years ended December 31, 2023, and 2022 appearing in this prospectus have been audited by Manning Elliott LLP, independent registered public accounting firm, as set forth in their report included herein.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the Commission under the Securities Act with respect to the common shares offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and our common shares, please see the registration statement and the exhibits and schedules filed with the registration statement. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contracts or other documents filed as an exhibit to the registration statement. The registration statement, including its exhibits and schedules, may be inspected without charge at www.sec.gov, the Commission's Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission.

We expect to make our periodic reports and other information filed with or furnished to the SEC available, free of charge, through our website at www.alphacognition.com as soon as reasonably practicable after those reports and other information are filed with or furnished to the SEC. Upon effectiveness of the Registration Statement on Form S-1 of which this prospectus form a part, we will become subject to the information and periodic reporting requirements of the Exchange Act, and, in accordance therewith, will file periodic reports, proxy statements and other information with the Commission. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and on the Commission's website referred to above. The information contained on, or that can be accessed through, our website, is not part of, and is not incorporated into, this prospectus. All website addresses in this prospectus are intended to be inactive textual references only.

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ALPHA COGNITION INC.

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ALPHA COGNITION INC.
UNAUDITED CONDENSED INTERIM CONSOLIDATED BALANCE SHEETS

	(Unaudited) September 30, 2024	December 31, 2023
ASSETS		
Current assets		
Cash and cash equivalents	\$ 3,666,389	\$ 1,404,160
Restricted cash	107,010	90,413
Prepaid expenses and other current assets	740,933	366,316
Related party note receivable, net	—	57,550
Total current assets	4,514,332	1,918,439
Other assets	80,000	—
Equipment, net	1,011	1,721
Intangible assets, net	432,729	532,010
Total assets	\$ 5,028,072	\$ 2,452,170
LIABILITIES AND STOCKHOLDERS' DEFICIENCY		
Current liabilities		
Accounts payable and accrued liabilities	\$ 1,743,596	\$ 1,394,117
Current portion of promissory note – related party	1,211,463	1,211,463
Deferred income	50,777	10,413
Total current liabilities	3,005,836	2,615,993
Convertible debentures, net	1,002,874	—
Conversion feature liability	1,415,265	—
Warrant liabilities	2,449,478	4,455,747
Other long-term liabilities	74,250	84,125
Total liabilities	7,947,703	7,155,865
Stockholders' deficiency		
Common shares, no par value, unlimited shares authorized, 6,034,216 and 4,728,355 shares issued and outstanding as of September 30, 2024, and December 31, 2023	49,149,464	39,760,287
Class B preferred shares, no par value, unlimited shares authorized, 316,655 shares issued and outstanding as of September 30, 2024, and December 31, 2023	62	62
Additional paid-in capital	18,661,446	17,288,430
Accumulated other comprehensive loss	(104,301)	(104,301)
Accumulated deficit	(70,626,302)	(61,648,173)
Total stockholders' deficiency	(2,919,631)	(4,703,695)
Total liabilities and stockholders' deficiency	\$ 5,028,072	\$ 2,452,170

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

ALPHA COGNITION INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF OPERATIONS AND
COMPREHENSIVE
LOSS (UNAUDITED)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2024	2023	2024	2023
Operating expenses				
Research and development	\$ 996,029	\$ 1,429,716	\$ 2,879,945	\$ 3,773,880
General and administrative expenses	1,491,755	1,336,197	6,440,568	3,744,162
Total operating expenses	<u>2,487,784</u>	<u>2,765,913</u>	<u>9,320,513</u>	<u>7,518,042</u>
Net operating loss	<u>(2,487,784)</u>	<u>(2,765,913)</u>	<u>(9,320,513)</u>	<u>(7,518,042)</u>
Other income (expenses)				
Foreign exchange (loss) gain	(8,217)	(13,301)	(29,708)	(3,584)
Interest income	1,916	2,712	16,146	5,059
Grant income	61,122	32,757	333,462	32,757
Interest expense	(18,679)	(9,607)	(42,153)	(14,017)
Impairment of intangible assets	—	—	(39,166)	—
Change in fair value of conversion feature liability	174,930	—	174,930	—
Change in fair value of warrant liabilities	416,806	(515,771)	(16,127)	(532,429)
Provision for loan losses	—	—	(55,000)	—
Total other income (expenses)	<u>627,878</u>	<u>(503,210)</u>	<u>342,384</u>	<u>(512,214)</u>
Net loss	<u>(1,859,906)</u>	<u>(3,269,123)</u>	<u>(8,978,129)</u>	<u>(8,030,256)</u>
Other comprehensive loss (income)				
Currency translation adjustment	—	(11,232)	—	(19,573)
Comprehensive loss	<u>\$ (1,859,906)</u>	<u>\$ (3,280,355)</u>	<u>\$ (8,978,129)</u>	<u>\$ (8,049,829)</u>
Net loss per share, basic and diluted	<u>\$ (0.31)</u>	<u>\$ (0.84)</u>	<u>\$ (1.51)</u>	<u>\$ (2.23)</u>
Weighted-average shares used to compute net loss per share, basic and diluted	<u>6,030,259</u>	<u>3,880,433</u>	<u>5,928,460</u>	<u>3,599,266</u>

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

ALPHA COGNITION INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(DEFICIENCY) (UNAUDITED)
For the Three and Nine Months Ended September 30, 2024 and 2023

For the three months ended September 30, 2024

	Common Shares		Class A Restricted Shares		Preferred Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance, June 30, 2024	6,020,216	\$49,009,464	—	\$ —	316,655	\$ 62	\$18,467,705	\$ (104,301)	\$(70,626,302)	\$(1,393,466)
Warrants exercised	14,000	140,000	—	—	—	—	—	—	—	140,000
Share-based compensation	—	—	—	—	—	—	193,741	—	—	193,741
Net loss	—	—	—	—	—	—	—	—	(1,859,906)	(1,859,906)
Balance, September 30, 2024	6,034,216	\$49,149,464	—	\$ —	316,655	\$ 62	\$18,661,446	\$ (104,301)	\$(70,626,302)	\$(2,919,631)

For the three months ended September 30, 2023

	Common Shares		Class A Restricted Shares		Preferred Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance, June 30, 2023	3,518,025	\$33,817,610	280,000	\$ 3,103,620	316,655	\$ 62	\$14,944,336	\$ (93,069)	\$(52,351,985)	\$(579,426)
Units issued for cash	244,562	1,345,093	—	—	—	—	—	—	—	1,345,093
Share issuance costs	—	(230,342)	—	—	—	—	44,292	—	—	(186,050)
Conversion of restricted shares to common shares	280,000	3,103,620	(280,000)	(3,103,620)	—	—	—	—	—	—
Expired share options	—	—	—	—	—	—	(111,987)	—	111,987	—
Effect on change in functional currency	—	(4,541,545)	—	—	—	—	351,969	—	—	(4,189,576)
Share-based compensation	—	—	—	—	—	—	697,073	—	—	697,073
Foreign exchange on translation	—	—	—	—	—	—	—	(11,232)	—	(11,232)
Net loss	—	—	—	—	—	—	—	—	(3,269,123)	(3,269,123)
Balance, September 30, 2023	4,042,587	\$33,494,436	—	\$ —	316,655	\$ 62	\$15,925,683	\$ (104,301)	\$(55,509,121)	\$(6,193,241)

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

ALPHA COGNITION INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(DEFICIENCY) (UNAUDITED)
For the Three and Nine Months Ended September 30, 2024 and 2023

For the nine months ended September 30, 2024

	Common Shares		Class A Restricted Shares		Preferred Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance, December 31, 2023	4,728,355	\$39,760,287	—	\$ —	316,655	\$ 62	\$17,288,430	\$ (104,301)	\$(61,648,173)	\$(4,703,695)
Units issued for cash	678,630	3,732,469	—	—	—	—	—	—	—	3,732,469
Shares issued for services	413,445	2,273,949	—	—	—	—	—	—	—	2,273,949
Share issuance costs	168,886	(987,998)	—	—	—	—	582,245	—	—	(405,753)
Options exercised	14,900	128,182	—	—	—	—	(126,382)	—	—	1,800
Warrants exercised	30,000	300,000	—	—	—	—	—	—	—	300,000
Share-based compensation	—	—	—	—	—	—	917,153	—	—	917,153
Reallocation of derivative liability on re-pricing of warrants from CAD to USD exercise price	—	3,942,575	—	—	—	—	—	—	—	3,942,575
Net loss	—	—	—	—	—	—	—	—	(8,978,129)	(8,978,129)
Balance, September 30, 2024	6,034,216	\$49,149,464	—	\$ —	316,655	\$ 62	\$18,661,446	\$ (104,301)	\$(70,626,302)	\$(2,919,631)

For the nine months ended September 30, 2023

	Common Shares		Class A Restricted Shares		Preferred Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance, December 31, 2022	2,440,936	\$27,956,155	280,000	\$ 3,103,620	316,655	\$ 62	\$15,589,229	\$ (84,728)	\$(47,884,515)	\$(1,320,177)
Units issued for cash	1,194,468	5,851,148	—	—	—	—	—	—	—	5,851,148
Share issuance costs	85,183	(512,046)	—	—	—	—	117,310	—	—	(394,736)
Conversion of restricted shares to common shares	280,000	3,103,620	(280,000)	(3,103,620)	—	—	—	—	—	—
Options exercised	42,000	687,132	—	—	—	—	(676,632)	—	—	10,500
Expired share options	—	—	—	—	—	—	(405,650)	—	405,650	—
Expired warrants	—	949,972	—	—	—	—	(949,972)	—	—	—
Share-based compensation	—	—	—	—	—	—	1,899,429	—	—	1,899,429
Effect on change in functional currency	—	(4,541,545)	—	—	—	—	351,969	—	—	(4,189,576)
Foreign exchange on translation	—	—	—	—	—	—	—	(19,573)	—	(19,573)
Net loss	—	—	—	—	—	—	—	—	(8,030,256)	(8,030,256)
Balance, September 30, 2023	4,042,587	\$33,494,436	—	\$ —	316,655	\$ 62	\$15,925,683	\$ (104,301)	\$(55,509,121)	\$(6,193,241)

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

ALPHA COGNITION INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	For the nine months ended September 30,	
	2024	2023
Cash flows used in operating activities		
Net loss	\$ (8,978,129)	\$ (8,030,256)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	60,825	63,359
Accretion of discount on convertible debentures	64,101	—
Accrued expenditures for government grant	23,767	—
Accrued interest	—	5,476
Accrue interest expense, convertible debentures	8,716	—
Accrued interest income, related party	2,550	(886)
Change in fair value of conversion feature liability	(174,930)	—
Change in fair value of warrant liabilities	16,127	532,429
Change in fair value of bonus rights liability	(9,875)	5,246
Debt issuance costs	354,791	—
Provision for loan losses	55,000	—
Impairment of intangible assets	39,166	—
Share-based compensation	917,153	1,899,429
Shares issued for services	2,273,949	—
Changes in non-cash operating working capital items:		
Prepaid expenses and other current assets	(454,617)	68,761
Accounts payable and accrued liabilities	349,478	(1,312,729)
Net cash used in operating activities	(5,451,927)	(6,769,171)
Cash flows provided by (used in) investing activities	—	—
Net cash provided by (used in) investing activities	—	—
Cash flows provided by financing activities		
Units issued for cash	3,732,469	5,851,148
Exercise of options	1,800	10,500
Exercise of warrants	300,000	—
Proceeds received from restricted government grant	373,825	201,500
Amounts paid from restricted government grant funds	(357,228)	—
Issuance of related party note	—	(55,000)
Proceeds from issuance of convertible debentures	4,545,000	—
Debt issuance costs	(459,360)	—
Share issuance costs	(405,753)	(394,736)
Net cash provided by financing activities	7,730,753	5,613,412
Effect of foreign exchange on cash	—	(19,573)
Change in cash and cash equivalents during the period	2,278,826	(1,175,332)
Cash and cash equivalents, beginning of period	1,494,573	2,083,696
Cash and cash equivalents, end of period	\$ 3,773,399	\$ 908,364
Cash and cash equivalents consists of:		
Demand deposits	\$ 3,666,389	\$ 706,864
Restricted cash	107,010	201,500
	\$ 3,773,399	\$ 908,364

ALPHA COGNITION INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED) — (Continued)

	For the nine months ended September 30,	
	2024	2023
Supplemental Disclosure		
Cash paid for interest	\$ 37,754	\$ 53,991
Supplemental non-cash disclosures		
Reallocation of fair value of share options upon exercise	\$ 126,382	\$ 676,632
Reclassification of derivative liability for warrants priced with USD per change in functional currency	\$ —	\$ 351,969
Reclassification of derivative liability for warrants priced with CAD per change in functional currency	\$ —	\$ 4,541,545
Reclassification of derivative liability for warrants re-priced from CAD to USD exercise price	\$ 3,942,575	\$ —
Common shares issued for share issuance costs	\$ 928,874	\$ —
Warrants issued for share issuance costs	\$ 582,245	\$ 117,310
Common shares issued for services	\$ 2,273,949	\$ —

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

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)
September 30, 2024, and 2023

NOTE 1 — NATURE OF OPERATIONS AND GOING CONCERN

Alpha Cognition Inc. ("ACI" or the "Company") is a commercial stage, biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's Disease and Cognitive Impairment with Traumatic Brain Injury ("TBI"), for which there are limited or no treatment options. The registered and records office of the Company is 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8. As of November 12, 2024, the Company's common shares commenced trading on the NASDAQ stock exchange under the symbol "ACOG". As of May 1, 2023, the Company's common shares commenced trading on the Canadian Securities Exchange ("CSE") under the symbol "ACOG", previously the Company's shares were traded on the TSX Venture Exchange ("TSX-V") until April 28, 2023, when the Company had them delisted. The Company's shares also traded on the Over-The-Counter Markets ("OTC") under the trading symbol "ACOGF" until they were listed on the NASDAQ.

On July 29, 2024, the Company was granted approval by the U.S. Food and Drug Administration (FDA) for the commercialization of ZUNVEYL, previously known as ALPHA-1062, for the treatment of mild-to-moderate Alzheimer's disease.

On November 5, 2024, the Company completed a reverse stock split on the ratio of one share issued for every previously issued and outstanding twenty-five shares. All current and comparative references to the number and price per share for common shares, preferred shares, options, warrants, ACI Canada legacy performance options and weighted average number of shares, loss per share, have been restated to give effect to this reverse stock split.

On November 13, 2024, the Company completed a public offering of Common Shares by issuing 8,695,653 Common Shares at a public offering price of \$5.75 per share for gross proceeds of \$50,000,005. In connection with the US public offering, the Company's Common Shares began trading on the NASDAQ on November 12, 2024.

Going Concern

These unaudited condensed interim consolidated financial statements have been prepared with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business rather than through a process of forced liquidation. The Company has not generated revenues from its operations to date and as of September 30, 2024, had working capital of \$1,508,496 and an accumulated deficit of \$70,626,302 which has been primarily financed by equity. The Company's continuing operations, as intended, are dependent upon its ability to generate cash flows or obtain additional financing. Upon closing the Company's \$50 million financing on November 13, 2024, management is of the opinion that it does have sufficient working capital to meet the Company's liabilities and commitments as they become due for the 12 months from the date these financial statements. Management intends to finance operating costs over the next twelve months with cash on hand.

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation — The conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and the rules of the Securities and Exchange Commission (the "SEC"). The unaudited condensed interim consolidated financial statements as of September 30, 2024, have been derived from the Company's audited consolidated financial statements for the fiscal year December 31, 2023 ("2023 Consolidated Financial Statements"). It is recommended that the unaudited condensed interim consolidated financial statements be read in conjunction with the 2023 Consolidated Financial Statements.

Principles of Consolidation — These unaudited condensed interim consolidated financial statements include the accounts of the Company, its wholly owned subsidiary, Alpha Cognition Canada Inc. ("ACI Canada") and ACI Canada's wholly owned subsidiary Alpha Cognition USA Inc. ("ACI USA").

All significant intercompany accounts and transactions between the Company and its subsidiaries have been eliminated upon consolidation.

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)
September 30, 2024, and 2023

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Functional and Reporting Currency — The functional currency of an entity is the currency of the primary economic environment in which the entity operates. Effective August 31, 2023, the functional currency of the Company was updated to the United States Dollar ("USD" or U.S. Dollar") as management assessed that the currency of the primary economic environment in which the Company operates changed to USD on that date. The key factor influencing this decision was the change in the Company's primary funding from Canadian dollars ("CAD") to USD, whereas the functional currency of its subsidiaries was unchanged and remain in USD. Prior to USD the functional currency of the Company was CAD, and its subsidiaries was USD. Changes to the Company's functional currency have been accounted for on a prospective basis from August 31, 2023. The determination of functional currency was made in accordance with the Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") 830, *Foreign Currency Matters*.

The Company's reporting currency is the USD. For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's CAD operations are translated to USD at the exchange rate on the reporting date. The income and expenses are translated using average exchange rates. Foreign currency differences that arise on translation for consolidated purposes are recognized in other comprehensive loss on the consolidated statements of operations and comprehensive (loss) income.

All values presented are in USD unless otherwise denoted.

Use of Estimates and Assumptions — The preparation of these unaudited condensed interim consolidated financial statements in conformity with GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as of the date of the unaudited condensed interim consolidated financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates, to ensure that those estimates effectively reflect changes in the Company's business and new information as it becomes available. Management bases these estimates on historical and anticipated results, trends, and various other assumptions that the Company believes are reasonable under the circumstances, including assumptions as to forecasted amounts and future events. Actual results could differ materially from these estimates under different assumptions or conditions.

Concentrations of Credit Risk — The Company's financial instruments subject to concentrations of credit risk consists primarily of cash and cash equivalents. Cash is deposited with financial institutions with high credit quality which are typically in excess of insured limits. Additionally, as of September 30, 2024, the Company had \$231,887 (December 31, 2023 – \$475,567) in cash held at its payment processing company in a demand account to be used to pay accounts payable. During the nine months ending September 30, 2024, and 2023, the Company did not experience any loss related to these concentrations.

Cash and Cash Equivalents — The Company considers cash to include currency on hand, demand deposits with banks or other financial institutions, and other kinds of accounts that have the general characteristics of demand deposits in that the Company may deposit additional funds at any time and also effectively may withdraw funds at any time without prior notice or penalty. The Company considers cash equivalents to include term deposits, certificates of deposit, and all highly liquid instruments with original maturities of three months or less to be cash equivalents.

Equipment — Equipment is stated at historical cost less accumulated depreciation. Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in the consolidated statement of operations. Repairs and maintenance are expensed as incurred. Depreciation is charged over the estimated useful lives using the declining balance method as follows:

Computer equipment	55%
Other equipment	20%

ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) September 30, 2024, and 2023

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Intangible Assets — The Company accounts for intangible assets in accordance with FASB ASC 350, *Intangibles — Goodwill and Other*. The Company's intangible assets consist of exclusive licenses that allow the Company to further develop and exploit the ALPHA-1062 and ALPHA-0602 Technology, as defined in Note 11. The licenses are carried at cost and amortized on a straight-line basis over their estimated useful life of 15 years. During the nine months ended September 30, 2024, the Company impaired the ALPHA-0602 licenses in the amount of \$39,166 on the unaudited condensed interim consolidated statements of operations and comprehensive loss.

Leases — The Company accounts for leases using FASB ASC 842, *Leases*. The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less. The lease payments associated with these leases are charged directly to the consolidated statement of operations on a straight-line basis over the lease term. The Company had no leases outstanding during the nine months ended September 30, 2024, or the year ended December 31, 2023.

Impairment of Long-Lived and Non-Financial Assets — The Company reviews long-lived assets, primarily comprised of equipment and definite life intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future net cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the asset and whether any impairment indicators exist. The Company recorded an impairment of intangible assets of \$39,166 and \$nil for the nine months ending September 30, 2024, and 2023, respectively.

Income Taxes — The Company uses the asset and liability method to account for income taxes in accordance with ASC 740, *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on future tax consequences attributable to differences between the consolidated financial statements carrying amounts of existing assets and liabilities and their respective tax bases, tax loss and credit carry forwards.

Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that include the enactment date. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than a 50% likelihood of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

Research and Development Costs — The Company expenses all research and development costs incurred in accordance with the Accounting Standard Codifications as promulgated by FASB ASC 730, *Research and Development*.

Advertising and Marketing Costs — The Company expenses advertising and marketing costs when incurred. During the nine months ending September 30, 2024, and 2023, the Company incurred advertising and marketing expenses of \$11,874 and \$16,099, respectively, which is included in general and administrative expenses in the unaudited condensed interim consolidated statements of operations and comprehensive loss.

Loss Per Share — Basic loss per share is computed by dividing net loss available to ordinary stockholders by the weighted-average number of common shares outstanding during the reporting period. If applicable, diluted income per share is computed similar to basic income per share except that the weighted average shares outstanding are increased to include potential common shares for the assumed conversion of convertible debentures and the exercise of share options and warrants, if dilutive. The number of potential common shares is calculated by assuming outstanding

ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) September 30, 2024, and 2023

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

share options and warrants were exercised and that the proceeds from such exercises were used to acquire common shares at the average market price during the reporting periods. For the periods presented, this calculation proved to be anti-dilutive.

Share-Based Compensation — The Company accounts for share-based compensation in accordance with ASC 718, *Compensation — Share-Based Compensation*, which requires compensation cost for the grant-date fair value of share-based awards to be recognized over the requisite service period. The Company accounts for forfeitures when they occur. The fair value of share-based awards, granted or modified, is determined on the grant date (or modification or acquisition dates, if applicable) at fair value, using the Black-Scholes option pricing model. This model is affected by the Company's share price as well as assumptions regarding a number of subjective variables. These subjective variables include, but are not limited to, the Company's expected share price volatility over the terms of the awards, and actual and projected employee share option exercise behaviors. The Company records share-based compensation expense for service-based share options on an accelerated attributions method over the requisite service period. The Company records share-based compensation expense for performance-based share options on an accelerated attribution method over the requisite service period, and only if performance-based conditions are considered probable to be satisfied.

The fair value of options is determined using the Black-Scholes option pricing model which incorporates all market vesting conditions. The number of shares and options expected to vest is reviewed and adjusted at the end of each reporting period such that the amount recognized for services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest.

Liability-Based Awards — Bonus right awards that include cash settlement features are accounted for as liability-based awards in accordance with ASC 718, *Compensation — Share Based Compensation*. The fair value of the bonus right awards is estimated using a Black-Scholes option-pricing model and is revalued on each reporting date, based on the probability of the expected awards to vest, until settlement. Changes in the estimated fair value of the bonus right awards are recognized within general and administrative expense in the unaudited condensed interim consolidated statement of operations and comprehensive loss over the vesting period. Key assumptions in the calculation of the fair value of the bonus right awards include expected volatility, risk-free interest rate, expected life, and fair value per award.

Segment Reporting — The Company currently operates in researching and developing pharmaceutical treatments for neurological diseases industry. Based on the guidance of ASC 280, *Segment Reporting*, the Company has one operating segment. For the nine months ending September 30, 2024, and 2023, the Company operated in two geographical areas; the United States and Canada.

Convertible Debentures and Conversion Feature Liability — The Company's debt instruments contain a host liability and an embedded conversion feature. The Company uses the guidance under FASB ASC Topic 815 *Derivatives and Hedging* ("ASC 815") to determine if the embedded conversion feature must be bifurcated and separately accounted for as a derivative under ASC 815. It also determines whether any embedded conversion features requiring bifurcation qualify for any scope exceptions contained within ASC 815. Generally, contracts issued or held by a reporting entity that are both (i) indexed to its own shares, and (ii) classified in stockholders' equity, would not be considered a derivative for the purposes of applying ASC 815. Any embedded conversion features that do not meet the scope exception noted above are classified as derivative liabilities, initially measured at fair value, and remeasured at fair value each reporting period with change in fair value recognized in the unaudited condensed interim consolidated statements of operations and comprehensive loss. Any embedded conversion features that meet the scope exception under ASC 815 are initially recorded at their relative fair value in paid-in-capital and are not remeasured at fair value in future periods.

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)
September 30, 2024, and 2023

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Any embedded conversion features that do not meet the scope exception under ASC 815 are initially recorded at their fair value and the residual amount of the proceeds received is allocated to the convertible debentures. The host debt instrument is accounted for in accordance with guidance applicable to non-convertible debt under FASB ASC Topic 470 Debt ("ASC 470") and is accreted to its face value over the term of the debt with accretion expense and periodic interest expense recorded in the consolidated statements of operations and comprehensive loss.

The Company uses the Black-Scholes option pricing model to determine the fair value of the conversion feature liability, the warrant liability, share-based options, and stand-alone share purchase warrants issued as noted above. This model requires the input of subjective assumptions including the following:

Risk-Free Interest Rate — The risk-free interest rate is based on the U.S. Treasury zero coupon bond issues in effect at the time of grant for periods corresponding with the expected term of option.

Dividend Yield — The Company has never paid dividends on its common shares and has no plans to pay dividends on its common shares. Therefore, the Company used an expected dividend yield of zero.

Expected Life — The Company's expected term represents the period that the Company's options granted are expected to be outstanding or the remaining contractual life of the conversion period and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term).

Expected Volatility — The Company's expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period equal to the expected term of the awards.

Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity.

Fair Value Measurements — FASB ASC 820 — *Fair Value Measurements and Disclosures* defines fair value, establishes a framework for measuring fair value under U.S. GAAP, and expands disclosures about fair value measurements. In accordance with ASC 820, we have categorized our financial assets and liabilities based on the priority of the inputs to the valuation technique into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument.

Financial assets and liabilities recorded in the accompanying consolidated balance sheets are categorized based on the inputs to the valuation techniques as follows:

- | | |
|----------------|---|
| <i>Level 1</i> | — Financial instruments whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market which we have the ability to access at the measurement date. |
| <i>Level 2</i> | — Financial instruments whose values are based on quoted market prices in markets where trading occurs <i>infrequently</i> or whose values are based on quoted prices of instruments with similar attributes in active markets. |
| <i>Level 3</i> | — Financial instruments whose values are based on prices or valuation techniques that require inputs that are <i>both</i> unobservable and significant to the overall fair value measurement. These inputs reflect management's own assumptions about the assumptions a market participant would use in pricing the instrument. |

The Company's financial instruments consist of cash, restricted cash, related party note receivable, accounts payable, convertible debentures, conversion feature liability, warrant liabilities, other liabilities, and promissory note. The fair values of accounts payable, convertible debentures and promissory note approximate their carrying values either due to their current nature or current market rates for similar instruments.

ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) September 30, 2024, and 2023

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Cash is measured at fair value on a recurring basis using level 1 inputs. Other liabilities consisting of the bonus rights liability, conversion feature liability and warrant liabilities are measured at fair value on a recurring basis using level 3 inputs. As of September 30, 2024, and December 31, 2023, the fair value of the bonus rights liability was \$74,250 and \$84,125, respectively. As of September 30, 2024 and December 31, 2023, the fair value of the conversion feature liability was \$1,002,874 and \$nil, respectively. As of September 30, 2024, and December 31, 2023, the fair value of the warrant liabilities was \$2,449,478 and \$4,455,747, respectively.

Interest Rate Risk — Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Financial assets and liabilities with variable interest rates expose the Company to interest rate cash flow risk. The Company does not hold any financial liabilities with variable interest rates. Financial assets and liabilities with fixed interest rates expose the Company to interest rate price risk. As of September 30, 2024, and December 31, 2023, the promissory note bears interest of 7.0% per annum and the convertible debentures bears interest of 10.0% per annum, both of which are subject to interest rate price risk. The Company maintains bank accounts which earn interest at variable rates, but it does not believe it is currently subject to any significant interest rate risk.

Currency Risk — Foreign currency exchange rate risk is the risk that the fair value or future cash flows will fluctuate as a result of changes in foreign exchange rates. The Company's operations are carried out in Canada and the United States. As of September 30, 2024, and December 31, 2023, the Company had net monetary liabilities of approximately \$31,000 and \$36,000, respectively, denominated in Canadian dollars.

These factors expose the Company to foreign currency exchange rate risk, which could have an adverse effect on the profitability of the Company. A 10% change in the exchange rate with the Canadian dollar would change net loss and comprehensive loss by approximately \$2,200. At this time, the Company currently does not have plans to enter into foreign currency future contracts to mitigate this risk; however, it may do so in the future.

Grant Accounting — All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of operations and comprehensive loss. When grant proceeds are initially received, they are recorded as deferred income and restricted cash. Grant proceeds used to pay for study costs and are expensed as incurred, with a corresponding amount of grant revenue recorded along with a reduction of the balance of the deferred income liability. The Company classifies the balance of cash received from grants as restricted cash when the proceeds from the grant have been designated for use in specified research. During the six months ending September 30, 2024 and 2023, the Company recorded grant income of \$333,462 and \$32,757, from its R&D Grant (defined in Note 3) in the unaudited condensed interim consolidated statements of operations and comprehensive loss.

Accounting Pronouncements Adopted in 2024 — In August 2020, FASB issued ASU 2020 -06, *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, which is intended to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. There was no material impact of this new guidance on the accompanying unaudited condensed interim consolidated financial statements.

NOTE 3 — R&D GRANT

On June 5, 2023, the Company was awarded a \$750,000 research and development grant from the Army Medical Research and Materiel Command for a pre-clinical study on the use of the ALPHA -1062 Intranasal to reduce blast mTBI (mild Traumatic Brain Injury) induced functional deficit and brain abnormalities ("R&D Grant"). The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense.

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NOTE 3 — R&D GRANT (cont.)

As of September 30, 2024, the Company has received \$575,325 (December 31, 2023 – \$201,500) for the R&D Grant and has restricted cash of \$107,010 (December 31, 2023 – \$90,413). As of September 30, 2024, the Company has deferred income of \$50,777 (December 31, 2023 – \$10,413) and recognized \$333,462 of grant income on the unaudited condensed interim consolidated statement of comprehensive loss during the nine months ended September 30, 2024 (nine months ended September 30, 2023 – \$32,757). Additionally, during the nine months ended September 30, 2024, the Company has incurred \$333,462 (nine months ended September 30, 2023 – \$32,757) in expenses relating to the R&D Grant. The grant funds are to be used on the following project “Assessment of Functional Recovery and Reduced Tauopathy Following ALPHA-1062 Administration in a Repetitive Blast TBI Model in Rodents.” The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense. Funds received from the R&D grant are restricted and to be used solely as outlined in the grant. The R&D grant funding will expire for use on September 30, 2028. The award funding is to subsidize the costs for research and development with the following specific aims:

- Specific Aim 1: Quantify the ability of ALPHA -1062 to reduce brain-wide tauopathy and pathology in blast-mTBI;
- Specific Aim 2: Characterize and quantify changes in the inter -cellular associations between disease-associated microglia and cells of the basal forebrain induced by repetitive blast -mTBI and altered by ALPHA-1062 treatment; and
- Specific Aim 3: Determine the efficacy of ALPHA -1062 to improve the adverse cognitive and behavioral outcomes consequent to repetitive blast-mTBI.

Per the R&D Grant budget expenses are expected to include cost to carry out the clinical trials including personnel costs, materials and supplies, animal housing, publications, and travel costs. The Company classifies any cash received from the R&D Grant that has not yet been used to pay ongoing R&D grant expenditures as restricted cash, as the proceeds from the grant are to be designated for the specified grant research.

NOTE 4 — RELATED PARTY NOTE RECEIVABLE

On July 7, 2023, the Company entered into a loan agreement with Alpha Seven Therapeutics, Inc., (“Alpha Seven”) a related party through a common director and officers of the Company, to advance an amount up to \$150,000. The unsecured outstanding balance carries an interest rate of 12% per annum, a term of 12 months, no payments are due until maturity. As of September 30, 2024, and December 31, 2023, the Company had advanced \$55,000 and accrued interest of \$4,195 and \$2,550, respectively.

As of September 30, 2024, management determined the credit risk of the loan to Alpha Seven had increased significantly since initial recognition and the Company recorded a provision for credit losses for the outstanding principal balance of \$55,000 and reversed the accrued interest of \$4,195 in the unaudited condensed interim consolidated statement of operations and comprehensive loss.

	Principal	Interest
Balance as of December 31, 2022	\$ —	\$ —
Loans advanced	55,000	—
Interest accrued	—	2,550
Balance as of December 31, 2023	\$ 55,000	\$ 2,550
Interest accrued	—	1,645
Provision for credit losses	(55,000)	—
Reversal of accrued interest	—	(4,195)
Balance as of September 30, 2024	\$ —	\$ —

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NOTE 5 — BALANCE SHEET COMPONENTS

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	September 30, 2024	December 31, 2023
Other receivables	\$ 24,795	\$ 100,036
Prepaid expenses	710,340	206,377
Prepaid legal expenses	5,798	59,903
Prepaid expenses and other assets	\$ 740,933	\$ 366,316

Other assets

Other assets include the long-term prepaid portion of \$80,000 relating to the Spartan Consulting Agreement (defined in Note 12).

Equipment

Equipment consisted of the following:

	September 30, 2024	December 31, 2023
Equipment	\$ 12,370	\$ 12,370
Less: accumulated depreciation	(11,359)	(10,649)
Equipment, net	\$ 1,011	\$ 1,721

Depreciation expense for the three months ended September 30, 2024 and 2023 was \$ 236 and \$525, respectively. Depreciation expense for the nine months ended September 30, 2024, and 2023 was \$710 and \$1,577, respectively.

Accounts payable and accrued liabilities

	September 30, 2024	December 31, 2023
Accounts payable	\$ 790,310	\$ 475,553
Other accrued liabilities	274,955	127,284
Accrued payroll and bonuses	678,331	791,280
Accounts payable and accrued liabilities	\$ 1,743,596	\$ 1,394,117

NOTE 6 — INTANGIBLE ASSETS

Intangible assets consisted of the following:

	Gross Amount	Accumulated Amortization	Net Balance	Weighted Average Remaining Useful Life
September 30, 2024				
Licenses	\$ 1,185,633	\$ 752,9043	\$ 432,729	5.42
December 31, 2023				
Licenses	\$ 1,235,633	\$ 703,623	\$ 532,010	6.61

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NOTE 6 — INTANGIBLE ASSETS (cont.)

Amortization expense for the three months ended September 30, 2024 and 2023, was \$19,761 and 20,594, respectively. Amortization expense for the nine months ended September 30, 2024, and 2023, was \$60,115 and \$61,782, respectively. During the nine months ended September 30, 2024, and 2023, the Company reported an impairment of intangible assets of \$39,166 and \$nil, respectively, from the impairment of one license.

The following table outlines the estimated future annual amortization expense related to intangible assets as of September 30, 2024:

Year Ending December 31,		
2024	\$	19,761
2025		79,042
2026		79,042
2027		79,042
2028		79,042
Thereafter		96,800
Total	\$	432,729

NOTE 7 — PROMISSORY NOTE

In March 2015, the Company issued a promissory note of \$ 1,400,000 to Neurodyn Life Sciences Inc ("NLS"), a related party through a common director, for the acquisition of the ALPHA-1062 Technology ("NLS Promissory Note") (Note 10).

On March 6, 2023, the Company and NLS agreed to an amendment to the promissory note pursuant to which the interest rate was increased from 2% to 5.5% and the maturity date was extended from December 31, 2022, to July 15, 2024. The amended agreement was effective March 1, 2023, and requires interest only payments until maturity. In addition, the amendment now incorporates both Alpha Cognition Inc. and Alpha Cognition Canada, Inc. under the Memogain Technology License Agreement and added clarity to certain terms and definitions under the license agreement. The Company evaluated the amended agreement under ASC 470 and determined that the amendment should be accounted for as a debt modification prospectively. The Company accounted for this transaction as a debt modification and did not record any gain or loss relating to the modification. The debt modification did not meet the greater than ten percent test and was deemed not substantial.

As of September 30, 2024, and December 31, 2023, the principal balance outstanding on the promissory note was \$1,211,463. During the nine months ended September 30, 2024, and 2023, the Company recorded interest expense and amortization of the premium, included in accretion expense, of \$59,129 and \$42,982, respectively.

Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 15, 2024, to July 15, 2025. Additionally, \$300,000 will be due on December 31, 2024, with the remaining principal balance due at maturity with certain events triggering the balance to be repayable on demand. Such events include (1) being in breach of the Memogain License Agreements (Note 11); (2) failure to make payments when due; (3) entering into a technology license or merger and acquisition transaction having a value in excess of USD \$40,000,000; and (4) completing a financing, excluding any initial NASDAQ uplisting, having a value in excess of USD \$40,000,000 (see Note 17 (b)). The Company evaluated the amended agreement under ASC 470 and determined that the amendment should be accounted for as a debt modification prospectively. The Company accounted for this transaction as a debt modification and did not record any gain or loss relating to the modification. The debt modification did not meet the greater than ten percent test and was deemed not substantial.

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NOTE 8 — CONVERTIBLE DEBENTURES AND CONVERSION FEATURE LIABILITY

The following table summarizes the activity for the convertible debentures and conversion feature liability as of September 30, 2024:

	Convertible Debentures	Conversion Feature Liability	Warrant Liabilities	Total
	\$	\$	\$	\$
Balance, December 31, 2023	—	—	—	—
Proceeds	4,545,000	—	—	4,545,000
Allocation of proceeds to conversion feature liability	(1,590,195)	1,590,195	—	—
Allocation of proceeds to warranty liabilities	(1,920,179)	—	1,920,179	—
Accretion	64,101	—	—	64,101
Accrued interest	8,716	—	—	8,716
Debt issuance costs	(104,569)	—	—	(104,569)
Revaluation of conversion feature liability	—	(174,930)	—	(174,930)
Revaluation of warrant liabilities	—	—	(124,155)	(124,155)
Balance, September 30, 2024	1,002,874	1,415,265	1,796,024	4,214,163

On September 24, 2024, the Company entered into Securities Purchase Agreements (“SPAs”) with various third party lenders for the issuance of convertible debentures (“Debentures”) and warrants to purchase 430,805 common shares of the Company at an exercise price of \$ 10.55 per share until September 24, 2029 (“Debenture Warrants”) for \$4,545,000.

The Debentures bear interest at 10% per annum, computed on the basis of a 360 -day year and twelve 30-day months, and are due and payable with accrued interest thereon on September 24, 2026 (“Maturity Date”). At any time prior to the Maturity Date, the holder has the option to convert their Debenture and any accrued interest into common shares of the Company at a price of \$10.55 (“Conversion Price”). Should the Company complete a Qualified Offering, being an offering of the Company’s securities for at least \$10 million in aggregate gross proceeds in coordination with the simultaneous uplisting of the Company’s common shares onto a United States national securities exchange, the Debentures will automatically convert into the securities, including warrants, on the same terms as are applicable in the Qualified Offering at the lower of (i) the Conversion Price or (ii) the per security offering price in the Qualified Offering. If prior to the Maturity Date or the completion of a Qualified Offering, the last trading price of the Company’s common shares exceed 250% of the Conversion Price for 10 consecutive trading days, the Debentures and accrued interest will automatically convert into common shares of the Company at the Conversion Price.

Upon closing of a Qualified Offering, each Debenture Warrant holder will receive an additional 50% of warrants with identical terms as the Debenture Warrants. The exercise price of the Debenture Warrants are subject to adjustment upon the completion of a Qualified Offering to the lower of (i) the existing Debenture Warrant exercise price, (ii) the exercise price of any common share purchase warrants issued in the Qualified Offering, or (iii) if no common share purchase warrants are issued in the Qualified Offering, the closing price of the common shares on the Canadian Securities Exchange (as converted into U.S. dollars) immediately prior to the pricing news release of the Qualified Offering.

The holders of the Debenture Warrants may elect, if the Company does not have an effective registration statement registering or the prospectus contained therein is not available for the issuance of the Debenture Warrant shares to the holder, in lieu of exercising the Debenture Warrants for cash, a cashless exercise option to receive common shares equal to the fair value of the Debenture Warrants. The fair value is determined by multiplying the number of Debenture Warrants to be exercised by, the option of the Debenture Holder, (i) the previous day’s volume weighted average price (“VWAP”) of the common shares of the Company, (ii) the bid price of the common shares of the Company as of the time of the execution of the exercise notice, or (iii) the closing price of the common shares on the date of the exercise

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NOTE 8 — CONVERTIBLE DEBENTURES AND CONVERSION FEATURE LIABILITY (cont.)

notice ("Elected Exercise Price") less the exercise price with the difference divided by the Elected Exercise Price. On October 16, 2024, the Company's registration statement restricting the Debenture Warrant holders ability to elect to cashless exercise their Debenture Warrants became effective.

If a Qualified Offering occurs or Debenture Warrant holder elects to exercise on a cashless basis, there will be variability in the number of shares issued per Debenture Warrant.

Each SPA also grants each lender a participation right up to September 24, 2025 whereby each lender will have the right to participate in up to 25% of any subsequent offering of the Company based on such lender's pro rata portion of the SPAs.

The Company has determined that the conversion features meet the definition of a derivative in accordance with ASC 815 — *Derivatives and hedging*, and as a result has bifurcated the conversion features from the contract. As a result, the Company recorded the embedded derivative as a conversion feature liability on its consolidated balance sheets with a corresponding debt discount which is netted against the principal amount of the Debentures. The Company accretes the debt discount associated with the conversion feature liability to accretion expense over the term of the Debentures using the effective interest rate method. The conversion feature liability is initially measured at fair value and re-measured at the end of each reporting period with any changes in fair value reported on the consolidated statement of operations and comprehensive loss.

The Company incurred transaction costs of \$459,360 in connection with the SPAs, of which \$104,569 was allocated to the debt component of the Debentures and is being amortized over the term of the Debentures and \$354,791 was expensed as general and administrative expenses.

The initial fair value of the conversion feature liability for the SPAs was determined to be \$1,590,195 using the Black-Scholes Option Pricing model with the following assumptions:

Risk-free interest rate	3.49 – 4.78%
Dividend yield	—
Expected life	0.14 – 2.0 years
Volatility	79 – 91%
Probability of automatic conversion under qualified offering	70%
Probability of automatic conversion under accelerated offering	15%
Probability of voluntary conversion	15%

As of September 30, 2024, the fair value of the conversion feature liability for the SPAs was determined to be \$1,415,265 using the Black-Scholes Option Pricing model with the following assumptions:

Risk-free interest rate	3.66 – 4.93%
Dividend yield	—
Expected life	0.13 – 1.98 years
Volatility	72 – 90%
Probability of automatic conversion under qualified offering	70%
Probability of automatic conversion under accelerated offering	15%
Probability of voluntary conversion	15%

During the nine months ended September 30, 2024 and 2023, the Company recognized interest expense of \$8,716 and \$0, respectively.

During the nine months ended September 30, 2024 and 2023, the Company recognized accretion of the debt discount of \$64,101 and \$0, respectively. During the nine months ended September 30, 2024, the Company recognized a gain on revaluation of conversion feature liability of \$174,930 and \$0, respectively.

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NOTE 8 — CONVERTIBLE DEBENTURES AND CONVERSION FEATURE LIABILITY (cont.)

As of September 30, 2024 and 2023, the principal and accrued interest owing to lenders was \$ 4,553,716 and \$0, respectively.

During the nine months ended September 30, 2024 and 2023, the Company recognized debt issuance costs relating to the convertible features and warrants of \$354,791 and \$0, respectively, on the consolidated statement of operations and comprehensive loss.

NOTE 9 — OTHER LONG-TERM LIABILITIES

The Company adopted a cash bonus policy pursuant to which it may grant bonus rights to certain eligible participants, which include employees, officers, or consultants of the Company, that are payable in cash. These bonus rights are subject to certain vesting provisions and are revalued at each reporting date with the change being included in management fees and salaries on the Company's unaudited condensed interim consolidated statements of operations and comprehensive loss.

During the year ended December 31, 2022, Officers of the Company were granted the ability to earn up to 370,448 bonus rights entitling them to a cash bonus equal to an amount by which the fair market value of one common share of the Company (calculated as the 30-day Volume Weighted Average Price ("VWAP") per common share) exceeds \$40.00 multiplied by the number of bonus rights vested. The bonus rights initially earned vest on the earlier of the date of a change of control or April 15, 2024, and were be payable upon vesting. The bonus rights will be earned in tranches based on the price of the Company's common share exceeding certain thresholds.

On April 16, 2024, the Company amended the bonus rights agreements to extend the vesting date from April 15, 2024, through the earlier of April 28, 2027, a change of control, or attainment of the business value threshold with respect to any tranche. Additionally, the grant price was reduced from \$40.00 to \$30.00. As of September 30, 2024, and 2023, the Officers had earned 95,071 bonus rights.

As of September 30, 2024, and December 31, 2023, the Company recognized a bonus right liability of \$74,250 and \$84,125, respectively, to recognize the proportionate unvested bonus rights. Total compensation expense (recovery) for the bonus rights recognized within general and administrative expenses for the nine months ended September 30, 2024, and 2023, was \$(4,381) and \$4,382, respectively. Total compensation expense (recovery) for the bonus rights recognized within research and development expenses for the nine months ended September 30, 2024, and 2023, was \$(5,494) and \$1,236, respectively. As of September 30, 2024, and December 31, 2023, there was \$ 462,269 and \$14,660 of unrecognized compensation expense related to the bonus right awards, respectively.

In accordance with ASC 718, *Share-Based Payments*, the bonus right awards are considered liability-based awards and are revalued at each reporting date. The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the bonus rights liability as of September 30, 2024, and December 31, 2023:

	September 30, 2024	December 31, 2023
Risk-free interest rate	3.00%	5.04%
Expected life (in years)	2.58	0.29
Volatility	121.00%	177.76%
Weighted average fair value per bonus right	\$ 5.00	\$ 1.00

The number of bonus right awards granted to each executive is determined based on the business value of the Company at the earlier of (i) the date of a Change in Control or; (ii) the Vesting Date, as defined in the Company's Cash Bonus Policy. The Company estimates the expected number of bonus rights at the end of each reporting period based upon the likelihood of achieving the Business Value threshold, as defined in each executive's agreement. As of September 30, 2024, and December 31, 2023, 106,396 and 97,483 bonus right awards are expected to vest, respectively.

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NOTE 10 — STOCKHOLDERS' DEFICIENCY

Authorized Share Capital

The Company is authorized to issue the following share capital:

- Unlimited common voting shares without par value ("Common Share")
- Unlimited Class A restricted voting shares without par value ("Restricted Share")
- Unlimited Class B Preferred Series A voting shares without par value, convertible on a 1:1 basis into Common Share ("Class B Preferred Share")

Issued Share Capital

During the nine months ended September 30, 2024, the Company issued the following shares:

- Issued 14,000 Common Shares for the exercise of 14,000 warrants at a price of \$ 10.00 per share for total proceeds of \$140,000.
- On January 19, 2024, the Company completed the fifth closing of the Q2 2023 PP by issuing 678,630 units at a price of \$5.50 for total gross proceeds of \$3,732,469 ("Q2 2023 PP Tranche 5"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until January 19, 2027. In connection with the closing of Q2 2023 PP Tranche 5, the Company paid cash commissions of \$391,178, incurred legal fees of \$14,575, and issued 41,493 agents warrants with an estimated fair value of \$582,245. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until January 19, 2027.
- Issued 582,331 Common Shares valued at \$3,202,823 in accordance with the Spartan Consulting Agreement (defined in Note 11) of which \$928,874 was included in share issuance costs and \$2,273,949 was included in general and administrative expenses
- Issued 7,700 Common Shares in connection with the cashless exercise of 3,213 Common Share options with an exercise price of CAD\$5.50 per share and 7,700 Common Share options with an exercise price of \$7.00 per share; 3,213 Common Shares were surrendered. As a result, the Company transferred \$36,751 from additional paid-in capital to share capital.
- Issued 16,000 Common Shares for the exercise of 16,000 warrants at a price of \$10.00 per share for total proceeds of \$160,000.
- Issued 7,200 Common Shares for the exercise of 7,200 ACI Canada legacy performance options at a price of \$0.25 per share for total proceeds of \$1,800. As a result, the Company transferred \$89,631 from additional paid-in capital to share capital.

During the year ended December 31, 2023, the Company issued the following shares:

- Issued 949,906 private placement units at a price of CAD\$6.38 for total proceeds of \$4,506,055 (CAD\$6,055,650) with each unit consisting of one Common Share and one warrant exercisable at a price of CAD\$9.75 per warrant for a term of five years from the closing date ("Q1 2023 PP"). The Q1 2023 PP was completed through the closing of two tranches: one in February 2023 and one in March 2023. In connection with the Q1 2023 PP, the Company paid cash commissions of \$172,480, incurred legal fees of \$15,428, and issued 85,183 Common Shares and 12,986 agents warrants with an estimated fair value of \$618,004 and \$73,018, respectively. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of CAD\$9.75 for a term of 5 years.

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

Issued Share Capital (continued)

- Issued 108,000 Common Shares for the exercise of 108,000 ACI Canada legacy performance options at a price of \$0.25 per share for total proceeds of \$27,000. As a result, the Company transferred \$1,344,480 from additional paid-in capital to share capital.
 - On May 30, 2023, the Company announced a private placement offering to raise gross proceeds of \$6,500,000 at \$5.50 per unit ("Q2 2023 PP"). Each unit initially consisted of one common share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at \$7.75 per share for a period of three years from the closing date. The aggregate proceeds may be increased by 30% to accommodate any over-allotment. In accordance with the Q2 2023 PP, the Company has agreed to pay the finder ("Spartan") cash commissions of 10% of the gross proceeds, issue finder's warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list, and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list.
 - On August 31, 2023, the Company completed an initial closing of the Q2 2023 PP by issuing 244,562 units at a price of \$5.50 for total proceeds of \$1,345,093 ("Q2 2023 PP Tranche 1"). Each unit consisted of one Common Share and one half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until August 31, 2026. In connection with the Q2 2023 PP Tranche 1, the Company paid cash commissions of \$180,051, incurred legal fees of \$28,334, and issued 10,912 agents warrants with an estimated fair value of \$44,292. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until August 31, 2026.
 - On October 16, 2023, the Company completed the second closing of the Q2 2023 PP by issuing 63,873 units at a price of \$5.50 for total gross proceeds of \$351,303 ("Q2 2023 PP Tranche 2"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until October 16, 2026. In connection with the closing of Q2 2023 PP Tranche 2, the Company paid cash commissions of \$51,600, incurred legal fees of \$5,371, and issued 3,127 agents warrants with an estimated fair value of \$10,199. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until October 16, 2026.
 - On November 8, 2023, the Company completed the third closing of the Q2 2023 PP by issuing 183,636 units at a price of \$5.50 for total gross proceeds of \$1,009,999 ("Q2 2023 PP Tranche 3"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until November 8, 2026. In connection with the closing of Q2 2023 PP Tranche 3, the Company paid cash commissions of \$151,500, incurred legal fees of \$10,501, and issued 49,182 agents warrants with an estimated fair value of \$24,692. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until November 8, 2026.
- On December 4, 2023, the Company amended the terms of the Q2 2023 PP. Each unit was amended to consist of one common share and one warrant. Each warrant will entitle the holder to purchase an additional common share of the Company at \$7.75 per share for a period of three years from the closing date.
- On December 22, 2023, the Company completed the fourth closing of the Q2 2023 PP by issuing 365,661 units at a price of \$5.50 for total gross proceeds of \$2,011,137 ("Q2 2023 PP Tranche 4"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

additional Common Share of the Company at the initial pricing of \$ 7.75 per share until December 22, 2026. In connection with the closing of Q2 2023 PP Tranche 4, the Company paid cash commissions of \$238,515 and issued 28,911 agents warrants with an estimated fair value of \$249,965. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until December 22, 2026.

Issued Share Capital (continued)

- All 280,000 previously outstanding Restricted Shares were converted to Common Shares on August 29, 2023, for \$nil proceeds.
- 6,600 Common Shares in connection with the cashless exercise of 6,600 Common Share options with an exercise price of CAD\$5.50 per share; 3,444 Common Shares were surrendered. As a result, the Company transferred \$80,039 from additional paid-in capital to share capital.

Escrow Shares

As of September 30, 2024, and December 31, 2023, the Company had nil and 460,115 Common Shares and nil and 114,297 Class B Preferred Shares, respectively, held in escrow.

Warrants

During the nine months ended September 30, 2024, the Company issued the following warrants:

- 430,807 warrants with an exercise price of \$10.55 and expiry of September 24, 2029, in connection with the issuance of the convertible debentures (Note 8).
- 678,626 warrants with an exercise price of \$7.75 and expiry of January 19, 2027, in connection with the Q2 2023 PP Tranche 5.
- 41,493 warrants with an exercise price of \$7.75 and an expiry of January 19, 2027, to the agents of the Company's Q2 2023 PP Tranche 5. The warrants were valued at \$582,245 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 101.01%, discount rate of 3.77%, and a dividend yield of \$ nil.

The schedule of activity for the warrants is as follows:

	Number of Warrants	Weighted Average Exercise Price (as converted)	Remaining Contractual Term (Years)
Balance, December 31, 2022	639,249	\$ 28.76	0.84
Issued	1,626,721	7.48	—
Expired	(516,778)	34.01	—
Balance, December 31, 2023	1,749,192	\$ 7.66	3.43
Issued	1,150,926	7.75	—
Exercised	(30,000)	10.00	—
Expired	(92,471)	10.00	—
Balance, September 30, 2024	2,777,649	\$ 7.52	2.50

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

A summary of the warrants outstanding and exercisable as of September 30, 2024, is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
133,193 \$	7.75	August 31, 2026
35,064 \$	7.75	October 16, 2026
101,000 \$	7.75	November 8, 2026
394,572 \$	7.75	December 22, 2026
720,123 \$	7.75	January 19, 2027
585,609 \$	7.23	February 16, 2028
86,200 \$	7.22 (CAD\$9.75)	February 16, 2028
28,797 \$	7.22 (CAD\$9.75)	March 15, 2028
262,286 \$	7.08	March 15, 2028
430,805 \$	10.55	September 24, 2029
2,777,649		

Warrants Liabilities

- a) Prior to August 31, 2023, the Company's functional currency was the CAD, as such, the Company recorded a warrant liability on the warrants outstanding with USD exercise prices. This derivative liability was being revalued at each reporting period.

The Company revalued its derivative liability upon the change in functional currency, which resulted in a loss on revaluation of \$145,980 for the year ended December 31, 2023.

Due to the change in functional currency on August 31, 2023, the derivative liability was measured at fair value using the Black-Scholes Option Pricing Model with a valuation date of August 31, 2023. The derivative liability of the Company on that date was \$351,969, which upon reclassification, was charged to equity as an increase in reserves of \$351,969.

Balance as of December 31, 2022	\$ 205,989
Revaluation of derivative liability	145,980
Reclassification of derivative liability per change in functional currency	(351,969)
Balance as of December 31, 2023	\$ —

A summary of the warrants with USD exercise prices outstanding and exercisable as of August 31, 2023, upon the change in functional currency was as follows:

Warrants Outstanding	Exercise Price	Expiry Date
122,471 \$	10.00	August 30, 2024
122,281 \$	7.75	August 31, 2026
244,752		

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the re-valuations for the warrants priced in USD as of August 31, 2023:

	August 31, 2023
Risk-free interest rate	5.14%
Dividend yield	—
Expected life (in years)	1.00
Volatility	131%
Weighted average fair value per warrant	\$ 4.00

- b) On August 31, 2023, the Company's functional currency changed to the USD from the CAD; as such, the Company recorded a derivative liability on the warrants outstanding with previously issued CAD exercises prices. This derivative liability is being revalued at each reporting period.

As of August 31, 2023, the Company charged \$ 4,541,545 to equity to reclassify the derivative liability for warrants with exercise prices denominated in CAD using the Black-Scholes Option Pricing Model. The initial reclassification resulted in a decrease in share capital \$4,541,545. In December 2023, 471,093 warrants were re-priced from CAD to USD denominated exercise price which resulted in \$4,025,102 of the derivative liability being reclassified to equity. During the nine months ended September 30, 2024, 376,801 warrants were re-priced from CAD to USD denominated exercise price which resulted in \$3,942,575 of the derivative liability being reclassified to equity. As of September 30, 2024, the Company revalued the derivative liability to \$653,454 (December 31, 2023 – \$4,455,747) and recorded a loss on revaluation of \$ 140,282 for the nine months ended September 30, 2024 (nine months ended September 30, 2023 – \$nil).

Balance as of December 31, 2022	\$ —
Reclassification of derivative liability per change in functional currency	4,541,545
Revaluation of derivative liability	3,939,304
Reclassification of derivative liability per change in exercise price	(4,025,102)
Balance as of December 31, 2023	\$ 4,455,747
Revaluation of derivative liability	140,282
Reclassification of derivative liability per change in exercise price	(3,942,575)
Balance as of September 30, 2024	\$ 653,454

A summary of warrants not issued for services with CAD exercise prices outstanding and exercisable as of September 30, 2024, is as follows:

Warrants Outstanding		Exercise Price	Expiry Date
86,200	\$	7.22 (CAD\$9.75)	February 16, 2028
15,810	\$	7.22 (CAD\$9.75)	March 15, 2028
102,010			

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the re-valuations following the change in functional currency to USD as of September 30, 2024, and December 31, 2023:

	September 30, 2024	December 31, 2023
Risk-free interest rate	2.76%	3.38%
Dividend yield	—	—
Expected life (in years)	3.39	4.15
Volatility	87%	87%
Weighted average fair value per warrant	\$ 6.47	\$ 9.25

- c) On September 24, 2024, the Company entered into SPAs with various third party lenders for the issuance of Debentures and 430,805 Debenture Warrants for \$4,545,000 (Note 8).

The Debenture Warrants are exercisable at a price of \$ 10.55 per share until September 24, 2029. Upon closing of a Qualified Offering, each Debenture Warrant holder will receive an additional 50% of warrants with identical terms as the Debenture Warrants. The exercise price of the Debenture Warrants are subject to adjustment upon the completion of a Qualified Offering to the lower of (i) the existing Debenture Warrant exercise price, (ii) the exercise price of any common share purchase warrants issued in the Qualified Offering, or (iii) if no common share purchase warrants are issued in the Qualified Offering, the closing price of the common shares on the Canadian Securities Exchange (as converted into U.S. dollars) immediately prior to the pricing news release of the Qualified Offering.

The holders of the Debenture Warrants may also elect, if the Company does not have an effective registration statement registering or the prospectus contained therein is not available for the issuance of the Debenture Warrant shares to the holder, in lieu of exercising the Debenture Warrants for cash, a cashless exercise option to receive common shares equal to the fair value of the Debenture Warrants. The fair value is determined by multiplying the number of Debenture Warrants to be exercised by, the option of the Debenture Holder, (i) the previous day's volume weighted average price ("VWAP") of the common shares of the Company, (ii) the bid price of the common shares of the Company as of the time of the execution of the exercise notice, or (iii) the closing price of the common shares on the date of the exercise notice ("Elected Exercise Price") less the exercise price with the difference divided by the Elected Exercise Price.

If a Qualified Offering occurs or Debenture Warrant holder elects to exercise on a cashless basis, there will be variability in the number of shares issued per Debenture Warrant.

On initial recognition, the Company allocated \$1,920,179, being the fair value of the Debenture Warrants, from the proceeds of the SPA to set up the derivative liability. On October 16, 2024, the Company's registration statement restricting the Debenture Warrant holders ability to elect to cashless exercise their Debenture Warrants became effective.

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the initial valuation and the revaluation for the Debenture Warrant priced in USD as of September 24, 2024 and September 30, 2024:

	September 30, 2024	September 24, 2024
Risk-free interest rate	3.66%	3.49%
Dividend yield	—	—
Expected life (in years)	1.98	2.00
Volatility	80%	80%

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

Share Options

Common Share Options

The Company's 2023 Share Option Plan (the "2023 Option Plan") for its officers, directors, employees and consultants was approved by stockholders on June 27, 2023. Pursuant to the 2023 Option Plan, the Company may grant non-transferable share options totaling in aggregate up to 20% of the Company's issued and outstanding Common Shares and Restricted Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price that will not be lower than the greater of the last closing price for the Common Shares as quoted on the CSE: (i) on the trading day prior to the date of grant; and (ii) the date of grant. All options granted pursuant to the 2023 Option Plan will be subject to such vesting requirements as may be imposed by the Board. In the event of a Change of Control, as defined in the 2023 Option Plan, all unvested options will vest immediately.

The 2022 Option Plan was previously adopted by the board and approved by stockholders on July 19, 2022, pursuant to which incentive share options were granted to certain directors, officers, employees and consultants (the "2022 Option Plan"). Under the 2022 Option Plan, the Company could grant non-transferable share options totaling in aggregate up to 10% of the Company's issued and outstanding Common Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price which is not less than that permitted by the TSX-V. In connection with listing of the Common Shares on the CSE, the Company adopted the 2023 Option Plan and determined that the 2022 Option Plan be closed to new grants. The options outstanding under the 2022 Option Plan, issued prior to the adoption of the 2023 Option Plan ("2022 Options") are not included in the maximum number of share options available for grant pursuant to the 2023 Option Plan and are not subject to the terms of the 2023 Option Plan; as such, the 2022 Options will continue to be governed by the 2022 Option Plan.

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the Common Share options issued:

	September 30, 2024	December 31, 2023
Risk-free interest rate	—	3.12%
Expected life (in years)	—	10
Volatility	—	103%
Weighted average fair value per option	— \$	3.25

The following table summarizes the total amount of share-based compensation expense related to service conditions for Common Share options during the three and nine months ended September 30, 2024, and 2023:

	For the three months ended		For the nine months ended	
	September 30, 2024	September 30, 2023	September 30, 2024	September 30, 2023
Research and development	\$ 48,372	\$ 173,023	\$ 201,913	\$ 421,766
General and administrative	142,859	524,050	596,726	1,293,419
Total share-based compensation	\$ 191,231	\$ 697,073	\$ 798,639	\$ 1,715,185

As of September 30, 2024, there was an unrecognized share-based compensation expense relating to service conditions for common share options of \$390,161.

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

Common share option activity is as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value ⁽¹⁾
Balance, December 31, 2022	220,243	6.86	8.47	—
Granted	647,600	4.16	—	
Expired	(30,911)	25.34	—	
Exercised ⁽²⁾	(10,045)	4.16	—	
Balance, December 31, 2023	826,887	\$ 4.44	9.07	\$ 6,647,828
Exercised ⁽³⁾	(10,913)	4.79	—	
Balance, September 30, 2024	815,974	\$ 4.28	8.58	\$ 6,939,454
Options exercisable, September 30, 2024	527,881	\$ 4.41	8.35	\$ 4,418,911

- (1) The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share. The calculation excludes options with an exercise price higher than the closing price of the Company's share on the reporting date.
- (2) In accordance with the Company's 2023 Option Plan, option holders exercised 10,045 Common Share options on a cashless basis (net exercise) for the issuance of 6,600 Common Shares.
- (3) In accordance with the Company's 2023 Option Plan, option holders exercised 10,913 Common Share options on a cashless basis (net exercise) for the issuance of 7,700 Common Shares.

A summary of the Common Share options outstanding at September 30, 2024, is as follows:

Options Outstanding	Options Exercisable	Exercise Price	Expiry Date
1,566	1,566	\$ 10.00	June 1, 2029
1,566	1,566	\$ 10.00	July 22, 2030
104,000	104,000	\$ 5.11 (CAD\$7.00)	August 3, 2031
37,600	37,600	\$ 5.11 (CAD\$7.00)	December 20, 2031
8,600	7,166	\$ 5.11 (CAD\$7.00)	February 14, 2032
10,300	7,300	\$ 5.11 (CAD\$7.00)	April 11, 2032
18,000	17,666	\$ 5.11 (CAD\$7.00)	May 31, 2032
634,342	351,017	\$ 4.02 (CAD\$5.50)	June 8, 2033
815,974	527,881		

ACI Canada Legacy Performance Options

The Company retained ACI Canada's share option plan whereby ACI Canada could grant share options to directors, officers, employees and consultants enabling them to acquire common shares. Options granted had a maximum term of ten years and the board of directors determined the vesting requirements. From time to time, the Company granted performance-based share options to management and consultants. These options vest based on the Company's achievement of certain performance goals and operational metrics, as applicable, subject to continuous employment by each recipient.

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NOTE 10 — STOCKHOLDERS' DEFICIENCY (cont.)

The following table summarizes the total amount of share-based compensation expense related to performance conditions for ACI Canada legacy performance options during the three and nine months ended September 30, 2024, and 2023:

	For the three months ended		For the nine months ended	
	September 30, 2024	September 30, 2023	September 30, 2024	September 30, 2023
Research and development	\$ 2,510	\$ —	\$ 118,514	\$ —
General and administrative	—	—	—	184,244
Total share-based compensation	\$ 2,510	\$ —	\$ 118,514	\$ 184,244

As of September 30, 2024, and December 31, 2023, there was no unrecognized share-based compensation expense relating to service condition awards.

The following table summarizes ACI Canada legacy performance option activity for the Company:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value ⁽¹⁾
Balance, December 31, 2022	380,842	0.23	5.91	2,073,837
Exercised	(108,000)	0.25	—	—
Balance, December 31, 2023	272,842	\$ 0.22	4.51	\$ 3,228,973
Exercised	(7,200)	0.22	—	—
Balance, September 30, 2024	265,642	0.22	3.73	3,338,055
Options exercisable, September 30, 2024	258,362	\$ 0.22	3.71	\$ 3,246,797

(1) The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share. The calculation excludes options with an exercise price higher than the closing price of the Company's shares on the reporting date.

A summary of the ACI Canada legacy performance options outstanding at September 30, 2024, is as follows:

Options Outstanding	Options Exercisable	Exercise Price	Expiry Date
36,000	36,000	\$ 0.025	February 1, 2026
27,642	27,642	\$ 0.25	December 31, 2027
122,000	121,120	\$ 0.25	September 1, 2028
80,000	73,600	\$ 0.25	June 1, 2029
265,642	258,362		

NOTE 11 — RELATED PARTY TRANSACTIONS AND BALANCES

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management personnel include the Company's executive officers and members of its Board of Directors.

In September 2018, the Company signed a management agreement with CMI Cornerstone Management Corp. ("CMI"), a company controlled by Ken Cawkell, former CEO and a director of the Company, which requires monthly payments of \$15,000. In June 2019, the Company amended the agreement to increase the monthly fees to \$18,000. Included in

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NOTE 11 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

the agreement is a provision for a termination payment equal to the greater of (i) \$ 432,000 less any fees previously paid under the agreement between June 1, 2019, and the date of termination or (ii) \$54,000. On September 1, 2022, the Company amended the agreement to decrease the monthly fees to \$9,000. On April 30, 2023, the Company amended the agreement to an hourly fee of \$400 for services rendered. The amendment included a payment of \$54,000 for the termination fee.

In September 2018, the Company signed a management agreement with 9177 – 586 Quebec Inc., later assigned to 102388 P.E.I. Inc. ("PEI Inc."), companies controlled by Denis Kay, Chief Scientific Officer of the Company, which requires monthly payments of \$13,333 per month for an effective term of two years. In June 2019, the Company amended the agreement to increase the monthly fees to \$15,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$360,000 less any fees previously paid under the agreement between June 1, 2019, and the date of termination or (ii) \$45,000. On August 15, 2022, the Company amended the agreement to decrease the monthly fees to \$7,500.

In February 2021, the Company signed a consulting agreement with Michael McFadden, CEO of the Company, requiring an annual base compensation of \$500,000. A new employment agreement was signed in March 2022 which included in the agreement is a provision for termination payment without just cause of:

- a) Severance payments for a period of twelve months with the following terms:
 - i) Months 1 through 6: 100% of annual base salary;
 - ii) Months 7 through 9: 50% of annual base salary; and
 - iii) Months 10 through 12: 25% of annual base salary.
- b) Bonus severance equal to the average of bonuses paid of the two most recent full fiscal years prior to termination plus the bonus that would have been paid in the fiscal year of termination.

Also included in the agreement is a provision for termination payment due to a change of control, the CEO will receive:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

In April 2022, Mr. McFadden was granted the ability to earn up to 327,830 bonus rights of which 65,566 bonus rights had been earned as of September 30, 2024 (Note 8). The value of these bonus rights was determined to be \$54,045 and \$58,427 as of September 30, 2024, and December 31, 2023, respectively, and is included in other liabilities.

In May 2021, the Company hired Lauren D'Angelo as the Company's Chief Commercial Officer. In 2023 Ms. D'Angelo was promoted to Chief Operating Officer of the Company. The employment agreement signed in May 2021 with Ms. D'Angelo requires an annual base compensation currently at \$420,000 and includes a provision for a termination payment due to a change of control as follows:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

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NOTE 11 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

In May 2022, Ms. D'Angelo was granted the ability to earn up to 42,618 bonus rights of which 29,505 bonus rights had been earned as of September 30, 2024 (Note 8). The value of these bonus rights was determined to be \$20,205 and \$25,698 as of September 30, 2024, and December 31, 2023, respectively, and is included in other liabilities

In November 2021, the Company signed an employment agreement with Cedric O'Gorman, the Chief Medical Officer ("CMO") of the Company, requiring an annual base compensation of \$400,000. Included in the agreement is a provision for a termination payment without just cause of an amount equal to annual base compensation for a period of six months. If termination is due to a change of control, the CMO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

On January 1, 2023, Cedric O'Gorman resigned as the Chief Medical Officer of the Company.

In April 2022, the Company signed an employment agreement with Donald Kalkofen, the Chief Financial Officer ("CFO") of the Company, requiring an annual base compensation of \$420,000. Included in the agreement is a provision for termination payment due to a change of control, which if occurs, the CFO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

On October 1, 2024, Donald Kalkofen resigned as the Chief Financial Officer of the Company.

As of September 30, 2024, and December 31, 2023, \$610,946 and \$672,550, respectively, is owing to directors and officers of the Company and has been included in accounts payable and accrued liabilities. These balances are in relation to fees and management compensation and are non-interest bearing, unsecured and due on demand.

As of September 30, 2024, and December 31, 2023, the Company owed NLS \$ 1,211,463 for an outstanding promissory note with a carrying amount of \$1,211,463 (Note 7).

As of September 30, 2024, and December 31, 2023, the Company had advanced Alpha Seven \$55,000 and accrued interest of \$4,195 and \$2,550, respectively (Note 4). As of September 30, 2024, the Company set up a provision for loan losses on the outstanding loan balance and reversed the accrued interest.

Summary of key management personnel compensation:

	For the nine months ended	
	September 30, 2024	September 30, 2023
Management fees and salaries in research and development	\$ 643,573	\$ 393,595
Management fees and salaries in general and administrative expenses	1,007,319	852,094
Share-based compensation in research and development	314,092	403,791
Share-based compensation in general and administrative Expenses	596,723	1,501,411
Total related party transactions	\$ 2,561,707	\$ 3,150,921

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NOTE 12 — COMMITMENTS AND CONTINGENCIES

ALPHA-1062 Technology

In March 2015, the Company entered into the Memogain Technology License Agreement ("License Agreement") with NLS for the exclusive right and license to further develop and exploit the ALPHA-1062, formerly Memogain, Technology. The License Agreement set out the consideration as follows:

- The Company assumed all of NLS's obligations under the Memogain Asset Purchase Agreement which consisted of cumulative total payments to Galantos Pharma GmbH of \$11,160,200 (EUR 10,000,000), the cumulative total may be increased to \$ 16,740,300 (EUR 15,000,000) subject to certain provisions, involving sub-licensing the ALPHA-1062 technology and Company the receiving an upfront out-licensing payment of no less than \$8,928,160 (EUR 8,000,000). Royalty payments, are determined as follows (collectively the "Galantos Royalty Payments"):
 - 3% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
 - 10% of any sublicensing revenue; and
 - 25% of an upfront payment or milestone payment paid by a sub -licensee to the Company;
- Upon completion of the Galantos Royalty Payments, a royalty payment to NLS of 1% of the revenue received from the ALPHA-1062 Technology by the Company over \$ 100 million per annum; and
- The issuance of a promissory note of \$ 1,400,000 to NLS (Note 7).

The expiration date is twenty years from the Commencement Date (March 15, 2035) or the expiration of the last patent obtained (existing patents extend through 2042) pursuant, whichever event shall last occur, unless earlier terminated pursuant to bankruptcy or insolvency of the licensee; court order against the licensee; or a winding up, liquidation or termination of the existence of the licensee occurs.

No payments have been made to date related to the Galantos Royalty Payments.

On January 1, 2016, the Company assumed NLS's obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consist of cumulative total payments to Galantos Consulting of \$2,142,920 (EUR 2,000,000), the cumulative total may be increased to \$3,348,060 (EUR 3,000,000) subject to certain provisions, which is to be paid as follows (collectively the "Galantos Consulting Payments"):

- 1% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
- 2% of any sublicensing revenue; and
- 2% of an upfront payment or milestone payment paid by a sub -licensee to the Company.

The termination date is set as the date at which no further payments of any nature are due.

No payments have been made to date relating to the Galantos Consulting Payments.

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NOTE 12 — COMMITMENTS AND CONTINGENCIES (cont.)

ALPHA-0602 Technology

In November 2020, the Company entered into a license agreement with NLS for the world -wide exclusive right to the Progranulin ("ALPHA-0602") Technology. In accordance with the agreement, the Company will pay the following:

- \$50,000 to NLS before January 15, 2021 (paid);
- a royalty of 1.5% of the commercial sales, capped at \$ 2,000,000, to NLS;
- 10% of any Upfront Payments the Company may receive in the future in excess of \$2,000,000.

The ALPHA-0602 Technology license agreement shall terminate 11 years (November 3, 2031) from the Commencement Date, expiration of the last patents, or when full payment has been made, whichever shall first occur.

The total amount payable to NLS under this agreement shall not exceed \$ 2,000,000. Regarding the ALPHA-602 technology the Company paid \$ 50,000 in January 2021 as per the license agreement. No payments have been made to date under the above NLS world-wide exclusive rights for the royalties or Upfront Payments the Company may receive.

During the nine months ended September 30, 2024, the Company decided to discontinue development of the ALPHA-602 technology.

Spartan Capital Securities, LLC Agreement

On May 30, 2023, the Company agreed to enter into an ongoing consulting services agreement (the "Spartan Consulting Agreement") for a three-year term with Spartan Capital Securities, LLC ("Spartan"). The services include advising and assisting on potential business development transactions, strategic introductions, assisting management with enhancing corporate and stockholder value, and capital raising advice. The Company paid Spartan a consulting fee in the aggregate amount of \$480,000, payable in three equal installments with each installment being subject to the Company achieving certain business development and capital raising objectives. Spartan was also be entitled to earn and receive additional Common Shares of the Company which will be issued to Spartan on a rolling basis upon completion of predetermined business development objectives including the closing of certain offering amounts and the completion of material business transactions. As of December 31, 2023, \$160,000 in consulting fees have been paid and no additional common shares had been issued under the consulting services agreement with Spartan.

On January 19, 2024, the Company paid the remaining consulting fee of \$ 320,000 and issued 582,331 Common Shares valued at \$3,202,823 to Spartan and its assignees pursuant to the Spartan Consulting Agreement.

Legal Proceedings

During the normal course of business, the Company may become involved in legal claims that may or may not be covered by insurance. Management does not believe that any such claims would have a material impact on the Company's unaudited condensed interim consolidated financial statements.

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NOTE 13 — CAPITAL DISCLOSURE AND MANAGEMENT

The Company defines its capital as all components of stockholders' equity (deficiency). The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern.

The Company manages its capital structure to maximize its financial flexibility making adjustments to it in response to changes in economic conditions and the risk characteristics of the underlying assets and business opportunities. The Company does not presently utilize any quantitative measures to monitor its capital. The Company is not subject to externally imposed capital requirements.

NOTE 14 — LIQUIDITY RISK

Liquidity risk is the risk that the Company will not be able to meet its financial obligations associated with financial liabilities. The Company's ultimate success depends on the outcome of its research and development and collaboration activities. The Company expects to incur additional losses in the future and anticipates the need to raise additional capital to continue to execute its long-range business plan. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

Contractual undiscounted cash flow requirements for financial liabilities as of September 30, 2024, are as follows:

	≤1 Year	>1 Year	Total
Accounts payable	\$ 1,743,596	\$ —	\$ 1,743,596
Promissory note	1,211,463	—	1,211,463
	<u>\$ 2,955,059</u>	<u>\$ —</u>	<u>\$ 2,955,059</u>

Contractual undiscounted cash flow requirements for financial liabilities as of December 31, 2023, are as follows:

	≤1 Year	>1 Year	Total
Accounts payable	\$ 1,394,117	\$ —	\$ 1,394,117
Promissory note	1,211,463	—	1,211,463
	<u>\$ 2,605,580</u>	<u>\$ —</u>	<u>\$ 2,605,580</u>

NOTE 15 — SEGMENTED INFORMATION

The Company currently operates in a single reportable operating segment, being the researching and developing pharmaceutical treatments for neurological diseases in the geographical areas of Canada and the United States of America. Geographic information for the United States and Canada as of September 30, 2024, and December 31, 2023, is as follows:

As of September 30, 2024			
	Canada	United States	Total
Non-current assets other than financial instruments	\$ 432,885	\$ 855	\$ 433,740

As of December 31, 2023			
	Canada	United States	Total
Non-current assets other than financial instruments	\$ 532,276	\$ 1,455	\$ 533,731

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)
September 30, 2024, and 2023

NOTE 16 — NET LOSS PER SHARE

Net loss per common share has been computed on the basis of the weighted -average number of common shares outstanding during the nine months ended September 30, 2024, and 2023. Since the Company was in a loss position for the nine months ended September 30, 2024, and 2023, basic net loss per share was the same as diluted net loss per share for the period presented.

The following table sets forth the computation of (loss) earnings per share:

	For the three months ended		For the nine months ended	
	September 30, 2024	September 30, 2023	September 30, 2024	September 30, 2023
Numerator				
Net loss – basic and diluted	\$ (1,859,906)	\$ (3,269,123)	\$ (8,978,129)	\$ (8,049,256)
Denominator				
Weighted average shares used to compute net loss per share, basic and diluted	6,030,259	3,880,433	5,928,460	3,599,266
Net loss per share – basic and diluted	\$ (0.31)	\$ (0.84)	\$ (1.51)	\$ (2.23)

The following potentially dilutive common shares related to outstanding securities for the nine months ended September 30, 2024, and 2023 were excluded from the computation of diluted net loss per share because their effect would have been anti-dilutive for the year, see below:

	For the nine months ended	
	September 30, 2024	September 30, 2023
Warrants	2,777,647	1,218,558
Common Share options	815,974	836,932
ACI Canada legacy performance options	265,642	338,842
Convertible Debentures	431,514	—
Total anti-dilutive features	4,290,779	2,394,332

NOTE 17 — SUBSEQUENT EVENTS

- Subsequent to September 30, 2024, the Company granted 32,000 Common Shares options to the CFO of the Company with an exercise price of CAD\$15.00 per share for a period of ten years from date of grant. The options will vest over three years vesting on a quarterly basis.
- On November 13, 2024, the Company completed a public offering of Common Shares by issuing 8,695,653 Common Shares at a public offering price of \$ 5.75 per share for gross proceeds of \$50,000,005. In connection with the US public offering, the Company incurred underwriting fees of approximately \$3.58 million.
- On November 13, 2024, as a result of the completion of the public offering, the Company's convertible notes automatically converted pursuant to their terms into 801,413 Common Shares at a conversion price of \$5.75 being the public offering price per share in the public offering. Additionally, the Company issued an additional 215,418 warrants exercisable to acquire 215,418 Common Shares at an exercise price of \$ 7.19 per share and the exercise price of the Company's existing 430,835 warrants issued in connection with the offering of the convertible notes was repriced from \$10.55 per share to \$ 7.19 per share.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors Alpha Cognition Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Alpha Cognition Inc. and its subsidiaries (the "Company") as of December 31, 2023 and 2022, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficiency) and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the consolidated 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.

Explanatory Paragraph — Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 1, as of December 31, 2023, the Company has not generated revenues since inception, and has an accumulated deficit of \$61,648,173 and a working capital deficiency of \$697,554. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Emphasis of Matter — Stock Consolidation

As disclosed in Note 17(f), on November 5, 2024, a 1 for 25 reverse stock split of the Company's common stock became effective. The Company's issued and outstanding Class B Preferred Series A Shares, performance shares, stock options and warrants have been adjusted to reflect the reverse stock split in accordance with their respective terms. All share, other equity instruments and per share information, in the accompanying consolidated financial statements and notes has been retroactively adjusted for the effects of the reverse split for all periods presented.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated 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 the 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 audits to obtain reasonable assurance about whether the consolidated 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.

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Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Manning Elliott LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada

April 3, 2024, except as to Note 17(f), as to which the date is November 6, 2024

We have served as the Company's auditor since 2019

ALPHA COGNITION INC.
CONSOLIDATED BALANCE SHEETS
(Expressed in United States Dollars)

	December 31, 2023	December 31, 2022
ASSETS		
Current assets		
Cash	\$ 1,404,160	\$ 2,083,696
Restricted cash	90,413	—
Prepaid expenses and other current assets	366,316	249,045
Related party note receivable	57,550	—
Total current assets	1,918,439	2,332,741
Equipment, net	1,721	3,824
Intangible assets, net	532,010	614,386
Total assets	\$ 2,452,170	\$ 2,950,951
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued liabilities	\$ 1,394,117	\$ 2,845,381
Promissory note – related party	1,211,463	1,211,463
Deferred income	10,413	—
Total current liabilities	2,615,993	4,056,844
Warrant liability	4,455,747	205,989
Other long-term liabilities	84,125	8,295
Total liabilities	7,155,865	4,271,128
Stockholders' (deficiency) equity		
Common shares, no par value, unlimited shares authorized, 4,728,359 and 2,440,938 shares issued and outstanding as of December 31, 2023, and December 31, 2022	39,760,287	27,956,155
Class A restricted common shares, no par value, unlimited shares authorized, nil and 280,000 shares issued and outstanding as of December 31, 2023, and December 31, 2022	—	3,103,620
Class B preferred shares, no par value, unlimited shares authorized, 316,655 shares issued and outstanding as of December 31, 2023, and December 31, 2022	62	62
Additional paid-in capital	17,288,430	15,589,229
Accumulated other comprehensive loss	(104,301)	(84,728)
Accumulated deficit	(61,648,173)	(47,884,515)
Total stockholders' (deficiency) equity	(4,703,695)	(1,320,177)
Total liabilities and Stockholders' (deficiency) equity	\$ 2,452,170	\$ 2,950,951

The accompanying notes to the financial statements are an integral part of these statements.

ALPHA COGNITION INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Expressed in United States Dollars)

	For the Year Ended December 31,	
	2023	2022
Operating expenses		
Research and development	\$ 4,833,973	\$ 8,717,945
General and administrative expenses	5,054,120	4,841,884
Total operating expenses	<u>9,938,093</u>	<u>13,559,829</u>
Net operating loss	<u>(9,938,093)</u>	<u>(13,559,829)</u>
Other income (expenses)		
Foreign exchange gain (loss)	9,928	(296,057)
Interest income	6,804	1,925
Grant income	191,087	—
Federal wage tax credits	69,416	—
Interest expense	(17,516)	(37,237)
Write-off of equipment	—	(5,506)
Change in fair value of warrant liability	(4,085,284)	1,823,444
Total other income (expenses)	<u>(3,825,565)</u>	<u>1,486,569</u>
Net loss	<u>(13,763,658)</u>	<u>(12,073,260)</u>
Other comprehensive loss		
Currency translation adjustment	(19,573)	16,806
Comprehensive loss	<u>\$ (13,783,231)</u>	<u>\$ (12,056,454)</u>
Net loss per share, basic and diluted:	<u>\$ (3.65)</u>	<u>\$ (4.44)</u>
Weighted-average shares used to compute net loss per share, basic and diluted	<u>3,774,219</u>	<u>2,718,888</u>

The accompanying notes to the financial statements are an integral part of these statements.

ALPHA COGNITION INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIENCY)
(Expressed in United States Dollars)

	Common Shares		Class A Restricted Shares		Preferred Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance, December 31, 2021	2,424,278	\$27,708,988	280,000	\$ 3,103,620	316,655	\$ 62	\$14,018,340	\$ (101,534)	\$(35,811,255)	\$ 8,918,221
Options exercised	16,660	247,167	—	—	—	—	(206,382)	—	—	40,785
Share-based compensation	—	—	—	—	—	—	1,777,271	—	—	1,777,271
Foreign exchange on translation	—	—	—	—	—	—	—	16,806	—	16,806
Net loss	—	—	—	—	—	—	—	—	(12,073,260)	(12,073,260)
Balance, December 31, 2022	2,440,938	27,956,155	280,000	3,103,620	316,655	62	15,589,229	(84,728)	(47,884,515)	(1,320,177)
Units issued for cash	1,807,638	9,223,587	—	—	—	—	—	—	—	9,223,587
Share issuance costs	85,183	(1,458,151)	—	—	—	—	402,166	—	—	(1,055,985)
Conversion of restricted shares to common shares	280,000	3,103,620	(280,000)	(3,103,620)	—	—	—	—	—	—
Options exercised	114,600	1,451,519	—	—	—	—	(1,424,519)	—	—	27,000
Share-based compensation	—	—	—	—	—	—	2,369,585	—	—	2,369,585
Effect on change in functional currency	—	(4,541,545)	—	—	—	—	351,969	—	—	(4,189,576)
Reallocation of derivative liability on re-pricing of warrants from CAD to USD exercise price	—	4,025,102	—	—	—	—	—	—	—	4,025,102
Foreign exchange on translation	—	—	—	—	—	—	—	(19,573)	—	(19,573)
Net loss	—	—	—	—	—	—	—	—	(13,763,658)	(13,763,658)
Balance, December 31, 2023	4,728,359	\$39,760,287	—	\$ —	316,655	\$ 62	\$17,288,430	\$ (104,301)	\$(61,648,173)	\$ (4,703,695)

The accompanying notes to the financial statements are an integral part of these statements.

ALPHA COGNITION INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in United States Dollars)

	For the year ended December 31,	
	2023	2022
Cash flows used in operating activities		
Net loss	\$ (13,763,658)	\$ (12,073,260)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	84,479	90,923
Accretion of discount on promissory note	—	24,273
Accrued expenditures for government grant	(80,000)	—
Accrued interest	—	8,230
Accrued interest income, related party	(2,550)	—
Change in fair value of warrant liability	4,085,284	(1,823,444)
Change in fair value of bonus rights liability	75,830	8,295
Share-based compensation	2,369,585	1,777,271
Loss on write-off of equipment	—	5,506
Changes in non-cash operating working capital items:		
Prepaid expenses and other current assets	(117,271)	619,787
Accounts payable and accrued liabilities	(1,451,264)	2,110,301
Net cash used in operating activities	(8,799,565)	(9,252,118)
Cash flows provided by (used in) investing activities		
Acquisition of equipment	—	(4,876)
Net cash provided by (used in) investing activities	—	(4,876)
Cash flows provided by financing activities		
Units issued for cash	9,223,587	—
Exercise of options	27,000	40,785
Proceeds received less expenses from government grant	201,500	—
Amounts paid from restricted government grant funds	(111,087)	—
Share issuance costs	(1,055,985)	—
Issuance of related party note	(55,000)	—
Net cash provided by financing activities	8,230,015	40,785
Effect of foreign exchange on cash	(19,573)	(1,888)
Change in cash during the year	(589,123)	(9,218,097)
Cash, beginning of year	2,083,696	11,301,793
Cash, end of year	\$ 1,494,573	\$ 2,083,696
Cash consists of:		
Cash	\$ 1,404,160	\$ 2,083,696
Restricted Cash	90,413	—
	\$ 1,494,573	\$ 2,083,696
Supplemental Disclosure		
Cash paid for interest	\$ 59,777	\$ 16,000
Supplemental non-cash disclosures		
Reallocation of fair value of share options upon exercise	\$ 1,424,519	\$ 206,382
Reclassification of derivative liability for warrants priced with USD per change in functional currency	\$ 351,969	\$ —
Reclassification of derivative liability of warrants priced with CAD per change in functional currency	\$ 4,541,545	\$ —
Reclassification of derivative liability for warrants re-priced from CAD to USD exercise price	\$ 4,025,102	\$ —
Common shares issued for share issuance costs	\$ 618,004	\$ —
Warrants issued for share issuance costs	\$ 402,166	\$ —

The accompanying notes to the financial statements are an integral part of these statements.

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022
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NOTE 1 — NATURE OF OPERATIONS AND GOING CONCERN

Alpha Cognition Inc. ("ACI" or the "Company") is in the business of researching and developing pharmaceutical treatments for neurological diseases. The registered and records office of the Company is 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8. As of May 1, 2023, the Company's common shares commenced trading on the Canadian Securities Exchange ("CSE") under the symbol "ACOG", previously the Company's shares were traded on the TSX Venture Exchange ("TSX-V") until April 28, 2023, when the Company had them delisted. The Company's shares also trade on the Over-The-Counter Markets ("OTC") under the trading symbol "ACOGF".

On November 5, 2024, the Company completed a reverse stock split on the ratio of one share issued for every previously issued and outstanding twenty-five shares. All current and comparative references to the number and price per share for common shares, preferred shares, options, warrants, ACI Canada legacy performance options and weighted average number of shares, loss per share, have been restated to give effect to this reverse stock split.

Going Concern

These consolidated financial statements have been prepared with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business rather than through a process of forced liquidation. The Company has not generated revenues from its operations to date and as of December 31, 2023, had a working capital deficiency of \$697,554 and an accumulated deficit of \$61,648,173 which has been primarily financed by equity. The Company's continuing operations, as intended, are dependent upon its ability to generate cash flows or obtain additional financing. Management is of the opinion that it does not have sufficient working capital to meet the Company's liabilities and commitments as they become due for the 12 months from the date these financial statements were available to be issued. Management intends to finance operating costs over the next twelve months with private placements and public offerings of the Company's common shares and funds received from the exercise of warrants and share options. Additionally, the Company will also consider funding that may arise through partnerships activities and debt. There is a risk that additional financing will not be available on a timely basis or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern.

These consolidated financial statements do not reflect adjustments that would be necessary if the going concern assumption was not appropriate. If the going concern assumption was not appropriate for these consolidated financial statements, adjustments would be necessary to the balance sheet used. Such adjustments could be material.

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation — The accompanying consolidated financial statements of the Company have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP" or "GAAP").

Principles of Consolidation — These consolidated financial statements include the accounts of the Company, its wholly owned subsidiary, Alpha Cognition Canada Inc. ("ACI Canada") and ACI Canada's wholly owned subsidiary Alpha Cognition USA Inc. ("ACI USA").

All significant intercompany accounts and transactions between the Company and its subsidiaries have been eliminated upon consolidation.

Functional and Reporting Currency — The functional currency of an entity is the currency of the primary economic environment in which the entity operates. Effective August 31, 2023, the functional currency of the Company was updated to the United States Dollar ("USD" or U.S. Dollar") as management assessed that the currency of the primary economic environment in which the Company operates changed to USD on that date. The key factor influencing this decision was the change in the Company's primary funding from Canadian dollars ("CAD") to USD, whereas the functional currency of its subsidiaries was unchanged and remain in USD. Prior to USD the functional currency of the Company was CAD, and its subsidiaries was USD. Changes to the Company's functional currency have been accounted for on a prospective basis from August 31, 2023. The determination of functional currency was made in accordance with the Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") 830, *Foreign Currency Matters*.

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

The Company's reporting currency is the USD. For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's CAD operations are translated to USD at the exchange rate on the reporting date. The income and expenses are translated using average exchange rates. Foreign currency differences that arise on translation for consolidated purposes are recognized in other comprehensive loss on the consolidated statements of operations and comprehensive (loss) income.

Use of Estimates and Assumptions — The preparation of these consolidated financial statements in conformity with GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as of the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates, to ensure that those estimates effectively reflect changes in the Company's business and new information as it becomes available. Management bases these estimates on historical and anticipated results, trends, and various other assumptions that the Company believes are reasonable under the circumstances, including assumptions as to forecasted amounts and future events. Actual results could differ materially from these estimates under different assumptions or conditions.

Cash and Cash Equivalents — The Company considers cash to include currency on hand, demand deposits with banks or other financial institutions, and other kinds of accounts that have the general characteristics of demand deposits in that the Company may deposit additional funds at any time and also effectively may withdraw funds at any time without prior notice or penalty. The Company considers cash equivalents to include term deposits, certificates of deposit, and all highly liquid instruments with original maturities of three months or less to be cash equivalents.

Concentrations of Credit Risk — The Company's financial instruments subject to concentrations of credit risk consists primarily of cash and cash equivalents. Cash is deposited with financial institutions with high credit quality which are typically in excess of insured limits. Additionally, as of December 31, 2023, the Company had \$475,567 in cash held at its payment processing company in a demand account to be used to pay accounts payable. During the years ending December 31, 2023, and 2022, the Company did not experience any loss related to these concentrations.

Equipment — Equipment is stated at historical cost less accumulated depreciation. Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in the consolidated statement of operations. Repairs and maintenance are expensed as incurred. Depreciation is charged over the estimated useful lives using the declining balance method as follows:

Computer equipment	55%
Other equipment	20%

Intangible Assets — The Company accounts for intangible assets in accordance with FASB ASC 350 , *Intangibles — Goodwill and Other*. The Company's intangible assets consist of exclusive licenses that allow the Company to further develop and exploit the ALPHA-1062 and ALPHA-602 Technology, as defined in Note 11. The licenses are carried at cost and amortized on a straight-line basis over their estimated useful life of 15 years.

Leases — The Company accounts for leases using FASB ASC 842, *Leases*. The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less. The lease payments associated with these leases are charged directly to the consolidated statement of operations on a straight-line basis over the lease term. During the year ended December 31, 2022, all of the Company's leases were considered short-term leases with a term of 12 months or less and are charged directly to the consolidated statement of operations on a straight -line basis over the lease term. The Company had no leases outstanding during the year ended December 31, 2023.

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022
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NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Impairment of Long-Lived and Non-Financial Assets — The Company reviews long-lived assets, primarily comprised of equipment and definite life intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future net cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the asset and whether any impairment indicators exist. No impairment losses were recognized for the years ending December 31, 2023 and 2022.

Income Taxes — The Company uses the asset and liability method to account for income taxes in accordance with ASC 740, *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on future tax consequences attributable to differences between the consolidated financial statements carrying amounts of existing assets and liabilities and their respective tax bases, tax loss and credit carry forwards.

Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that include the enactment date. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company recognizes the effect of income tax positions only if those position are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than a 50% likelihood of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

Research and Development Costs — The Company expenses all research and development costs incurred in accordance with the Accounting Standard Codifications as promulgated by FASB ASC 730, *Research and Development*.

Advertising and Marketing Costs — The Company expenses advertising and marketing costs when incurred. During the years ending December 31, 2023, and 2022, the Company incurred advertising and marketing expenses of \$19,791 and \$31,733, respectively, which is included in general and administrative expenses in the consolidated statements of operations and comprehensive loss.

Loss Per Share — Basic loss per share is computed by dividing net loss available to ordinary stockholders by the weighted-average number of common shares outstanding during the reporting period. If applicable, diluted income per share is computed similar to basic income per share except that the weighted average shares outstanding are increased to include potential common shares for the assumed exercise of share options, and warrants, if dilutive. The number of potential common shares is calculated by assuming outstanding share options and warrants were exercised and that the proceeds from such exercises were used to acquire common shares at the average market price during the reporting periods. For the periods presented, this calculation proved to be anti-dilutive.

Share-Based Compensation — The Company accounts for share-based compensation in accordance with ASC 718, *Compensation — Share-Based Compensation*, which requires compensation cost for the grant-date fair value of share-based awards to be recognized over the requisite service period. The Company accounts for forfeitures when they occur. The fair value of share-based awards, granted or modified, is determined on the grant date (or modification or acquisition dates, if applicable) at fair value, using the Black-Scholes option pricing model. This model is affected by the Company's share price as well as assumptions regarding a number of subjective variables. These subjective variables include, but are not limited to, the Company's expected share price volatility over the terms of the awards, and actual and projected employee share option exercise behaviors. The Company records share-based compensation expense for service-based share options on an accelerated attributions method over the requisite service period.

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022
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NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

The Company records share-based compensation expense for performance-based share options on an accelerated attribution method over the requisite service period, and only if performance-based conditions are considered probable to be satisfied.

The fair value of options is determined using the Black-Scholes option pricing model which incorporates all market vesting conditions. The number of shares and options expected to vest is reviewed and adjusted at the end of each reporting period such that the amount recognized for services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest.

Liability-Based Awards — Bonus right awards that include cash settlement features are accounted for as liability-based awards in accordance with ASC 718, *Compensation — Share Based Compensation*. The fair value of the bonus right awards is estimated using a Black-Scholes option-pricing model and is revalued on each reporting date, based on the probability of the expected awards to vest, until settlement. Changes in the estimated fair value of the bonus right awards are recognized within general and administrative expense in the consolidated statement of operations and comprehensive loss over the vesting period. Key assumptions in the calculation of the fair value of the bonus right awards include expected volatility, risk-free interest rate, expected life, and fair value per award.

Segment Reporting — The Company currently operates in researching and developing pharmaceutical treatments for neurological diseases industry. Based on the guidance of ASC 280, *Segment Reporting*, the Company has one operating segment. For the years ending December 31, 2023 and 2022, the Company operated in two geographical areas; the United States and Canada.

Derivative liability — The Company's debt instruments contain a host liability and an embedded conversion feature. The Company uses the guidance under FASB ASC Topic 815 *Derivatives and Hedging* ("ASC 815") to determine if the embedded conversion feature must be bifurcated and separately accounted for as a derivative under ASC 815. It also determines whether any embedded conversion features requiring bifurcation qualify for any scope exceptions contained within ASC 815. Generally, contracts issued or held by a reporting entity that are both (i) indexed to its own shares, and (ii) classified in stockholders' equity, would not be considered a derivative for the purposes of applying ASC 815. Any embedded conversion features that do not meet the scope exception noted above are classified as derivative liabilities, initially measured at fair value, and remeasured at fair value each reporting period with change in fair value recognized in the consolidated statements of operations and comprehensive loss. Any embedded conversion features that meet the scope exception under ASC 815 are initially recorded at their relative fair value in paid-in-capital and are not remeasured at fair value in future periods.

The Company uses the Black-Scholes option pricing model to determine the fair value of the conversion feature liability, the warrant liability, share-based options, and stand-alone share purchase warrants issued as noted above. This model requires the input of subjective assumptions including the following:

Risk-Free Interest Rate — The risk-free interest rate is based on the U.S. Treasury zero coupon bond issues in effect at the time of grant for periods corresponding with the expected term of option.

Dividend Yield — The Company has never paid dividends on its common shares and has no plans to pay dividends on its common shares. Therefore, the Company used an expected dividend yield of zero.

Expected Life — The Company's expected term represents the period that the Company's options granted are expected to be outstanding or the remaining contractual life of the conversion period and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term).

Expected Volatility — The Company's expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period equal to the expected term of the awards.

Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity.

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NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Fair Value Measurements — FASB ASC 820 — *Fair Value Measurements and Disclosures* defines fair value, establishes a framework for measuring fair value under U.S. GAAP, and expands disclosures about fair value measurements. In accordance with ASC 820, we have categorized our financial assets and liabilities based on the priority of the inputs to the valuation technique into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument.

Financial assets and liabilities recorded in the accompanying consolidated balance sheets are categorized based on the inputs to the valuation techniques as follows:

- | | |
|----------------|---|
| <i>Level 1</i> | — Financial instruments whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market which we have the ability to access at the measurement date. |
| <i>Level 2</i> | — Financial instruments whose values are based on quoted market prices in markets where trading occurs <i>infrequently</i> or whose values are based on quoted prices of instruments with similar attributes in active markets. |
| <i>Level 3</i> | — Financial instruments whose values are based on prices or valuation techniques that require inputs that are <i>both</i> unobservable and significant to the overall fair value measurement. These inputs reflect management's own assumptions about the assumptions a market participant would use in pricing the instrument. |

The Company's financial instruments consist of cash, restricted cash, related party note receivable, prepaid and other current assets, accounts payable, warrant liability, other liabilities, and promissory note. The fair value of the prepaid and other current assets, accounts payable, and promissory note approximate their carrying values either due to their current nature or current market rates for similar instruments.

Cash is measured at fair value on a recurring basis using level 1 inputs. Other liabilities consisting of the bonus rights liability and warrant liability are measured at fair value on a recurring basis using level 3 inputs. As of December 31, 2023 and 2022, the fair value of the bonus rights liability was \$84,125 and \$8,295, respectively. As of December 31, 2023 and 2022, the fair value of the warrant liability was \$4,455,747 and \$205,989, respectively.

Interest Rate Risk — Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Financial assets and liabilities with variable interest rates expose the Company to interest rate cash flow risk. The Company does not hold any financial liabilities with variable interest rates. Financial assets and liabilities with fixed interest rates expose the Company to interest rate price risk. As of December 31, 2023, and 2022, the promissory note bears interest of 5.5% and 2% per annum, respectively, and is subject to interest rate price risk. The Company maintains bank accounts which earn interest at variable rates, but it does not believe it is currently subject to any significant interest rate risk.

Currency Risk — Foreign currency exchange rate risk is the risk that the fair value or future cash flows will fluctuate as a result of changes in foreign exchange rates. The Company's operations are carried out in Canada and the United States. As of December 31, 2023, and 2022, the Company had net monetary assets (liabilities) of approximately (\$36,000) and \$690,000, respectively, denominated in Canadian dollars.

These factors expose the Company to foreign currency exchange rate risk, which could have an adverse effect on the profitability of the Company. A 10% change in the exchange rate with the Canadian dollar would change net loss and comprehensive loss by approximately \$14,500. At this time, the Company currently does not have plans to enter into foreign currency future contracts to mitigate this risk; however, it may do so in the future.

ALPHA COGNITION INC.
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NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Grant Accounting — All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of operations and comprehensive loss. When grant proceeds are initially received, they are recorded as deferred income and restricted cash. Grant proceeds used to pay for study costs and are expensed as incurred, with a corresponding amount of grant revenue recorded along with a reduction of the balance of the deferred income liability. The Company classifies the balance of cash received from grants as restricted cash, when the proceeds from the grant have been designated for use in specified research. During the year ended December 31, 2023, the Company recorded grant income of \$191,087 from its R&D Grant (defined in Note 3) in the consolidated statements of operations and comprehensive loss.

Accounting Pronouncements Not Yet Adopted — In August 2020, FASB issued ASU 2020 -06, *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, which is intended to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. ASU 2020-06 is effective for the Company for the fiscal year beginning after December 15, 2023. The Company is currently evaluating the impact of this new guidance on its consolidated financial statements.

On January 1, 2023, the Company adopted Accounting Standards Update ("ASU") No. 2016 -13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). ASU 2016-13 requires an entity to utilize a new impairment model that requires measurement and recognition of expected credit losses for most financial assets and certain other instruments, including but not limited to available-for-sale debt securities. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down to the security. The new guidance also modifies the impairment models for purchased financial assets with credit deterioration since their origination. There was no impact on the accompanying consolidated financial statements as of the adoption date.

NOTE 3 — R&D GRANT

On June 5, 2023, the Company was awarded a \$ 750,000 research and development grant from the Army Medical Research and Materiel Command for a pre-clinical study on the use of the ALPHA -1062 Intranasal to reduce blast mTBI (mild Traumatic Brain Injury) induced functional deficit and brain abnormalities ("R&D Grant"). The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense.

As of December 31, 2023, the Company has received \$ 201,500 for the R&D Grant and has restricted cash of \$90,413. As at December 31, 2023, the Company has deferred income of \$ 10,413 after the recognition of \$191,087 of grant income on the consolidated statement of comprehensive loss during the year ended December 31, 2023. Additionally, during the year ended December 31, 2023, the Company has incurred \$191,087 in expenses relating to the R&D Grant. The grant funds are to be used on the following project "Assessment of Functional Recovery and Reduced Tauopathy Following ALPHA-1062 Administration in a Repetitive Blast TBI Model in Rodents." The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense. Funds received from the R&D grant are restricted and to be used solely as outlined in the grant. The R&D grant funding will expire for use on September 30, 2028. The award funding is to subsidize the costs for research and development with the following specific Aims:

- Specific Aim 1: Quantify the ability of ALPHA -1062 to reduce brain-wide tauopathy and pathology in blast-mTBI;

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NOTE 3 — R&D GRANT (cont.)

- Specific Aim 2: Characterize and quantify changes in the inter-cellular associations between disease-associated microglia and cells of the basal forebrain induced by repetitive blast-mTBI and altered by ALPHA -1062 treatment;
- Specific Aim 3: Determine the efficacy of ALPHA -1062 to improve the adverse cognitive and behavioral outcomes consequent to repetitive blast-mTBI.

Per the R&G Grant budget expenses are expected to include cost to carry out the clinical trials including personnel costs, materials and supplies, animal housing, publications, and travel costs. The Company classifies any cash received from the R&D Grant that has not yet been used to pay ongoing R&D grant expenditures as restricted cash, as the proceeds from the grant are to be designated for the specified grant research.

NOTE 4 — RELATED PARTY NOTE RECEIVABLE

On July 7, 2023, the Company entered into a loan agreement with Alpha Seven Therapeutics, Inc., ("Alpha Seven") a related party through a common director and officers of the Company, to advance an amount up to \$150,000. The unsecured outstanding balance carries an interest rate of 12% per annum, a term of 12 months, no payments are due until maturity. As of December 31, 2023, the Company has advanced \$55,000 and accrued interest of \$ 2,550.

NOTE 5 — BALANCE SHEET COMPONENTS

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	December 31,	
	2023	2022
Other receivables	\$ 100,036	\$ 25,079
Prepaid expenses	206,377	205,784
Prepaid legal expenses	59,902	18,182
Prepaid expenses and other assets	\$ 366,316	\$ 249,045

Equipment

Equipment consisted of the following:

	December 31,	
	2023	2022
Equipment	\$ 12,370	\$ 12,370
Less: accumulated depreciation	(10,649)	(8,546)
Equipment, net	\$ 1,721	\$ 3,824

Depreciation expense for the years ended December 31, 2023, and 2022 was \$ 2,103 and \$8,547, respectively.

Accounts payable and accrued liabilities

	December 31,	
	2023	2022
Accounts payable	\$ 475,553	\$ 2,016,057
Other accrued liabilities	127,284	278,664
Accrued payroll and bonuses	791,280	550,660
Accounts payable and accrued liabilities	\$ 1,394,117	\$ 2,845,381

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NOTE 6 — INTANGIBLE ASSETS

Intangible assets consisted of the following:

December 31, 2023	Gross Amount	Accumulated Amortization	Net Balance	Weighted Average Remaining Useful Life
Licenses	\$ 1,235,633	\$ 703,623	\$ 532,010	6.61

December 31, 2022	Gross Amount	Accumulated Amortization	Net Balance	Weighted Average Remaining Useful Life
Licenses	\$ 1,235,633	\$ 621,247	\$ 614,386	7.58

Amortization expense for the years ended December 31, 2023, and 2022 was \$ 82,376 and \$82,376, respectively.

The following table outlines the estimated future annual amortization expense related to intangible assets as of December 31, 2023:

Years ended December 31,	
2024	\$ 82,376
2025	82,376
2026	82,376
2027	82,376
2028	82,376
Thereafter	120,130
Total	\$ 532,010

NOTE 7 — PROMISSORY NOTE

In March 2015, the Company issued a promissory note of \$ 1,400,000 to Neurodyn Life Sciences Inc ("NLS"), a related party through a common director, for the acquisition of the ALPHA-1062 Technology ("NLS Promissory Note") (Note 10).

On March 6, 2023, the Company and NLS agreed to an amendment to the promissory note pursuant to which the interest rate was increased from 2% to 5.5% and the maturity date was extended from December 31, 2022 to July 15, 2024. The amended agreement was effective March 1, 2023, and requires interest only payments until maturity. In addition, the amendment now incorporates both Alpha Cognition Inc. and Alpha Cognition Canada, Inc. under the Memogain Technology License Agreement and added clarity to certain terms and definitions under the license agreement. The Company evaluated the amended agreement under ASC 470 and determined that the amendment should be accounted for as a debt modification prospectively. The Company accounted for this transaction as a debt modification and did not record any gain or loss relating to the modification. The debt modification did not meet the greater than ten percent test and was deemed not substantial.

As at December 31, 2023 and 2022, the principal balance outstanding on the promissory note was \$1,211,463. During the years ended December 31, 2023 and 2022, the Company recorded interest expense and amortization of the premium, included in accretion expense, of \$59,777 and \$48,502, respectively.

Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 15, 2024 to July 15, 2025.

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NOTE 8 — OTHER LONG-TERM LIABILITIES

The Company adopted a cash bonus policy pursuant to which it may grant bonus rights to certain eligible participants, which include employees, officers, or consultants of the Company, that are payable in cash. These bonus rights are subject to certain vesting provisions and are revalued at each reporting date with the change being included in management fees and salaries on the Company's consolidated statement of loss and comprehensive loss.

During the year ended December 31, 2022, Officers of the Company were granted the ability to earn up to 370,448 bonus rights entitling them to a cash bonus equal to an amount by which the fair market value of one common share of the Company (calculated as the 30-day Volume Weighted Average Price ("VWAP") per common share) exceeds \$40.00 multiplied by the number of bonus rights vested. The bonus rights earned vest on the earlier of the date of a change of control or April 15, 2024, and will be payable upon vesting. The bonus rights will be earned in tranches based on the price of the Company's common share exceeding certain thresholds. As of December 31, 2023 and 2022, the Officers had earned 95,071 and 95,071, respectively, bonus rights.

On initial recognition, the Company recorded an expense of \$56,988 to recognize the proportionate unvested bonus rights. As at December 31, 2023 and 2022, the Company recognized a bonus right liability of \$84,125 and \$8,295, respectively. Total compensation expense for the bonus rights for the years ended December 31, 2023 and 2022, of \$75,830 and \$8,295 was recognized within general and administrative expenses, respectively. As of December 31, 2023 and 2022, there was \$14,660 and \$125,725 of unrecognized compensation expense in related to the bonus right awards, respectively.

In accordance with ASC 718, *Share-Based Payments*, the bonus right awards are considered liability-based awards and are revalued at each reporting date. The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the bonus rights liability as of December 31, 2023, and 2022:

	December 31, 2023	December 31, 2022
Risk-free interest rate	5.04%	4.51%
Expected life (in years)	0.29	1.29
Volatility	177.76%	94%
Weighted average fair value per bonus right	\$ 0.04	\$ 0.01

The number of bonus right awards granted to each executive is determined based on the business value of the Company at the earlier of (i) the date of a Change in Control or; (ii) the Vesting Date, as defined in the Company's Cash Bonus Policy. The Company estimates the expected number of bonus rights at the end of each reporting period based upon the likelihood of achieving the Business Value threshold, as defined in each executive's agreement. As of December 31, 2023 and 2022, 97,483 and 97,785 bonus right awards are expected to vest, respectively.

NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY)

Authorized Share Capital

The Company is authorized to issue the following share capital:

- Unlimited common voting shares without par value ("Common Shares")
- Unlimited Class A restricted voting shares without par value ("Restricted Shares")
- Unlimited Class B Preferred Series A voting shares without par value, convertible on a 1:1 basis into Common Share ("Class B Preferred Share")

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

Issued Share Capital

During the year ended December 31, 2023, the Company issued the following shares:

- Issued 949,906 private placement units at a price of CAD\$6.38 for total proceeds of \$4,506,055 (CAD\$6,055,650) with each unit consisting of one Common Share and one warrant exercisable at a price of CAD\$9.75 per warrant for a term of five years from the closing date ("Q1 2023 PP"). The Q1 2023 PP was completed through the closing of two tranches: one in February 2023 and one in March 2023. In connection with the Q1 2023 PP, the Company paid cash commissions of \$172,480, incurred legal fees of \$15,428, and issued 85,183 Common Shares and 12,986 agents warrants with an estimated fair value of \$618,004 and \$73,018, respectively. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of CAD\$9.75 for a term of 5 years.
- Issued 108,000 Common Shares for the exercise of 108,000 ACI Canada legacy performance options at a price of \$0.25 per share for total proceeds of \$27,000. As a result, the Company transferred \$1,344,480 from additional paid-in capital to share capital.
- On May 30, 2023, the Company announced a private placement offering to raise gross proceeds of \$6,500,000 at \$5.50 per unit ("Q2 2023 PP"). Each unit initially consisted of one common share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at \$7.75 per share for a period of three years from the closing date. The aggregate proceeds may be increased by 30% to accommodate any over-allotment. In accordance with the Q2 2023 PP, the Company has agreed to pay the finder ("Spartan") cash commissions of 10% of the gross proceeds, issue finder's warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list, and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list. The Q2 2023 PP capital raising activities were completed subsequent to December 31, 2023 (see Note 17(a)).
- On August 31, 2023, the Company completed an initial closing of the Q2 2023 PP by issuing 244,562 units at a price of \$5.50 for total proceeds of \$1,345,093 ("Q2 2023 PP Tranche 1"). Each unit consisted of one Common Share and one half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until August 31, 2026. In connection with the Q2 2023 PP Tranche 1, the Company paid cash commissions of \$180,051, incurred legal fees of \$28,334, and issued 10,912 agents warrants with an estimated fair value of \$44,292. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until August 31, 2026.
- On October 16, 2023, the Company completed the second closing of the Q2 2023 PP by issuing 63,873 units at a price of \$5.50 for total gross proceeds of \$351,303 ("Q2 2023 PP Tranche 2"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until October 16, 2026. In connection with the closing of Q2 2023 PP Tranche 2, the Company paid cash commissions of \$51,600, incurred legal fees of \$5,371, and issued 3,127 agents warrants with an estimated fair value of \$10,199. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until October 16, 2026.
- On November 8, 2023, the Company completed the third closing of the Q2 2023 PP by issuing 183,636 units at a price of \$5.50 for total gross proceeds of \$1,009,999 ("Q2 2023 PP Tranche 3"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until November 8, 2026. In connection with the closing of Q2 2023 PP Tranche 3, the

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

Company paid cash commissions of \$151,500, incurred legal fees of \$10,501, and issued 9,182 agents warrants with an estimated fair value of \$24,692. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until November 8, 2026. The Company also paid a consulting fee of US\$ 160,000 pursuant to the Spartan Consulting Agreement.

- On December 4, 2023, the Company amended the terms of the Q2 2023 PP. Each unit was amended to consist of one common share and one warrant. Each warrant will entitle the holder to purchase an additional common share of the Company at \$7.75 per share for a period of three years from the closing date.
- On December 22, 2023, the Company completed the fourth closing of the Q2 2023 PP by issuing 365,661 units at a price of \$5.50 for total gross proceeds of \$2,011,137 ("Q2 2023 PP Tranche 4"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.50 per share until December 22, 2026. In connection with the closing of Q2 2023 PP Tranche 4, the Company paid cash commissions of \$238,515 and issued 28,911 agents warrants with an estimated fair value of \$249,965. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until December 22, 2026.
- All 280,000 previously outstanding Restricted Shares were converted to Common Shares on August 29, 2023, for \$nil proceeds.
- 6,600 Common Shares in connection with the cashless exercise of 10,045 Common Share options with an exercise price of CAD\$5.50 per share; 3,444 Common Shares were surrendered. As a result, the Company transferred \$80,039 from additional paid-in capital to share capital.

During the year ended December 31, 2022, the Company issued the following shares:

- 14,000 Common Shares for the exercise of 14,000 ACI Canada legacy performance options at a price of \$0.25 per share for total proceeds of \$3,500. As a result, the Company transferred \$174,285 from additional paid-in capital to common shares.
- 2,660 Common shares for the exercise of 2,660 Common Share options at a price of CAD\$17.85 per share for total proceeds of \$37,285 (CAD\$47,495). As a result, the Company transferred \$32,097 from additional paid-in capital to common shares.

Escrow Shares

As of December 31, 2023 and 2022, the Company had 460,115 and 790,174 Common Shares, nil and 124,661 Restricted Shares, and 114,297 and 203,995 Class B Preferred Shares, respectively, held in escrow.

Warrants

During the year ended December 31, 2023, the Company issued the following warrants:

- 671,809 warrants with an exercise price of CAD\$9.75 and expiry of February 16, 2028, in connection with the first tranche of the Q1 2023 PP.
- 278,096 warrants with an exercise price of CAD\$9.75 and expiry of March 15, 2028, in connection with the second tranche of the Q1 2023 PP.

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

- 12,986 warrants with an exercise price of CAD\$9.75 and an expiry of March 15, 2028, to the agents of the Company's Q1 2023 PP. The warrants were valued at \$73,018 using the Black Scholes option-pricing model with the following assumptions: expected life of 5 years, volatility of 108.71%, discount rate of 3.05%, and a dividend yield of \$0.
- 122,284 warrants with an exercise price of \$7.75 and an expiry of August 31, 2026, in connection with the Company's Q2 2023 PP Tranche 1.
- 10,912 warrants with an exercise price of \$7.75 and an expiry of August 31, 2026, to the agents of the Company's Q2 2023 PP Tranche 1. The warrants were valued at \$44,292 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 91.24%, discount rate of 4.40%, and a dividend yield of \$0.
- 31,937 warrants with an exercise price of \$7.75 and an expiry of October 16, 2026, in connection with the Company's Q2 2023 PP Tranche 2.
- 3,127 warrants with an exercise price of \$7.75 and an expiry of October 16, 2026, to the agents of the Company's Q2 2023 PP Tranche 2. The warrants were valued at \$10,199 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 90.98%, discount rate of 4.60%, and a dividend yield of \$nil.
- 91,818 warrants with an exercise price of \$7.75 and an expiry of November 8, 2026, in connection with the Company's Q2 2023 PP Tranche 3.
- 9,182 warrants with an exercise price of \$7.75 and an expiry of November 8, 2026, to the agents of the Company's Q2 2023 PP Tranche 3. The warrants were valued at \$24,692 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 91.31%, discount rate of 4.00%, and a dividend yield of \$nil.
- 365,659 warrants with an exercise price of \$7.75 and an expiry of December 22, 2026, in connection with the Company's Q2 2023 PP Tranche 4.
- 28,911 warrants with an exercise price of \$7.75 and an expiry of December 22, 2026, to the agents of the Company's Q2 2023 PP Tranche 4. The warrants were valued at \$249,965 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 91.75%, discount rate of 3.70%, and a dividend yield of \$nil.

During the year ending December 31, 2023, 131,078 warrants with an aggregate fair value of \$1,394,858 expired resulting in \$1,394,858 being reallocated from reserves to Common Shares.

In December 2023, 452,711 warrants originally issued on February 16, 2023, had their exercise price modified from CAD\$9.75 to \$7.23 and 18,383 warrants originally issued on March 15, 2023, had their exercise price modified from CAD\$9.75 to \$7.08, no change was made to any expiry dates (See Note 9(b)).

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

The schedule of activity for the warrants is as follows:

	Number of Warrants	Weighted Average Exercise Price (as converted)	Remaining Contractual Term (Years)
Balance, December 31, 2021	639,249	\$ 28.75	1.84
Balance, December 31, 2022	639,249	28.75	0.84
Issued	1,626,721	7.48	—
Expired	(516,778)	34.01	—
Balance, December 31, 2023	1,749,192	\$ 7.66	3.43

A summary of the warrants outstanding and exercisable as of December 31, 2023, is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
122,472 \$	10.00	August 30, 2024
133,196 \$	7.75	August 31, 2026
35,064 \$	7.75	October 16, 2026
101,000 \$	7.75	November 8, 2026
394,570 \$	7.75	December 22, 2026
452,711 \$	7.23	February 16, 2028
219,098 \$	7.25 (CAD\$9.75)	February 16, 2028
272,699 \$	7.25 (CAD\$9.75)	March 15, 2028
18,383 \$	7.08	March 15, 2028
1,749,193		

Warrant Liability

- a) Prior to August 31, 2023, the Company's functional currency was the CAD, as such, the Company recorded a warrant liability on the warrants outstanding with USD exercise prices. This derivative liability was being revalued at each reporting period.

The Company revalued its derivative liability upon the change in functional currency, which resulted in a loss on revaluation of \$145,980 and a gain of \$1,658,486 for the years ended December 31, 2023, and 2022, respectively.

Due to the change in functional currency on August 31, 2023, the derivative liability was measured at fair value using the Black-Scholes Option Pricing Model with a valuation date of August 31, 2023. The derivative liability of the Company on that date was \$351,969, which upon reclassification, was charged to equity as an increase in reserves of \$351,969.

Balance as of December 31, 2021	\$ 2,048,127
Revaluation of derivative liability	(1,842,138)
Balance as of December 31, 2022	205,989
Revaluation of derivative liability	145,980
Reclassification of derivative liability per change in functional currency	(351,969)
Balance as of December 31, 2023	\$ —

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

A summary of the warrants with USD exercise prices outstanding and exercisable as of August 31, 2023, upon the change in functional currency was as follows:

Warrants Outstanding	Exercise Price	Expiry Date
122,471 \$	10.00	August 30, 2024
122,281 \$	7.75	August 31, 2026
244,752		

The following weighted average assumptions were used in the Black -Scholes option-pricing model for the re-valuations for the warrants priced in USD as of August 31, 2023, and December 31, 2022:

	August 31, 2023	December 31, 2022
Risk-free interest rate	5.14%	4.03%
Dividend yield	—	—
Expected life (in years)	1.00	1.65
Volatility	131%	93%
Weighted average fair value per warrant	\$ 0.16	\$ 0.07

- b) On August 31, 2023, the Company's functional currency changed to the USD from the CAD; as such, the Company recorded a derivative liability on the warrants outstanding with previously issued CAD exercises prices. This derivative liability is being revalued at each reporting period.

As at August 31, 2023, the Company charged \$ 4,541,545 to equity to reclassify the derivative liability for warrants with exercise prices denominated in CAD using the Black-Scholes Option Pricing Model. The initial reclassification resulted in a decrease in share capital \$4,541,545. In December 2023, 11,777,336 warrants were re-priced from CAD to USD denominated exercise price which resulted in \$4,025,102 of the derivative liability being reclassified to equity. As of December 31, 2023, the Company revalued the derivative liability to \$4,455,747 and recorded a loss on revaluation of \$3,939,304.

Balance as of December 31, 2021 and 2022	\$ —
Reclassification of derivative liability per change in functional currency	4,541,545
Revaluation of derivative liability	3,939,304
Reclassification of derivative liability per change in exercise price	(4,025,102)
Balance as of December 31, 2023	\$ 4,455,747

A summary of warrants not issued for services with CAD exercise prices outstanding and exercisable as of December 31, 2023, is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
219,098 \$	7.25 (CAD\$9.75)	February 16, 2028
259,713 \$	7.25 (CAD\$9.75)	March 15, 2028
478,811		

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the initial valuation and re-valuations following the change in functional currency to USD, as at and December 31, 2023 and August 31, 2023:

	December 31, 2023	August 31, 2023
Risk-free interest rate	3.38%	6.31%
Dividend yield	—	—
Expected life (in years)	4.15	3.22
Volatility	87%	110%
Weighted average fair value per warrant	\$ 0.37	\$ 0.14

Share Options

Common Share Options

The Company's 2023 Share Option Plan (the "2023 Option Plan") for its officers, directors, employees and consultants was approved by stockholders on June 27, 2023. Pursuant to the 2023 Option Plan, the Company may grant non-transferable share options totaling in aggregate up to 20% of the Company's issued and outstanding Common Shares and Restricted Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price that will not be lower than the greater of the last closing price for the Common Shares as quoted on the CSE: (i) on the trading day prior to the date of grant; and (ii) the date of grant. All options granted pursuant to the 2023 Option Plan will be subject to such vesting requirements as may be imposed by the Board. In the event of a Change of Control, as defined in the 2023 Option Plan, all unvested options will vest immediately.

The 2022 Option Plan was previously adopted by the board and approved by stockholders on July 19, 2022, pursuant to which incentive share options were granted to certain directors, officers, employees and consultants (the "2022 Option Plan").

Under the 2022 Option Plan, the Company could grant non-transferable share options totaling in aggregate up to 10% of the Company's issued and outstanding Common Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price which is not less than that permitted by the TSX-V. In connection with listing of the Common Shares on the CSE, the Company adopted the 2023 Option Plan and determined that the 2022 Option Plan be closed to new grants. The options outstanding under the 2022 Option Plan, issued prior to the adoption of the 2023 Option Plan ("2022 Options") are not included in the maximum number of share options available for grant pursuant to the 2023 Option Plan and are not subject to the terms of the 2023 Option Plan; as such, the 2022 Options will continue to be governed by the 2022 Option Plan.

For accounting purposes, the cancellation and subsequent reissuance of these share options was treated as a modification. The incremental fair value is the difference between the fair value of the modified share-based payment and that of the original share-based payment both measured at the date of the modification.

The incremental fair value of \$98,017 resulting from the share option modifications is being recognized over the new vesting terms and the balance of the original grant-date fair value is being recognized over the remaining original vesting period.

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the Common Share options issued:

	December 31, 2023	December 31, 2022
Risk-free interest rate	3.12%	2.62%
Expected life (in years)	10	10
Volatility	103%	84%
Weighted average fair value per option	\$ 0.13	\$ 0.56

The following table summarizes the total amount of share-based compensation expense related to service conditions for Common Share options during the years ended December 31, 2023 and 2022:

	For the Years Ended	
	December 31, 2023	December 31, 2022
Research and development	\$ 540,076	\$ 519,140
General and administrative	1,645,265	1,148,580
Total share-based compensation	\$ 2,185,341	\$ 1,667,720

As of December 31, 2023, there was an unrecognized share-based compensation expense relating to service conditions for common share options of \$1,188,800.

Common share option activity is as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value ⁽¹⁾
Balance, December 31, 2021	211,903	\$ 20.86	9.22	\$ 1,774,312
Granted	46,800	15.36	—	—
Expired	(35,800)	24.29	—	—
Exercised	(2,660)	13.18	—	—
Balance, December 31, 2022	220,243	18.12	8.47	—
Granted	647,600	4.16	—	—
Expired	(30,911)	25.34	—	—
Exercised ⁽²⁾	(10,045)	4.16	—	—
Balance, December 31, 2023	826,887	\$ 4.44	9.07	\$ 6,647,836
Options exercisable, December 31, 2023	322,026	\$ 4.65	9.07	\$ 2,519,350

(1) The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share on December 31, 2023, and 2022. The calculation excludes options with an exercise price higher than the closing price of the Company's share on December 31, 2023 and 2022.

(2) In accordance with the Company's 2023 Option Plan, option holders exercised 10,045 Common Share options on a cashless basis (net exercise) for the issuance of 6,600 Common Shares.

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NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

ACI Canada Legacy Performance Options

The Company retained ACI Canada's share option plan whereby ACI Canada could grant share options to directors, officers, employees and consultants enabling them to acquire common shares. Options granted had a maximum term of ten years and the board of directors determined the vesting requirements. From time to time, the Company granted performance-based share options to management and consultants. These options vest based on the Company's achievement of certain performance goals and operational metrics, as applicable, subject to continuous employment by each recipient.

The following table summarizes total amount of share-based compensation expense related to performance conditions for the ACI Canada legacy performance options during the years ended December 31, 2023 and 2022:

	For the Years Ended	
	December 31, 2023	December 31, 2022
Research and development	\$ 184,244	\$ 109,551
General and administrative	—	—
Total share-based compensation	\$ 184,244	\$ 109,551

As of December 31, 2023 and 2022, there was no unrecognized share -based compensation expense relating to service condition awards.

The following table summarizes ACI Canada legacy performance option activity for the Company:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value ⁽¹⁾
Balance, December 31, 2021	397,642	\$ 0.23	6.68	\$ 2,073,837
Cancelled	(2,800)	0.25	—	—
Exercised	(14,000)	0.25	—	—
Balance, December 31, 2022	380,842	0.23	5.91	1,986,561
Exercised	(108,000)	0.25	—	—
Balance, December 31, 2023	272,842	\$ 0.22	4.51	\$ 3,228,973
Options exercisable, December 31, 2023	256,042	\$ 0.22	4.47	\$ 3,030,650

- (1) The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share on December 31, 2023 and 2022. The calculation excludes options with an exercise price higher than the closing price of the Company's share on December 31, 2023, and 2022.

NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management personnel include the Company's executive officers and members of its Board of Directors.

In September 2018, the Company signed a management agreement with CMI Cornerstone Management Corp. ("CMI"), a company controlled by Ken Cawkell, former CEO and a director of the Company, which requires monthly payments of \$15,000. In June 2019, the Company amended the agreement to increase the monthly fees to \$18,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$432,000 less any fees previously paid under the agreement between June 1, 2019 and the date of termination or (ii) \$54,000. On September 1, 2022, the

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NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

Company amended the agreement to decrease the monthly fees to \$ 9,000. On April 30, 2023, the Company amended the agreement to an hourly fee of \$400 for services rendered. The amendment included a payment of \$54,000 for the termination fee.

In September 2018, the Company signed a management agreement with 9177 – 586 Quebec Inc., later assigned to 102388 P.E.I. Inc. ("PEI Inc."), companies controlled by Denis Kay, Chief Scientific Officer of the Company, which requires monthly payments of \$13,333 per month for an effective term of two years. In June 2019, the Company amended the agreement to increase the monthly fees to \$15,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$360,000 less any fees previously paid under the agreement between June 1, 2019 and the date of termination or (ii) \$45,000. On August 15, 2022, the Company amended the agreement to decrease the monthly fees to \$7,500.

In August 2020, the Company signed a management agreement with Seatrend Strategy Group, ("Seatrend"), a company controlled by Jeremy Wright, the Chief Financial Officer of the Company, which required monthly payments of \$6,000. In October 2020, the Company amended the agreement to increase the monthly fees to \$15,000. Included in the agreement was a provision for a termination payment of six's month's fees. On April 12, 2022, Jeremy Wright resigned as the CFO of the Company and was paid a termination payment of \$90,000.

In February 2021, the Company signed a consulting agreement with Michael McFadden, CEO of the Company, requiring an annual base compensation of \$500,000. A new employment agreement was signed in March 2022 which included in the agreement is a provision for termination payment without just cause of:

- a) Severance payments for a period of twelve months with the following terms:
 - i) Months 1 through 6: 100% of annual base salary;
 - ii) Months 7 through 9: 50% of annual base salary; and
 - iii) Months 10 through 12: 25% of annual base salary.
- b) Bonus severance equal to the average of bonuses paid of the two most recent full fiscal years prior to termination plus the bonus that would have been paid in the fiscal year of termination.

Also included in the agreement is a provision for termination payment due to a change of control, the CEO will receive:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

In April 2022, Mr. McFadden was granted the ability to earn up to 327,830 bonus rights of which 65,566 bonus rights had been earned as of December 31, 2023 (Note 8). The value of these bonus rights was determined to be \$58,427 and \$5,819 as of December 31, 2023 and 2022, respectively, and is included in other liabilities.

In May 2021, the Company hired Lauren D'Angelo as the Company's Chief Commercial Officer. In 2023 Ms. D'Angelo was promoted to Chief Operating Officer of the Company. The employment agreement signed in May 2021 with Ms. D'Angelo requires an annual base compensation currently at \$420,000 and includes a provision for a termination payment due to a change of control as follows:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

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NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

In May 2022, Ms. D'Angelo was granted the ability to earn up to 42,618 bonus rights of which 29,505 bonus rights had been earned as of December 31, 2023 (Note 8). The value of these bonus rights was determined to be \$25,698 and \$2,476 as of December 31, 2023 and 2022, respectively, and is included in other liabilities.

In November 2021, the Company signed an employment agreement with Cedric O'Gorman, the Chief Medical Officer ("CMO") of the Company, requiring an annual base compensation of \$400,000. Included in the agreement is a provision for a termination payment without just cause of an amount equal to annual base compensation for a period of six months. If termination is due to a change of control, the CMO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

On January 1, 2023, Cedric O'Gorman resigned as the Chief Medical Officer of the Company.

As of December 31, 2023, and 2022, \$672,550 and \$619,361, respectively, is owing to directors and officers of the Company and has been included in accounts payable and accrued liabilities. These balances are in relation to fees and management compensation and are non-interest bearing, unsecured and due on demand.

As of December 31, 2023, the Company owed NLS \$ 1,211,463 for an outstanding promissory note with a carrying amount of \$1,220,372 (Note 7).

As of December 31, 2023, the Company has advanced Alpha Seven \$ 55,000 and accrued interest of \$2,550 (Note 4).

Summary of key management personnel compensation:

	For the Years Ended	
	December 31, 2023	December 31, 2022
Other general and administrative	\$ —	\$ 9,555
Other research and development	—	10,500
Management fees and salaries	1,490,459	1,166,371
Research and development – management fees and salaries	703,453	939,712
Share-based compensation	2,351,281	1,576,235
Total related party transactions	\$ 4,545,193	\$ 3,702,373

NOTE 11 — COMMITMENTS AND CONTINGENCIES

ALPHA-1062 Technology

In March 2015, the Company entered into the Memogain Technology License Agreement ("License Agreement") with NLS for the exclusive right and license to further develop and exploit the ALPHA-1062, formerly Memogain, Technology. The License Agreement set out the consideration as follows:

- The Company assumed all of NLS's obligations under the Memogain Asset Purchase Agreement which consisted of cumulative total payments to Galantof Pharma GmbH of \$10,675,000 (€10,000,000), the cumulative total may be increased to \$16,013,000 (€15,000,000) subject to certain provisions, involving

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NOTE 11 — COMMITMENTS AND CONTINGENCIES (cont.)

sub-licensing the ALPHA-1062 technology and Company the receiving an upfront out-licensing payment of no less than \$8,540,000 (€8,000,000). Royalty payments, are determined as follows (collectively the “Galantos Royalty Payments”):

- 3% of the net sales revenue received by the Company from the sale of any products relating to the Alpha-1062 Technology;
- 10% of any sublicensing revenue; and
- 25% of an upfront payment or milestone payment paid by a sub -licensee to the Company;
- Upon completion of the Galantos Royalty Payments, a royalty payment to NLS of 1% of the revenue received from the ALPHA-1062 Technology by the Company over \$ 100 million per annum and
- The issuance of a promissory note of \$ 1,400,000 to NLS (Note 7).

The expiration date is twenty years from the Commencement Date (March 15, 2035) or the expiration of the last patent obtained (existing patents extend through 2042) pursuant, whichever event shall last occur, unless earlier terminated pursuant to bankruptcy or insolvency of the licensee; court order against the licensee; or a winding up, liquidation or termination of the existence of the licensee occurs.

No payments have been made to date related to the Galantos Royalty Payments.

On January 1, 2016, the Company assumed NLS’s obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consist of cumulative total payments to Galantos Consulting of \$2,135,000 (€2,000,000), the cumulative total may be increased to \$ 3,203,000 (€3,000,000) subject to certain provisions, which is to be paid as follows (collectively the “Galantos Consulting Payments”):

- 1% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
- 2% of any sublicensing revenue; and
- 2% of an upfront payment or milestone payment paid by a sub -licensee to the Company.

The termination date is set as the date at which no further payments of any nature are due.

No payments have been made to date relating to the Galantos Consulting Payments.

ALPHA-602 Technology

In November 2020, the Company entered into a license agreement with NLS for the world -wide exclusive right to the Progranulin (“ALPHA-602”) Technology. In accordance with the agreement, the Company will pay the following:

- \$50,000 to NLS before January 15, 2021 (paid);
- a royalty of 1.5% of the commercial sales, capped at \$ 2,000,000, to NLS;
- 10% of any Upfront Payments the Company may receive in the future in excess of \$2,000,000.

The Alpha 602 Technology license agreement shall terminate 11 years (November 3, 2031) from the Commencement Date, expiration of the last patents, or when full payment has been made, whichever shall first occur.

The total amount payable to NLS under this agreement shall not exceed \$ 2,000,000. Regarding the ALPHA-602 technology the Company paid \$ 50,000 in January 2021 as per the license agreement. No payments have been made to date under the above NLS world-wide exclusive rights for the royalties or Upfront Payments the Company may receive.

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022
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NOTE 11 — COMMITMENTS AND CONTINGENCIES (cont.)***Spartan Capital Securities, LLC Agreement***

On May 30, 2023, the Company agreed to enter into an ongoing consulting services agreement (the "Spartan Consulting Agreement") for a three-year term with Spartan Capital Securities, LLC ("Spartan"). The services include advising and assisting on potential business development transactions, strategic introductions, assisting management with enhancing corporate and stockholder value, and capital raising advice. The Company will pay Spartan a consulting fee in the aggregate amount of \$480,000, payable in three equal installments with each installment being subject to the Company achieving certain business development and capital raising objectives. Spartan will also be entitled to earn and receive additional Common Shares of the Company which will be issued to Spartan on a rolling basis upon completion of predetermined business development objectives including the closing of certain offering amounts and the completion of material business transactions. As of December 31, 2023, \$160,000 in consulting fees have been paid and no additional common shares had been issued under the consulting services agreement with Spartan.

Subsequent to December 31, 2023, the Company paid the remaining consulting fee of \$ 320,000 and issued 14,558,285 common shares to Spartan and its assignees pursuant to the Spartan Consulting Agreement.

Leases

ACI USA, a subsidiary of the Company, leased office space in Stuart, Florida, under a non-cancelable operating lease which commenced on September 1, 2021, for a term of one year. Rent expense was \$8,000 for the year ended December 31, 2022.

The Company did not extend this lease agreement and it is not necessary to document the potential consideration for lease renewal. As of December 31, 2023 and 2022, the Company has no outstanding leases.

Legal Proceedings

During the normal course of business, the Company may become involved in legal claims that may or may not be covered by insurance. Management does not believe that any such claims would have a material impact on the Company's consolidated financial statements.

NOTE 12 — CAPITAL DISCLOSURE AND MANAGEMENT

The Company defines its capital as all components of stockholders' equity (deficiency). The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern.

The Company manages its capital structure to maximize its financial flexibility making adjustments to it in response to changes in economic conditions and the risk characteristics of the underlying assets and business opportunities. The Company does not presently utilize any quantitative measures to monitor its capital. The Company is not subject to externally imposed capital requirements.

NOTE 13 — LIQUIDITY RISK

Liquidity risk is the risk that the Company will not be able to meet its financial obligations associated with financial liabilities. The Company's ultimate success depends on the outcome of its research and development and collaboration activities. The Company expects to incur additional losses in the future and anticipates the need to raise additional capital to continue to execute its long-range business plan. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

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NOTE 13 — LIQUIDITY RISK (cont.)

Contractual undiscounted cash flow requirements for financial liabilities as of December 31, 2023, are as follows:

	≤1 Year	>1 Year	Total
Accounts payable	\$ 1,394,117	\$ —	\$ 1,394,117
Promissory note	1,211,463	—	1,211,463
	<u>\$ 2,605,580</u>	<u>\$ —</u>	<u>\$ 2,605,580</u>

Contractual undiscounted cash flow requirements for financial liabilities as of December 31, 2022, are as follows:

	≤1 Year	>1 Year	Total
Accounts payable	\$ 2,845,381	\$ —	\$ 2,845,381
Promissory note	1,211,463	—	1,211,463
	<u>\$ 4,056,844</u>	<u>\$ —</u>	<u>\$ 4,056,844</u>

NOTE 14 — SEGMENTED INFORMATION

The Company currently operates in a single reportable operating segment, being the researching and developing pharmaceutical treatments for neurological diseases in the geographical areas of Canada and the United States of America. Geographic information for the United States and Canada as of December 31, 2023 and 2022 is as follows:

	As at December 31, 2023		
	Canada	United States	Total
Non-current assets other than financial instruments	<u>\$ 532,276</u>	<u>\$ 1,455</u>	<u>\$ 533,731</u>

	As at December 31, 2022		
	Canada	United States	Total
Non-current assets other than financial instruments	<u>\$ 614,977</u>	<u>\$ 3,233</u>	<u>\$ 618,210</u>

NOTE 15 — NET LOSS PER SHARE

Net loss per common share has been computed on the basis of the weighted -average number of common shares outstanding during the years ended December 31, 2023 and 2022. Since the Company was in a loss position for the years ended December 31, 2023 and 2022, basic net loss per share was the same as diluted net loss per share for the years presented.

The following table sets forth the computation of (loss) earnings per share:

	Years Ended December 31,	
	2023	2022
Numerator		
Net loss – basic and diluted	<u>\$ (13,763,658)</u>	<u>\$ (12,073,260)</u>
Denominator		
Weighted average shares used to compute net loss per share, basic and diluted	<u>3,774,219</u>	<u>2,718,888</u>
Net loss per share – basic and diluted	<u>\$ (3.65)</u>	<u>\$ (4.44)</u>

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NOTE 15 — NET LOSS PER SHARE (cont.)

The following potentially dilutive outstanding securities for the years ended December 31, 2023 and 2022 were excluded from the computation of diluted net loss per share because their effect would have been anti-dilutive for the year, see below:

	For the Years Ended	
	December 31, 2023	December 31, 2022
Warrants	1,749,193	639,250
Common Share options	826,888	220,243
ACI Canada legacy performance options	272,842	380,842
Total anti-dilutive features	2,848,923	1,240,335

NOTE 16 — INCOME TAXES

No income tax expense was recorded by the Company for the years ended December 31, 2023, and 2022. The Company's federal statutory rate and state and provisional statutory rate was 15% and 12%, respectively. A reconciliation of the provision for income taxes to the income taxes at that statutory rate is as follows:

	For the Years Ended	
	December 31, 2023	December 31, 2022
Federal tax benefit at statutory rate	\$ (2,065,000)	\$ (1,811,000)
State and provisional tax benefit at statutory rate	(1,652,000)	(1,449,000)
Tax effect of:		
Permanent differences and others	1,299,000	214,000
Change in valuation allowance	2,418,000	3,046,000
Income tax recovery	\$ —	\$ —

The significant components of deferred tax assets and liabilities are as follows:

	For the Years Ended	
	December 31, 2023	December 31, 2022
Deferred income tax assets:		
Non-capital losses carried forward	\$ 11,055,000	\$ 8,823,000
Depreciation and amortization	157,000	135,000
Share issuance costs	357,000	194,000
Property and equipment	1,000	—
Total deferred tax assets	11,570,000	9,152,000
Valuation allowance	(11,570,000)	(9,152,000)
Net deferred tax asset	\$ —	\$ —

Realization of deferred tax assets is dependent upon future taxable income, if any. The Company established a valuation allowance to offset deferred tax assets as of December 31, 2023, and 2022 due to the uncertainty in the amount and timing of the realization of future tax benefits from its net operating loss carryforwards and other deferred tax assets.

Federal and state laws impose substantial restrictions on the utilization of net operating loss and tax credit carryforwards in the event of an ownership change for tax purposes, as defined in Section 382 of the Internal Revenue Code. As a result of such ownership changes, the annual limitation may result in the expiration of net operating losses and credits before utilization. The Company performed a Section 382 analysis through December 31, 2023. The Company has

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NOTE 16 — INCOME TAXES (cont.)

experienced ownership changes in the current year. The ownership change will not result in a limitation that will materially reduce the total amount of net operating loss carryforwards and credits that can be utilized. Subsequent ownership changes may affect the limitation in future years.

At December 31, 2023, the Company had, for Canadian tax purposes, non-capital losses aggregating approximately \$40,184,000. These losses are available to reduce taxable income earned by ACI and ACI Canada in future years and expire between 2035 and 2043. Additionally, as of December 31, 2022, the Company had, for United States of America tax purposes, non-capital losses aggregating approximately \$974,000. These losses are available to reduce taxable income earned by the ACI USA in future years and expire in 2043.

The Company files income tax returns in the United States federal jurisdiction, the State of Florida, and Canada. The Company is not currently under examination by income tax authorities in federal, state, or other jurisdictions. The Company's tax returns remain open for examination for all years.

NOTE 17 — SUBSEQUENT EVENTS

Management has performed an evaluation of subsequent events after the balance sheet date of December 31, 2023 through April 3, 2024, the date that the consolidated financial statements were available to be issued.

- a) On January 19, 2024, the Company completed the fifth and final closing of the Q2 2023 PP by issuing 678,630 units at a price of \$5.50 for total gross proceeds of \$3,732,467 ("Q2 2023 PP Tranche 5"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$7.75 per share until January 19, 2027. In connection with the closing of Q2 2023 PP Tranche 2, the Company paid cash commissions of \$342,320 and issued 41,493 agents warrants. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 until January 19, 2027. The Company also paid to certain finder's aggregate cash commission of \$48,858, being 6% of the gross proceeds raised under the offering from investors introduced to the Company by such finders.
- b) In January 2024, the Company paid Spartan the remaining consulting fee of \$320,000 and issued 582,331 common shares to Spartan and its assignees pursuant to the Spartan Consulting Agreement.
- c) In January 2024, 10,913 Common Share options with an exercise price of CAD\$5.50 per share were exercised on a cashless basis resulting in the issuance of 7,700 Common Shares.
- d) Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 2024 to July 2025. Additionally, \$300,000 is now due on December 31, 2024 with the remaining principal balance due at maturity. (Note 7).
- e) Subsequent to the year ended December 31, 2023, 132,898 warrants originally issued on February 16, 2023, had their exercise price modified from CAD\$9.75 to \$7.23 and 243,903 warrants originally issued on March 15, 2023, had their exercise price modified from CAD\$9.75 to \$7.08. No change was made to any expiry dates.
- f) On November 5, 2024, a 1 for 25 reverse stock split of the Company's common stock became effective. The Company's issued and outstanding Class B Preferred Series A Shares, performance shares, stock options and warrants have been adjusted to reflect the reverse stock split in accordance with their respective terms. All share, other equity instruments and per share information in the accompanying consolidated financial statements and notes has been retroactively adjusted for the effects of the reverse split for all periods presented.



Common Shares

PROSPECTUS

, 2024

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****ITEM 13 — OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION**

The following table sets forth the expenses payable by the registrant expected to be incurred in connection with the issuance and distribution of the shares of common stock being registered hereby (other than underwriting discounts and commissions). All of such expenses are estimates, other than the filing and listing fees payable to the SEC, FINRA, and stock exchange listing fee.

	Amount to be Paid
SEC registration fee	\$ 1,367.86
Transfer agent's fees and expenses*	10,000
Printing expenses*	15,000
Legal fees and expenses*	40,000
Accounting fees and expenses*	30,000
Blue Sky fees and expenses	0
Miscellaneous expenses*	1,000
Total	\$ 97,367.86

* — Estimated

ITEM 14 — INDEMNIFICATION OF DIRECTORS AND OFFICERS

The corporate laws of British Columbia allow us, and our corporate articles require us (subject to the provisions of the BCBCA noted below), to indemnify our Directors, former Directors, alternate Directors and their heirs and legal personal representatives against all eligible penalties to which such person is or may be liable, and the Company must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by such person in respect of that proceeding. Each Director and alternate Director is deemed to have contracted with the Company on the terms of the indemnity contained in our articles.

For the purposes of such an indemnification:

"eligible party", in relation to the Company, means an individual who

- (1) is or was a Director or officer of the Company,
- (2) is or was a director or officer of another corporation
 - (i) at a time when the corporation is or was an affiliate of the Company, or
 - (ii) at the request of the Company, or
- (3) at the request of the Company, is or was, or holds or held a position equivalent to that of, a director or officer of a partnership, trust, joint venture or other unincorporated entity,

and includes, except in the definition of "eligible proceeding" and certain other cases, the heirs and personal or other legal representatives of that individual;

"eligible penalty" means a judgment, penalty or fine awarded or imposed in, or an amount paid in settlement of, an eligible proceeding;

"eligible proceeding" means a proceeding in which an eligible party or any of the heirs and personal or other legal representatives of the eligible party, by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, the Company or an associated corporation:

- (1) is or may be joined as a party, or
- (2) is or may be liable for or in respect of a judgment, penalty or fine in, or expenses related to, the proceeding;

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"expenses" includes costs, charges and expenses, including legal and other fees, but does not include judgments, penalties, fines or amounts paid in settlement of a proceeding; and

"proceeding" includes any legal proceeding or investigative action, whether current, threatened, pending or completed.

In addition, under the BCBCA, the Company may pay, as they are incurred in advance of the final disposition of an eligible proceeding, the expenses actually and reasonably incurred by an eligible party in respect of that proceeding, provided that the Company first receives from the eligible party a written undertaking that, if it is ultimately determined that the payment of expenses is prohibited by the restrictions noted below, the eligible party will repay the amounts advanced.

Notwithstanding the provisions of the Company's articles noted above, the Company must not indemnify an eligible party or pay the expenses of an eligible party, if any of the following circumstances apply:

- (1) if the indemnity or payment is made under an earlier agreement to indemnify or pay expenses and, at the time that the agreement to indemnify or pay expenses was made, the company was prohibited from giving the indemnity or paying the expenses by its memorandum or articles;
- (2) if the indemnity or payment is made otherwise than under an earlier agreement to indemnify or pay expenses and, at the time that the indemnity or payment is made, the company is prohibited from giving the indemnity or paying the expenses by its memorandum or articles;
- (3) if, in relation to the subject matter of the eligible proceeding, the eligible party did not act honestly and in good faith with a view to the best interests of the company or the associated corporation, as the case may be;
- (4) in the case of an eligible proceeding other than a civil proceeding, if the eligible party did not have reasonable grounds for believing that the eligible party's conduct in respect of which the proceeding was brought was lawful.

In addition, if an eligible proceeding is brought against an eligible party by or on behalf of the Company or by or on behalf of an associated corporation, the Company must not do either of the following:

- (1) indemnify the eligible party under section 160 (a) in respect of the proceeding; or
- (2) pay the expenses of the eligible party in respect of the proceeding.

Notwithstanding any of the foregoing, and whether or not payment of expenses or indemnification has been sought, authorized or declined under the BCBCA or the articles of the Company, on the application of the Company or an eligible party, the Supreme Court of British Columbia may do one or more of the following:

- (1) order a company to indemnify an eligible party against any liability incurred by the eligible party in respect of an eligible proceeding;
- (2) order a company to pay some or all of the expenses incurred by an eligible party in respect of an eligible proceeding;
- (3) order the enforcement of, or any payment under, an agreement of indemnification entered into by a company;
- (4) order a company to pay some or all of the expenses actually and reasonably incurred by any person in obtaining an order under this section;
- (5) make any other order the court considers appropriate.

ITEM 15 — RECENT SALES OF UNREGISTERED SECURITIES

During the current fiscal year, Alpha Cognition Inc. (the 'Company') issued the following shares:

- a) January 2024, the Company Issued 678,630 private placement units at a price of \$5.50 for total proceeds of \$3,732,469 with each unit consisting of one Common Share one warrant exercisable at a price of \$5.75 per full warrant for a term of three years from each closing date. The Q2 2023 PP Offering was

finalized on January 19, 2024. In connection with the Offering closing during 2024, the Company paid cash commissions of \$342,320 and issued 41,493 agents warrants. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$5.75 for a term of 3 years. In connection with the final closing, Spartan Capital Securities, LLC ("Spartan") received cash compensation of US\$342,320 and was issued 41,493 compensation warrants of the Company, which may be exercised on the same terms as the private placement warrants. The Company also paid a consulting fee of US\$320,000 and issued 582,331 common shares to Spartan pursuant to a Consulting Agreement (see the Company's news release dated May 30, 2023). The Company also paid to certain finders aggregate cash commission of US\$48,858, being 6% of the gross proceeds raised under the Offering from investors introduced to the Company by such finders.

- b) On September 24, 2024, the Company issued approximately \$4.545 million of convertible notes and warrants to purchase 430,835 common shares. The securities were issued to private investors pursuant to the exemption under Rule 506(b) of Regulation D based, in part, on the representations made by the investors.
- c) On November 13, 2024 in connection with the closing of its public offering, the Company issued 608,696 underwriter warrants. The underwriter warrants were issued pursuant to the terms of an underwriting agreement to the representative of the underwriters for services performed under the underwriting agreement. The underwriter warrants were issued pursuant to the exemption provided by Section 4(a)(2).
- d) Concurrently with the closing of its public offering on November 13, 2024, pursuant to the terms of the convertible notes, the Company's convertible notes automatically converted into 801,412 common shares at a price of \$5.75 per share. The Company issued the common shares on conversion of the convertible notes pursuant to the exemption from the registration requirements of the Securities Act provided by Section 3(a)(9) thereof.
- e) Upon closing of its public offering on November 13, 2024, pursuant to the terms of the securities purchase agreement entered into on, each Buyer was issued an additional 50% of Warrants with identical terms to the initial Warrants, as adjusted at the time of closing of the Offering as disclosed in Item 3.03 below. The Company issued 215,418 Warrants to the Buyers. The Warrants were issued pursuant to the exemption from the registration requirements of the Securities Act provided by Section 4(a)(2) thereof.
- f) On December 16, 2024, the Company issued a representative's purchase warrant to purchase up to an aggregate of 34,196 common shares. The representative's warrant may be exercised beginning on June 14, 2025 until November 8, 2029. The initial exercise price of each warrant is \$7.18 per share. The warrants were issued pursuant to the exemption from the registration requirements of the Securities Act provided by Section 4(a)(2) thereof.

During the year ended December 31, 2023, Alpha Cognition Inc. (the "Company") issued the following shares:

- a) In February and March of 2023, the Company issued 949,906 private placement units at a price of CAD\$6.375 for total proceeds of \$4,506,055 (CAD\$6,055,650) with each unit consisting of one Common Share and one warrant exercisable at a price of CAD\$9.75 per warrant for a term of five years from the closing date ("Q1 2023 PP"). In connection with the Q1 2023 PP, the Company also issued 85,183 Common Shares and 12,986 agents warrants. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of CAD\$9.75 for a term of 5 years. The securities issued in the Q1 2023 PP were issued to private investors pursuant to the exemption under Rule 506(b) of Regulation D based, in part, on the representations made by the investors.
- b) 42,000 Common Shares for the exercise of 42,000 ACI Canada legacy performance options at a price of \$0.01 per share for total proceeds of \$10,500. The securities were issued pursuant to Rule 701.
- c) On May 30 2023, the Company announced a private placement offering to raise gross proceeds of \$6,500,000 at \$5.50 per unit ("Q2 2023 PP"). Each unit consists of one common share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at \$7.75 per share for a period of three years from the closing date. The aggregate proceeds may be increased by 30% to accommodate any over-allotment. In accordance with the Q2 2023 PP, the Company has agreed to pay the finder ("Spartan") cash commissions of 10% of the gross proceeds, issue finder's

warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list, and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list. The Q2 2023 PP capital raising activities are still active as of September 30, 2023. The securities were issued to private investors pursuant to the exemption under Rule 506(b) of Regulation D based, in part, on the representations made by the investors.

- d) During 2023 the Company issued 857,733 private placement units at a price of \$5.50 for total proceeds of \$4,717,532 with each unit consisting of one Common Share and between one or one-half of one warrant exercisable at a price of \$7.75 per full warrant for a term of three years from each closing date. During 2023 the Q2 2023 PP Offering was completed through the closing of four tranches: August 31, 2023, October 16, 2023, November 8, 2023, and December 22, 2023. In connection with the Offering closing during 2023, the Company paid cash commissions of \$661,666 and issued 52,132 agents warrants. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$7.75 for a term of 3 years. The securities were issued to private investors pursuant to the exemption under Rule 506(b) of Regulation D based, in part, on the representations made by the investors.
- e) All 280,000 previously outstanding Restricted Shares were converted to Common Shares on August 29, 2023, for \$nil proceeds. The conversions were completed pursuant to Section 3(a)(9) of the Securities Act.

During the year ended December 31, 2022, the Company issued the following shares:

- a) 14,000 Common Shares for the exercise of 14,000 ACI Canada legacy performance options at a price of \$0.01 per share for total proceeds of \$3,500. The securities were issued pursuant to Rule 701.
- 2,661 Common Shares for the exercise of 2,661 Common Share options at a price of CAD\$17.85 per share for total proceeds of \$37,285 (CAD\$47,495). The securities were issued pursuant to Rule 701
- In October 2021, the Company issued units (the "Units") for aggregate gross proceeds of approximately C\$14.4 million, including the exercise of the over-allotment option in full (the "Offering"). The Company issued 384,100 Units at a price of C\$37.50 per Unit, each Unit consisting of one common share of the Company (a "Share") and one common share purchase warrant (a "Warrant") entitling the holder to purchase one Share at a price of C\$43.50 per Share until October 1, 2023. The securities were issued pursuant to Rule 903 of Regulation S and Rule 506(b) of Regulation D and Section 4(a)(2) of the Securities Act.
- In March 2021, the Company completed its qualifying transaction by way of plan of arrangement, resulting in the Company acquiring 100% of the shares of the Alpha Cognition Canada and issuing to the shareholders of Alpha Cognition Canada 1,593,750 post-consolidated common shares, 280,000 restricted voting shares, 316,655 preferred shares, 400,335 warrants, 2,932 share options, and 399,642 performance share options of Alpha Cognition. The securities were issued pursuant to Rule 903 of Regulation S and Section 3(a)(10) of the Securities Act.
- In March 2021, concurrently with the completion of the qualifying transaction, the Company completed the conversion of subscription receipts previously issued by the Company and Alpha Cognition Canada on December 18, 2020 and February 10, 2021, resulting in a total of 134,405 post-consolidated common shares and 67,202 warrants of the Company being issued. Each warrant is exercisable at a price of C\$52.50 per warrant until March 18, 2023. The Company also issued 5,229 broker warrants exercisable at a price of C\$40 until March 18, 2023. The net proceeds of C\$4,965,440 were released to the Company and Alpha Cognition Canada on closing of the qualifying transaction. The securities were issued pursuant to Rule 903 of Regulation S and Rule 506(b) of Regulation D and Section 4(a)(2) of the Securities Act.
- In March 2021, the Company completed a brokered private placement by raising C\$5,376,198 by way of the sale of 134,405 subscription receipts at a price of C\$40 per subscription receipt ("Subscription Receipt") with each Subscription Receipt consisting of one common share and one-half warrant. Each whole warrant is exercisable at a price of C\$52.50 per warrant for a term of 24 months from the closing date. The securities were issued pursuant to Rule 903 of Regulation S and Rule 506(b) of Regulation D and Section 4(a)(2) of the Securities Act.

ITEM 16 — EXHIBITS

(a) Exhibits.

See the Exhibit Index.

(b) Financial Statement Schedules.

None.

(c) Reports, Opinions and Appraisals.

None.

ITEM 17 — UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (A) (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Vancouver, Province of British Columbia, on December 31, 2024.

ALPHA COGNITION INC.	
By: /s/ Michael McFadden	
Name: Michael McFadden	
Title: Chief Executive Officer and Director	

This registration statement has been signed by the following persons in the capacities and on the dates indicated.

/s/ Michael McFadden	Dated: December 31, 2024
Name: Michael McFadden	
Title: Chief Executive Officer and Director (Principal Executive Officer)	
/s/ Henry Du	Dated: December 31, 2024
Name: Henry Du	
Title: Vice President of Finance and Accounting and interim Chief Financial Officer (Principal Financial and Accounting Officer)	
/s/ Len Mertz*	Dated: December 31, 2024
Name: Len Mertz	
Title: Chairman and Director	
/s/ John Havens*	Dated: December 31, 2024
Name: John Havens	
Title: Director	
/s/ Philip Mertz*	Dated: December 31, 2024
Name: Phillip Mertz	
Title: Director	
/s/ Rajeev Bakshi*	Dated: December 31, 2024
Name: Rajeev Bakshi	
Title: Director	
/s/ Ken Cawkell*	Dated: December 31, 2024
Name: Ken Cawkell	
Title: Director	

*By: /s/ Michael McFadden	
Michael McFadden – Attorney in Fact	

SIGNATURE OF AUTHORIZED REPRESENTATIVE IN THE UNITED STATES

Pursuant to the requirements of Section 6(a) of the Securities Act, the undersigned has signed this Registration Statement, solely in the capacity of the duly authorized representative of the Registrant in the United States, on December 31, 2024.

	By: /s/ Michael McFadden
	Name: Michael McFadden
	Title: Chief Executive Officer and Director

EXHIBIT INDEX

Exhibit No.	Description
3.1 ⁽¹⁾	Notice of Articles
3.2 ⁽⁴⁾	Articles
4.1 ⁽¹⁾	Specimen common share certificate
4.2 ⁽¹⁾	Escrow Agreement by and between the Company, Computershare Investor Services Inc. and certain stockholders of the Company dated March 18, 2021
4.3 ⁽³⁾	Form of Warrant issued September 24, 2024
4.4 ⁽⁵⁾	Form of Pre-Funded Warrant
4.5 ⁽⁵⁾	Form of Underwriters Warrant
5.1	Form of Opinion of Morton Law, LLP, Canadian counsel to the Company, as to the validity of the common shares
10.1# ⁽¹⁾	2017 Stock Option Plan
10.2# ⁽¹⁾	2022 Stock Option Plan
10.3# ⁽¹⁾	2023 Stock Option Plan
10.4 ⁽¹⁾	ALPHA-1062 License Agreement dated March 23, 2015, as amended effective April 1, 2015 between the Company and Neurodyn Life Sciences Inc.
10.5 ⁽¹⁾	ALPHA-1062 Royalty Assignment Agreement dated January 1, 2016 between the Company and Neurodyn Life Sciences Inc.
10.6 ⁽¹⁾	ALPHA-0602 License Agreement dated January 1, 2020, as amended November 4, 2020 between the Company and Neurodyn Life Sciences Inc.
10.7 ⁽¹⁾	ALPHA-0602 Royalty Agreement dated November 3, 2020 between the Company and Neurodyn Life Sciences Inc.
10.8 ⁽¹⁾	Arrangement Agreement dated October 27, 2020, between the Company and Alpha Cognition, Inc. as amended, pursuant to which the Company acquired all of the issued and outstanding shares of Alpha Cognition, Inc pursuant to a plan of arrangement which constituted the Company's Qualifying Transaction
10.9 ⁽¹⁾	Agency Agreement dated December 18, 2020 among the Company, Alpha Cognition, Inc. and Raymond James & Associates Inc., pursuant to which the Company and Alpha Cognition, Inc issued subscription receipts that were converted into Common Shares and Warrants upon completion of the Qualifying Transaction
10.10 ⁽¹⁾	Escrow Agreement dated March 18, 2021 between the Company, Computershare Investor Services Inc., and certain shareholders of the Company
10.11 ⁽¹⁾	Consulting Agreement between the Company and CMI Cornerstone Management Corporation dated September 1, 2018 as amended June 1, 2019
10.12 ⁽²⁾	Expense Reimbursement Promissory Note dated December 31, 2017 by and between the Company and Neurodyn Life Sciences Inc.
10.13 ⁽¹⁾	Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated May 17, 2023
10.14 ⁽¹⁾	Amendment No. 1 to Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated December 4, 2023
10.15 ⁽¹⁾	Consulting Agreement between the Company and Spartan Capital Securities, LLC dated May 17, 2023
10.16 ⁽¹⁾	APLHA-1062 Second Amended License Agreement dated March 1, 2023 between the Company and Neurodyn Life Sciences Inc.
10.17 ⁽¹⁾	Second Amended Expense Reimbursement Promissory Note dated March 1, 2023 by and between the Company and Neurodyn Life Sciences Inc.
10.18# ⁽¹⁾	Employment Agreement between the Company and Michael McFadden dated March 28, 2022
10.19# ⁽¹⁾	Bonus Right Agreement by and between the Company and Michael McFadden dated April 28, 2022
10.21# ⁽¹⁾	Employment Agreement by and between the Company and Lauren D'Angelo dated May 1, 2021
10.22# ⁽¹⁾	Amendment #1 to Employment Agreement by and between the Company and Lauren D'Angelo dated June 22, 2022
10.23# ⁽¹⁾	Amendment to Employment Agreement by and between the Company and Lauren D'Angelo dated March 1, 2023
10.24# ⁽¹⁾	Bonus Right Agreement by and between the Company and Lauren D'Angelo dated May 10, 2022

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Exhibit No.	Description
10.25 ⁽³⁾	Registration Rights Agreement dated September 24, 2024
10.26 ⁽³⁾⁺	Securities Purchase Agreement dated September 24, 2024
10.27#	Employment Agreement, dated as of October 21, 2024, by and between Alpha Cognition USA Inc. and Henry Du, previously filed as Exhibit 10.27 to the Company's Form S-1/A filed with the SEC on November 6, 2024 and incorporated herein by reference (File No. 333-280196)
21.1 ⁽¹⁾	List of Subsidiaries
23.1	Consent of Manning Elliott LLP, an Independent Registered Public Accounting Firm
23.2	Consent of Morton Law LLP (included in Exhibit 5.1)
24.1	Powers of Attorney (included on the signature page of the Registration Statement on Form S-1 as filed with the Commission on April 30, 2024)
101.INS	XBRL Instance Document — the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension — Schema
101.CAL	XBRL Taxonomy Extension — Calculations
101.DEF	XBRL Taxonomy Extension — Definitions
101.LAB	XBRL Taxonomy Extension — Labels
101.PRE	XBRL Taxonomy Extension — Presentations
104	Cover Page Interactive Data File — the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
107	Filing Fee Table

- (1) Previously filed and incorporated by reference to the corresponding exhibit as filed in the Registrant's Registration Statement on Form S-1 as filed with the Commission on April 30, 2024
- (2) Previously filed and incorporated by reference to the corresponding exhibit as filed in the Registrant's Registration Statement on Form S-1/A as filed with the Commission on May 10, 2024
- (3) Previously filed and incorporated by reference to the Company's Form 8-K as filed with the Commission on September 25, 2024
- (4) Previously filed and incorporated by reference to the Company's Form 8-K filed with the Commission on October 3, 2024
- (5) Previously filed and incorporated by reference to the Company's Form S-1/A filed with the Commission on October 25, 2024
- + Certain schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation SK. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request
- # Indicates management contract or compensatory plan.



December 31, 2024

Alpha Cognition Inc.
c/o 1200 – 750 West Pender Street
Vancouver, BC V6C 2T8

Dear Sirs and Mesdames:

Re: Securities Registered under Registration Statement on Form S-1

We have acted as Canadian counsel in connection with filing a Registration Statement on Form S-1 (as amended or supplemented, the “**Registration Statement**”) pursuant to the Securities Act of 1933, as amended (the “**Securities Act**”), relating to the registration for resale under the Securities Act by certain selling stockholders (the “**Selling Stockholders**”) of (i) 542,913 common shares being newly registered and (ii) 904,753 common shares remaining for resale (collectively, the “**Shares**”), of Alpha Cognition Inc., a corporation existing under the *Business Corporations Act* (British Columbia) (the “**Company**”), that have been issued by the Company.

In rendering the opinions herein, we have examined originals or copies of documents and have considered such questions of law and made such other investigations as we have deemed relevant or necessary. We have assumed the genuineness of all signatures, the legal capacity of all individuals, the authenticity of all documents submitted to us as originals and the conformity to authentic original documents of all documents submitted to us as certified, conformed or photocopies or facsimiles thereof. We have assumed the accuracy and truthfulness of all representations and statements made in the documents so examined, and the performance of all obligations under agreement presented to us. We express no opinion as to any laws, or matters governed by any laws, other than the laws of the Province of British Columbia and the federal laws of Canada applicable therein. The opinions hereinafter expressed are based upon legislation, rules and regulations in effect on the date hereof.

Subject to the foregoing qualifications, we are of the opinion that as at the date hereof, the Shares to be sold by the Selling Stockholders pursuant to the Registration Statement have been duly authorized and are validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the references to this firm in the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Yours truly,

MORTON LAW LLP

/s/ Morton Law LLP



17th floor, 1030 West Georgia St., Vancouver, BC, Canada V6E 2Y3

Tel: 604. 714. 3600 Fax: 604. 714. 3669 Web: manningelliott.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated April 3, 2024, except as to Note 17(f), as to which the date is November 6, 2024, with respect to the consolidated financial statements of Alpha Cognition Inc. as of December 31, 2023 and 2022 and for the years ended December 31, 2023 and 2022, included in this Registration Statement on Form S-1.

/s/ Manning Elliott LLP

CHARTERED PROFESSIONAL ACCOUNTANTS
Vancouver, British Columbia, Canada
December 31, 2024

Calculation of Filing Fee Tables

Form S-1
(Form Type)Alpha Cognition Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Newly Registered Securities								
Fees to Be Paid	Equity	Common Shares, no par value, Common Shares, no par value, issued upon conversion of convertible notes and interest thereon, to be sold by the Selling Stockholders	457(c)	327,495	\$ 5.38 ⁽²⁾	\$1,761,923.10	0.00015310	\$ 269.75
	Equity	Common Stock, no par value issuable upon the exercise of the Warrants, to be sold by the Selling Stockholders	457(g)	215,418	\$ 7.19 ⁽³⁾	\$1,548,855.42	0.00015310	237.13
Total Offering Amounts						<u>\$3,310,778.52</u>		<u>\$ 506.88</u>
Total Fees Previously Paid								\$ 0.00
Total Fee Offsets								\$ --
Net Fees Due								<u>\$ 506.88</u>

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), there are also being registered hereby an additional indeterminate number of shares of the Registrant's common stock, \$0.001 par value per share, as may become issuable to the selling stockholders as a result of stock splits, stock dividends and similar transactions, and, in any such event, the number of shares registered hereby shall be automatically increased to cover the additional shares.
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act, based on the average of the high and low prices of the common stock of the registrant as reported on the Nasdaq on December 30, 2024.
- (3) Pursuant to Rule 457(g), reflects the shares of Common Stock that may be issued upon exercise of outstanding Warrants, for an exercise price \$7.19 per share of Common Stock.

Table 2: Fee Offset Claims and Sources

N/A

Table 3: Combined Prospectus

Security Type	Security Class Title ⁽⁵⁾	Amount of Securities Previously Registered ⁽⁴⁾	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
Equity	Common Shares, no par value, Common Shares, no par value, issued upon conversion of convertible notes and interest thereon, to be sold by the Selling Stockholders	473,918 ⁽⁵⁾⁽⁶⁾	\$ 4,679,936.30	Form S-1	333-282675	October 23, 2024
Equity	Common Stock, no par value issuable upon the exercise of the Warrants, to be sold by the Selling Stockholders	430,835 ⁽⁵⁾⁽⁶⁾	\$ 4,254,499.18	Form S-1	333-282675	October 23, 2024

- (4) Pursuant to Rule 416(a) under the Securities Act, there are also being registered hereby an additional indeterminate number of shares of the Registrant's common stock, \$0.001 par value per share, as may become issuable to the selling stockholders as a result of stock splits, stock dividends and similar transactions, and, in any such event, the number of shares registered hereby shall be automatically increased to cover the additional shares.
- (5) Reflects the Company's 1-for-25 reverse stock split which became effective on November 5, 2024 (the "Reverse Stock Split").
- (6) No registration fee is payable in connection with the securities previously registered on a registration statement on Form S-1 (File No. 333-282675), which was declared effective on October 23, 2024 (the "Prior Registration Statement") because such securities are being transferred from the Prior Registration pursuant to Rule 429(b) under the Securities Act. See "Statement Pursuant to Rule 429" in this registration statement.