

ALPHA COGNITION INC.

CSE FORM 2A Listing Statement

Dated as of April 28, 2023

TABLE OF CONTENTS

TAB	ELE OF CONTENTS	1
EXP	LANATORY NOTES	2
FOR	WARD LOOKING INFORMATION	2
FUN	CTIONAL AND PRESENTATION CURRENCY	3
1.	INTERPRETATION	4
2.	CORPORATE STRUCTURE	
3.	GENERAL DEVELOPMENT OF THE BUSINESS	9
4.	NARRATIVE DESCRIPTION OF THE BUSINESS	15
5.	SELECTED CONSOLIDATED FINANCIAL INFORMATION	46
6.	MANAGEMENT'S DISCUSSION AND ANALYSIS	47
7.	MARKET FOR SECURITIES	48
8.	CONSOLIDATED CAPITALIZATION	48
9.	OPTIONS TO PURCHASE SECURITIES	49
10.	DESCRIPTION OF THE SECURITIES	49
11.	ESCROWED SECURITIES	
12.	PRINCIPAL SHAREHOLDERS	56
13.	DIRECTORS AND OFFICERS	56
14.	CAPITALIZATION	
15.	EXECUTIVE COMPENSATION	70
16.	INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS	83
17.	RISK FACTORS	83
18.	PROMOTERS	99
19.	LEGAL PROCEEDINGS	
20.	INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL	
	TRANSACTIONS	100
21.	AUDITORS, TRANSFER AGENTS AND REGISTRARS	
22.	MATERIAL CONTRACTS	100
23.	INTEREST OF EXPERTS	101
24.	OTHER MATERIAL FACTS	101
25.	FINANCIAL STATEMENTS	

Schedule "A" – Audited Financial Statements

Schedule "B" – Annual Management's Discussion and Analysis Schedule "C" – Audit Committee Charter

EXPLANATORY NOTES

The "Company" refers to the issuer named Alpha Cognition Inc. This Form 2A Listing Statement has been prepared in connection with the Company's objective to list its common shares and warrants on the CSE, after delisting its shares and warrants from the TSX Venture Exchange.

FORWARD LOOKING INFORMATION

Certain statements contained in this Listing Statement, and in certain documents incorporated by reference herein, contains statements that, to the extent that they are not historical fact, may constitute "forward-looking statements" within the meaning of applicable securities legislation.

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.

Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "project", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative variations) of such words and phrases, or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved.

Such forward-looking statements, made as of the date hereof, reflect the Company's current views with respect to future events and are based on information currently available to the Company and are subject to and involve certain known and unknown risks, uncertainties, assumptions and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed in or implied by such forward-looking statements. Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. These risks, uncertainties, assumptions and other factors should be considered carefully, and prospective investors and readers should not place undue reliance on the forward-looking statements.

These risks, uncertainties, assumptions and other factors include, but are not limited to: the risks and factors set out in this Listing Statement, including as set out in "Risk Factors"; risks posed by the economic and political environments in which the Company operates and intends to operate; rising global inflation; the potential for losses arising from the expansion of operations into new markets; increased competition; assumptions regarding market trends and the expected demand and desires for the Company's products and proposed products; reliance on industry manufacturers, suppliers and others; the failure to adequately protect intellectual property; a failure to adequately manage future growth; adverse market conditions; and failure to satisfy ongoing regulatory requirements.

Any forward-looking statement speaks only as of the date on which such statement is made, and the Company undertakes no obligation to update any forward-looking statement or information or statements to reflect information, events, results, circumstances or otherwise after the date on which such statement is made or to reflect the occurrence of unanticipated events, except as required by law including securities laws. New factors emerge from time to time, and it is not possible for management to predict all of such factors and to assess in advance the impact of each such fact on the Company's business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements or information.

FUNCTIONAL AND PRESENTATION CURRENCY

The functional currency of an entity is the currency of the primary economic environment in which the entity operates. The functional currency of the Company is Canadian dollars ("CAD") and the functional currencies of its subsidiaries is United States Dollars ("USD"). The functional currency determinations were conducted through an analysis of the consideration factors identified in IAS 21, The Effects of Changes in Foreign Exchange Rates.

Transactions in currencies other than the functional currency are recorded at exchange rates prevailing on the dates of the transactions. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are translated at the period end exchange rate while non-monetary assets and liabilities in foreign currencies are translated at historical rates. Revenues and expenses are translated at the average exchange rates approximating those in effect during the reporting period.

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

1. INTERPRETATION

The following words and terms shall have the following meanings:

- "ACA" means the United States *Patient Protection and Affordable Care Act*, as amended by the *Health Care and Education Reconciliation Act of 2010*.
- "AChEI" means acetylcholine esterase inhibitor.
- "Alpha" or the "Company" means Alpha Cognition Inc. (formerly Crystal Bridge Enterprises Inc.).
- "ALPHA-0602" is a specific form of progranulin, a natural protein that is expressed in several cell types in the central nervous system and in peripheral tissues, and which is being developed by the Company as a treatment for ALS. See section 3 "General Development of the Business".
- "ALPHA-0702 and ALPHA-0802" are 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 with potentially lower toxicity, and greater therapeutic effect. See section 3 "General Development of the Business"
- "ALPHA-1062" is a patented new active ingredient that is being developed by the Company as a treatment for Alzheimer's Disease. See section 3 "General Development of the Business".
- "Alpha Canada" means Alpha Cognition Canada Inc. (formerly Alpha Cognition Inc.), a wholly owned subsidiary of the Company.
- "ALS" means amyotrophic lateral sclerosis, a group of rare, progressive, neurological diseases that mainly involve the nerve cells (neurons) responsible for controlling voluntary muscle movement.
- "Alzheimer's Disease" is a chronic neurodegenerative disease that destroys brain cells, causing cognitive functions, including thinking ability and memory, to deteriorate over time.
- "ANDA" means an abbreviated new drug application.
- "Annual Financials" has the meaning set out under section 5.1 "Consolidated Financial Information Annual Information".
- "Annual MD&A" has the meaning set out under section 5.1 "Consolidated Financial Information Annual Information".
- "AKS" means the United States Federal Anti-Kickback Statute.
- "Audit Committee" means the Company's audit committee of the Board. See section 13.4 "Board Committees".
- "BCBCA" means the Business Corporations Act (British Columbia).
- "BLA" means Biologics License Application.

- "Board" means the board of directors of the Company.
- "Bonus Rights Plan" means the Company's bonus rights compensation plan. See section 15 "Executive Compensation Stock option plans and other incentive plans Bonus Rights Plan".
- "Cash Bonus Policy" means the Company's cash compensation policy. See section 15 "Executive Compensation Stock option plans and other incentive plans".
- "Cashless Exercise" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Stock Option Plan".
- "CCPA" means the California Consumer Privacy Act of 2018.
- "Centurion" means Centurion Minerals Ltd.
- "CEO" means the Chief Executive Officer.
- "Cessation Date" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Stock Option Plan".
- "CFO" means the Chief Financial Officer.
- "cGMP" means current good manufacturing practice requirements.
- "Common Shares" means the common shares in the capital of the Company.
- "Compensation Committee" means the Company's compensation committee of the Board. See section 13.4 "Board Committees".
- "Consultant" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Stock Option Plan".
- "CMS" means Centers for Medicare & Medicaid Services.
- "CPC Escrow Agreement" means the escrow agreement dated August 30, 2018, between the Company, the Transfer Agent and certain shareholders of the Company.
- "CPRA" means the California Privacy Rights Act.
- "CSA" means the Canadian Securities Administrators.
- "CSE" means the Canadian Securities Exchange.
- "CSE Approval" means the final approval of the CSE in respect to the listing of the Company's Common Shares and Listed Warrants on the CSE, as evidenced by the issuance of the final approval bulletin of the CSE in respect thereof.
- "CSE Policies" means the rules and policies of the CSE in effect as of the date of this Listing Statement.

- "CSE Stock Option Plan" means the CSE-compliant stock option plan that the Company expects to implement upon listing on the CSE. See section 15 "Executive Compensation Stock option plans and other incentive plans CSE Stock Option Plan".
- "CTO" means cease trade order.
- "Deemed Issue Price" has the meaning set out under section 10.1 "Description of the Company's Securities Preferred Shares" of this Listing Statement.
- "**Domestic Issuer**" means a "domestic issuer" as determined in accordance with the United States Securities Exchange Act of 1934.
- "Employees" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Stock Option Plan".
- "Escrow Agreement" means the escrow agreement dated March 18, 2021, between the Company, the Transfer Agent and certain escrow shareholders.
- "Escrowed Securities" means the securities that are subject to the CPC Escrow Agreement and the Escrow Agreement. See section 11 "Escrowed Securities".
- "Ethics Code" means the Company's has written Code of Business Conduct and Ethics.
- "FDA" means the United States Food and Drug Administration.
- "FDCA" means the United States Federal Food, Drug, and Cosmetic Act.
- "Foreign Private Issuer" means a "foreign private issuer" as determined in accordance with the United States Securities Exchange Act of 1934.
- "GEMs" has the meaning set out under section 4.1 "Narrative Description of the Business General Overview" of this Listing Statement.
- "GCP" means Good Clinical Practice requirements.
- "Governance Committee" means the Company's governance and nomination committee of the Board. See section 13.4 "Board Committees".
- "Grant Agreement" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Bonus Rights Plan".
- "IND" means Investigational New Drug Application.
- "Legacy Compensation Plan" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Legacy Compensation Plan".
- "Liquidation Preference" has the meaning set out under section 10.1 "Description of the Company's Securities Preferred Shares" of this Listing Statement.
- "Listed Warrant Indenture" means the warrant indenture dated October 1, 2021 in connection with the Listed Warrants.

- "Listed Warrants" means the warrants to purchase Common Shares of the Company that are listed for trading under the stock symbol "ACOG.WT".
- "Listing Statement" means this CSE Form 2A Listing Statement.
- "MAD Study" has the meaning set out under section 4.1 "Narrative Description of the Business General Overview ALPHA-1062 Clinical Development" of this Listing Statement.
- "mTBI" means mild-traumatic brain injury.
- "Named Executive Officer" or "NEO" has the meaning set out in section 15 "Executive Compensation".
- "NCE" has the meaning set out under section 4.1.3 "Production and Sales Market Exclusivity" of this Listing Statement.
- "NDA" means New Drug Application.
- "Net Exercise" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Stock Option Plan".
- "Neurodyn" means Neurodyn Life Sciences Inc.
- "NI 52-110" means National Instrument 52-110 Audit Committees.
- "NOLs" means net operating losses.
- "OIG" means the United States Federal Office of Inspector General.
- "**Options**" means the stock options in the capital of the Company.
- "PDUFA" means the United States Prescription Drug User Fee Act.
- "Performance Shares" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Legacy Compensation Plan".
- "PGRN" means progranulin.
- "PREA" means the United States *Pediatric Research Equity Act of 2003*.
- "Preferred Shares" means the Series A, Class B preferred voting shares, with special rights and restrictions, in the capital of the Company.
- "Qualifying Transaction" means the qualifying transaction of Crystal Bridge Enterprises Inc. that was completed on March 18, 2021, pursuant to the policies of the TSXV.
- "REMS" means risk evaluation and mitigation strategies.
- "Restricted Shares" means the Class A restricted voting shares, with special rights and restrictions, in the capital of the Company.

- "SEC" means the U.S. Securities and Exchange Commission.
- "SAD Study" has the meaning set out under section 4.1 "Narrative Description of the Business General Overview ALPHA-1062 Clinical Development" of this Listing Statement.
- "SEDAR" means the System for Electronic Document Analysis and Retrieval.
- "Seed Share Resale Restrictions" has the meaning set out under section 11 "Escrowed Securities" of this Listing Statement.
- "Settlement Amount" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Bonus Rights Plan".
- "Shareholders" means the holders of the Common Shares of the Company.
- "Stock Option Plan" means the stock option plan of the Company.
- "TBI" means traumatic brain injury.
- "Tax Act" means the United States Federal Income Tax Act.
- "TDP-43" means the DNA binding protein 43 kDa.
- "Transfer Agent" means Computershare Investor Services Inc.
- "TSXV" means the TSX Venture Exchange.
- "U.S. Exchange Act" means the United States Securities Exchange Act of 1934.
- "VWAP" has the meaning set out under section 15 "Executive Compensation Stock option plans and other incentive plans Stock Option Plan".
- "Warrants" means the common share purchase warrants to acquire Common Shares.

2. CORPORATE STRUCTURE

2.1 Corporate Name and Head and Registered Office

The Company's full name is Alpha Cognition Inc. The head office of the Company is located at 301 – 1228 Hamilton Street, Vancouver, BC, V6B 6L2, and the registered office of the Company is located at Suite 1200, 750 West Pender Street, Vancouver, BC, V6C 2T8. Alpha Canada's head office is located 301 – 1228 Hamilton Street, Vancouver, BC, V6B 6L2, and Alpha Canada's registered office is located at Suite 1200, 750 West Pender Street, Vancouver, BC, V6C 2T8. Alpha Cognition USA, Inc.'s head office is located at 20073 Fiddler's Green, Frisco, TX with a mailing address of 5605 FM423, Ste 500, PMB#335, Frisco, TX 75036, and Alpha Cognition USA, Inc,'s registered office is located at Suite 2400, 1445 Ross Avenue, Dallas, Texas, 75202.

2.2 Jurisdiction of Incorporation

The Company was incorporated under the BCBCA on November 15, 2017 under the name "Crystal Bridge Enterprises Inc.". The Company completed its Qualifying Transaction with Alpha 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.

2.3 Inter-corporate Relationships

The Company has one wholly owned subsidiary, Alpha Canada. 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.



2.4 Requalification following a Fundamental Change

This section is not applicable.

2.5 Non-corporate Issuers and Issuers Incorporated Outside of Canada

This section is not applicable.

3. GENERAL DEVELOPMENT OF THE BUSINESS

3.1 General Development of the Business

The principal business of the Company is focused on research and development in the field of neurodegeneration, with respect to a therapy for Alzheimer's Disease, cognitive impairment with mTBI (ALPHA-1062) and subsequently with respect to a potential therapy for ALS (ALPHA-0602). For a discussion of the clinical and regulatory development of the technologies, please see section 4 "*Narrative Description of the Business*" in this Listing Statement.

Below is a description of the relevant history of the Company over the last three completed financial years:

On January 1, 2020, Alpha Canada entered into a license agreement with Neurodyn Life Sciences Inc. ("Neurodyn"), as amended November 4, 2020 pursuant to which it acquired the world-wide exclusive rights to the ALPHA-0602 technology.

On July 9, 2020, the Company and Alpha Canada entered into a letter agreement, pursuant to which the Company proposed to acquire 100% of the issued and outstanding shares of Alpha Canada.

On October 27, 2020, the Company and Alpha Canada entered into the definitive arrangement agreement to formalize and replace the letter agreement.

On November 3, 2020, Alpha Canada entered into a royalty agreement with respect to ALPHA-0602 made between Neurodyn, Andrew Bateman Ph.D., Hugh P.J. Bennett Ph.D., Babykumari Chitramuthu Ph.D. and Denis Kay Ph.D.

On December 18, 2020, and February 10, 2021, the Company and Alpha Canada completed the partially brokered private placement of 3,360,124 subscription receipts of the Company and Alpha Canada at price of \$1.60 per subscription receipt for aggregate gross proceeds of approximately \$5,376,198 (US\$4,042,254 using a set exchange rate of \$1.33 to US\$1).

On March 18, 2021, the Company completed its Qualifying Transaction with Alpha Canada and changed its name to Alpha Cognition Inc. As a result of the Qualifying Transaction, Alpha Canada became the Company's wholly-owned subsidiary.

On April 12, 2021, the Company announced the appointment of Mr. Michael McFadden as Chief Executive Officer and the appointment of Mr. Len Mertz as Chairman.

On April 27, 2021, the Company announced the appointment of Ms. Colleen Johns as Senior Vice President, Product Development, as part of the Company's plan to further develop the operational and commercialization team.

On May 4, 2021, the Company announced the appointment of Ms. Lauren D'Angelo as Chief Commercial Officer, as part of the Company's plan to further develop the operational and commercialization team.

Effective as of August 18, 2021, the Company's Common Shares were approved for quotation on the OTCQB Venture Market under the symbol "ACOGF".

On September 7, 2021, the Company announced that the FDA accepted its Investigational New Drug application for lead candidate, ALPHA-1062 for the treatment of Alzheimer's Disease to proceed to the pivotal clinical phase of the development program. This set of bioavailability-bioequivalence trials, if successful, would allow the Company to submit a new drug application for ALPHA-1062 in 2023. ALPHA-1062 is being developed as a next generation of acetylcholine esterase inhibitor (AChEI) designed to improve upon the existing standard of care by overcoming gastrointestinal side effects and tolerability limitations.

On October 1, 2021, the Company completed a prospectus offering for aggregate gross proceeds of approximately \$14.4 million through the issuance of 9,602,500 units at a price of \$1.50 per unit. Each unit consists of one common share of the Company and one common share purchase warrant. Each warrant entitles the holder to acquire an additional common share of the Company at a price of \$1.75 per share until

October 1, 2023. The warrants issued in connection with the prospectus offering began trading on the TSXV under the symbol "ACOG.WT" effective as of October 5, 2021 (the "Listed Warrants").

On October 1, 2021, the Company announced the formation of its Scientific Advisory Board, and that it had engaged Bello Capital Partners to provide strategic digital media services and Wealth Securities Limited as a market-maker.

On December 2, 2021, the Company announced the appointment of Dr. Cedric O'Gorman as Chief Medical Officer, to lead the medical, clinical and regulatory functions in support of the Company's clinical-stage products, ALPHA-1062 and ALPHA-0602. Dr. O'Gorman ceased to act as the Chief Medical Officer effective as of January 1, 2022.

On December 6, 2021, the Company announced the results from their ALPHA-1062 preclinical neurobehavioral and cognitive study. The study found that ALPHA-1062 achieved statistically significant improvement as compared to injured but untreated animals in every primary endpoint and achieved results equal with uninjured animals in four of five neuro-behavioral primary endpoints. Animal body weight was unaffected in the study. Additional histology work will be done to complete the trial. Pending results of the study and a meeting with the FDA, the Company could advance the program to a second mammal or directly to a Phase 2 clinical trial in humans. All Phase 1 trial work has been completed with positive results.

On December 28, 2021, the Company announced that Dr. Fred Sancilio resigned from his role as a director and as President of the Company.

On March 29, 2022, the Company announced positive preclinical data from their ALPHA-0602 ALS gene therapy program. The data underscores the robust preclinical evidence supporting the Company's adenoassociated virus (AAV) based gene therapy approach to treating ALS and highlights the Company's strategy to validate these data in planned clinical trials.

On April 12, 2022, the Company announced the appointment of Don Kalkofen as Chief Financial Officer of the Company and the addition of Michael McFadden, the Company's Chief Executive Officer, to the Board.

On April 28, 2022, the Company announced the following program developments:

- ALPHA-1062 for mild to moderate dementia of the Alzheimer's type
 - The Company has initiated pivotal trials to demonstrate bioequivalence to the FDA-assigned reference listed drug, required for marketing approval. The trials are of a single dose, cross-over study design in both fed and fasted conditions.
 - The Company intends to meet with the FDA to discuss the ongoing clinical development of ALPHA-1062 and a proposed Alzheimer's Disease tolerability and dosing trial which could allow for prescribing information changes post-approval. Pending regulatory feedback, the plan would be to initiate this study in late Q2 2022, with top line results expected in 2023.
- ALPHA-0602 for ALS
 - The Company announced positive preclinical data from its ALPHA-0602 ALS gene therapy program. These data underscore the robust preclinical evidence supporting the Company's adeno-associated virus (AAV) based gene therapy approach to treating ALS and highlights the Company's strategy to validate these data in planned clinical trials.
 - O Highlights of the positive proof of concept pre-clinical results demonstrated with ALPHA-0602 in vitro in motor neurons and in vivo in models of ALS, include:

- ALPHA-0602 demonstrated abundant progranulin expression in motor neurons, suggesting a neurotrophic role for progranulin. ALPHA-0602 further increased progranulin levels and decreased motor neuron cell death in in vitro models.
- Using an in vivo model of ALS to further assess the neurotrophic effects of progranulin, ALPHA-0602 reversed the motor neuron toxicity resulting from decreased levels of TDP-43 and FUS, and the expression of ALS related toxic forms of these proteins.
- In an ALS transgenic mouse model caused by a toxic form of transactive response DNA binding protein 43 kDa ("TDP-43"), ALPHA-0602 administered via adeno-associated virus, resulted in successful viral transduction of central nervous system cells and substantially increased cerebrospinal fluid levels of progranulin.
- ALPHA-0602-treated TDP-43 transgenic mice persistently gained weight throughout the 10 week study, in contrast to untreated transgenic animals who failed to gain weight. Continued weight gain in the face of a significant and sustained toxic insult, is suggestive of a therapeutic benefit of ALPHA-0602 expression.

• ALPHA-1062 for mTBI

- The Company announced functional data from the ALPHA-1062 mTBI program. ALPHA-1062 intranasal administration significantly reduced the extent of the functional deficit, and improved functional recovery of mTBI animals compared to untreated animals suffering a mTBI. Notably, in four of five functional measures of recovery, the performance of ALPHA-1062 treated group was statistically indistinguishable from that of the uninjured cohort.
- o In a rodent model of mTBI, ALPHA-1062 or vehicle (purified water as treatment control) was administered intranasally, with treatment initiated two hours after injury and continued twice daily for 35 days. ALPHA-1062 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 assessments; and
 - improved cognitive functional recovery measured by tests which assess recognition memory, and spatial learning and memory.
- The Company announced histology data from the intranasal ALPHA-1062 mTBI program. ALPHA-1062 treatment was neuroprotective, preserving hippocampal structure, reducing cell loss and promoting neurogenesis compared to no treatment. These histological results confirm the functional preservation/recovery data and taken together, strongly support the further development of ALPHA-1062 for the treatment of mTBI.

On May 31, 2022, the Company announced that during the second quarter of 2022, the Company met with the FDA regarding the ALPHA-1062 program for mild-to-moderate Alzheimer's Disease. The Company received feedback regarding the ALPHA-1062 trial, labeling, and manufacturing. As a result of the FDA feedback, the Company now plans to file its NDA for ALPHA-1062 in mild-to-moderate Alzheimer's Disease in Q3 2023, allowing the Company to include additional stability data in the NDA filing. The Company's projected commercial launch date of Q4 2024 remains the same. The Company has received pediatric designation for ALPHA-0602 for treatment of spinal muscular atrophy. This designation allows for priority review.

On May, 31, 2022 the Company also announced the grant of Options pursuant to its Stock Option Plan to certain directors of the Company to purchase up to an aggregate of 400,000 Common Shares of the Company. The Options are exercisable at a price of \$0.64 CAD per share and expire ten years from the date of grant, subject to certain vesting provisions.

On June 22, 2022, the Company announced positive results from its pivotal bioequivalence study with ALPHA-1062 for the treatment of mild to moderate Alzheimer's Disease. The study was designed to demonstrate pharmacokinetic equivalence compared to the reference listed drug "galantamine hydrobromide" immediate release, which is a standard of care treatment for patients with mild to moderate Alzheimer's Disease. Topline results confirmed in fed and fasted bioequivalence studies that ALPHA-1062 achieved bioequivalent area-under-the-curve and peak exposures relative to "galantamine hydrobromide" in the fed state. Data were within the required pharmacokinetic range of prior data demonstrated with "galantamine hydrobromide". There were no adverse events reported for ALPHA-1062 during these studies. With these positive pivotal study results, the Company plans to file an NDA for ALPHA-1062 in mild to moderate Alzheimer's Disease in Q3 2023.

On August 22, 2022, the Company announced positive topline results from a bioequivalence study with ALPHA-1062. The company elected to conduct this additional study which was designed to demonstrate pharmacokinetic (PK) equivalence between 5mg ALPHA-1062 delayed release tablets and 8 mg galantamine hydrobromide extended release capsules. These data, coupled with the positive pivotal data released in June, establish bioequivalence to both formulations (immediate and extended release) of galantamine hydrobromide and strengthen the NDA application for ALPHA-1062 in mild-to-moderate Alzheimer's Disease, planned for Q3 2023.

- 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 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.
- Topline results confirmed that in healthy adult volunteers treated to steady state, ALPHA-1062 was bioequivalent to galantamine hydrobromide extended release. In the pre-specified primary analysis, ALPHA-1062 achieved area-under-the-curve and peak exposures of approximately 107% and 127%, respectively, compared to those generated by galantamine hydrobromide extended release. As expected, Cmax results for ALPHA-1062 is bracketed between galantamine hydrobromide immediate release and galantamine hydrobromide extended release (lower than immediate release, higher than extended release) providing a robust and enhanced data set for the NDA filing. These data further describe the delayed release profile of ALPHA-1062 and strengthen the NDA data set by characterizing the therapeutic and acceptable exposures compared to both the immediate release and extended release products.

On August 25, 2022, the Company announced Q2 results and provided a corporate update including the following:

- The Company elected to conduct this additional study which was designed to demonstrate pharmacokinetic (PK) equivalence between 5mg ALPHA-1062 delayed release tablets and 8 mg galantamine hydrobromide extended release capsules. These data, coupled with the positive pivotal data released in June, establish bioequivalence to both formulations of galantamine hydrobromide and strengthen the NDA application for ALPHA-1062 in mild-to-moderate AD, planned for Q3 2023.
- The Company has completed significant start-up activities in preparation to initiate the RESOLVE tolerability study to date. The Company is seeking additional capital to fund this study initiation and will commence the study within a quarter to securing the required funding.

- The Company has initiated cost cutting measures to lower its near-term burn rate. The company streamlined R&D programs to focus on ALPHA-1062 and reduced headcount and other operating costs not essential to the ALPHA-1062 NDA file.
- The Company plans to request an FDA meeting to discuss the clinical development of intranasal ALPHA-1062 for the treatment of cognitive impairment with TBI. It is anticipated that this meeting will take place in Q4 2022.

On November 28, 2022, the Company provided the following corporate updates:

- The Company continues to prepare its NDA filing for ALPHA-1062 for mild to moderate Alzheimer's Disease.
- The Company completed an additional steady state bioavailability-bioequivalence study which was designed to demonstrate pharmacokinetic (PK) equivalence between 5mg ALPHA-1062 delayed release tablets and 8 mg galantamine hydrobromide extended release capsules.
- These data, coupled with the positive pivotal data released in June, establish bioequivalence to both formulations of galantamine hydrobromide and strengthen the NDA application for ALPHA1062 in mild-to-moderate AD, which is planned for Q3 2023.
- The Company implemented cost cutting measures to lower its near-term burn rate. The Company streamlined R&D programs to focus on ALPHA-1062 and reduced headcount and other operating costs not essential to the ALPHA-1062 NDA file.

On January 19, 2023, the Company announced the resignation of the Company's Chief Medical Officer, Dr. Cedric O'Gorman, MD.

On February 16, 2023, the Company announced that it had closed the first tranche of a private placement of units and issued 16,795,221 units of the Company at a price of \$0.255 per unit for gross proceeds of \$4,282,781. On March 15, 2023, the Company announced that it had closed the second tranche of a private placement of units and issued 6,952,427 units of the Company at a price of \$0.255 per unit, for gross proceeds of \$1,772,869. Each unit comprises a Common Share and a share purchase warrant. Each warrant entitles the holder to purchase one additional common share of the Company at a price of \$0.39 (approx. US\$0.29) per share for a period of five years. The private placement financing raised gross proceeds of C\$6.1 million (US\$4.5 million) through the sale of an aggregate 23,747,648 units. The Company expects to use the net proceeds from the Offering, together with its existing cash, cash equivalents and investments, for the advancement of the Company's clinical development programs, complete and file the NDA for ALPHA-1062, and for working capital and other general corporate purposes. In connection with the offering the Company engaged Spartan Capital Securities, LLC ("Spartan") of New York, which received compensation for its services on closing of the offering of US\$172,480 in cash, 2,129,566 Common Shares, and 324,642 warrants having the same terms as the unit warrants. Spartan is a U.S. brokerage firm registered in all states and territories of the U.S.

Subsequent to the financing, the Company and Spartan entered into a "Consulting Agreement and Selling Agent Agreement Term Sheet" dated March 27, 2023 pursuant to which: (i) the Company and Spartan are proposing to enter into a further placement agent agreement for an equity financing for gross proceeds of US\$6,500,000 with a 30% over-allotment option, on terms to be agreed to in the context of the market, for which Spartan will receive cash compensation of 10% of the aggregate gross proceeds of the financing raised by Spartan, a 5% non-accountable expense fee on gross proceeds raised by Spartan, and equity compensation in broker's warrants of 10% of the units sold by Spartan; and (ii) the Company and Spartan are proposing to enter into a further consulting agreement for the purpose of providing financial advisory and other services in connection with raising additional capital, and completing up to two potential business development transactions, for which Spartan will receive aggregate cash compensation of US\$480,000 and equity compensation of an estimated 13,706,193 Common Shares which is based on US\$6,500,000 gross

proceeds being raised in the equity financing. Both the cash and equity compensation are payable in three tranches upon the completion of each of the capital raising and two business development objectives.

Effective on March 1, 2023, Alpha Canada and Neurodyn agreed to an amendment to the US\$1.2M 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 is effective March 1, 2023 and requires monthly interest only payments until maturity. In addition, the amendment now incorporates the Company as a party to the ALPHA-1062 license agreement and added clarity to certain terms and definitions.

3.2 Significant Acquisitions and Dispositions

On July 9, 2020, the Company and Alpha Canada entered into a letter agreement, pursuant to which the Company proposed to acquire 100% of the issued and outstanding securities of Alpha Canada from the securityholders of Alpha Canada, by way of plan of arrangement, which would constitute the Company's Qualifying Transaction pursuant to the policies of the TSXV. On October 27, 2020, the Company and Alpha Canada entered into the arrangement agreement to formalize and replace the letter agreement. Subject to the terms and conditions of the arrangement agreement, the Company acquired all of the outstanding securities of Alpha Canada in exchange for post-consolidated securities of the Company by way of plan of arrangement under the provisions of Section 288 of the BCBCA. The Qualifying Transaction was completed effective as of March 18, 2021.

3.3 Trends, Commitments, Events or Uncertainties

Management is not aware of any trend, commitment, event or uncertainty that is both presently known to management and reasonably expected to have a material effect on the Company's business, financial condition or results of operations as at the date of this Listing Statement, except as otherwise disclosed herein or except in the ordinary course of business. See "Forward Looking Information" on page 2 of this Listing Statement and section 17 "Risk Factors".

4. NARRATIVE DESCRIPTION OF THE BUSINESS

4.1 General

Overview

The Company is a clinical stage, biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's Disease and cognitive impairment with TBI, for which there are limited or no treatment options. The Company is focused on the development of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's Disease with a near-term goal of NDA submission and FDA approval and commercial sales of ALPHA-1062 oral tablet formulation. The Company's ALPHA-1062 development program is primarily focused on clinical and regulatory development, Chemistry, Manufacturing and Control (CMC) development, and commercial readiness. The Company has three additional development programs: ALPHA-1062 in combination with memantine for the treatment of moderate-to-severe Alzheimer's Disease, ALPHA-1062 intranasal formulation for the treatment of mild cognitive impairment with TBI, and ALPHA-0602, previously referred to as 'Progranulin', for the treatment of amyotrophic lateral sclerosis, otherwise known as ALS or Lou Gehrig's disease.

ALPHA-1062, is a patented new chemical entity being developed as a next generation acetylcholinesterase inhibitor for the treatment of Alzheimer's Disease, with expected minimal gastrointestinal side effects. ALPHA-1062'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. ALPHA-1062 is in development in combination with memantine to treat moderate to severe Alzheimer's Disease and as an intranasal formulation for cognitive impairment with TBI.

ALPHA-0602 (Progranulin) is expressed in several cell types in the central nervous system and in peripheral tissues, promotes cell survival, regulates certain inflammatory processes, and plays 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. 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 with potentially lower toxicity, and greater therapeutic effect.

<u>ALPHA-1062</u>

ALPHA-1062 is a patented new chemical entity. When absorbed through mucosal tissue or ingested it is enzymatically converted to an active moiety that has previously been approved by the FDA and 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 experience gastrointestinal side effects which can limit its effectiveness. ALPHA-1062, a prodrug of galantamine, however may have reduced gastrointestinal side effects which could allow for faster dosing titration and may facilitate achieving therapeutic dosing levels faster. Drugs that convert from an inert form to an active substance in-situ are referred to as "prodrugs". At the time the Company licensed the ALPHA-1062 technology, only an intranasal formulation had been developed, and subsequently oral dosage formulations have been developed.

The Company's ALPHA-1062 development plan has two primary goals:

- Clinical Development: Demonstrate, to the satisfaction of regulatory bodies, that ALPHA-1062 formulations have a significantly reduced side effect profile and differentiated mechanism of action (MOA) from existing acetylcholinesterase inhibitor (AChEI) treatments, with the exception of galantamine's MOA.
- Regulatory: Demonstrate that an NDA pathway called a 505(b)(2) is available for approval in the United States, allowing commercialization, that relies on the establishment of a scientific bridge to the findings of safety and efficacy of the FDA approved Razadyne utilizing a bioavailability and bioequivalence pivotal study instead of the traditional efficacy trials.

ALPHA-1062 Clinical Development

The original nasal formulation of ALPHA-1062 was used to conduct Phase I human studies, initially by Neurodyn, 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 single ascending dose study ("SAD Study") followed by a multiple ascending dose ("MAD Study") 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).

Pivotal Trial: The Company successfully completed two studies in Q2 2022 and a third in Q3 2022. The studies were designed to demonstrate pharmacokinetic equivalence compared to the reference listed drug galantamine hydrobromide immediate release and galantamine hydrobromide extended release, which are the standard of care treatments for patients with mild to moderate Alzheimer's Disease. Topline results confirmed in bioequivalence studies 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 during these studies. With these positive pivotal study results, the Company plans to file an NDA for ALPHA-1062 in mild to moderate Alzheimer's Disease during Q3 2023, with possible FDA approval for the U.S. market by Q3 2024.

The following table summarizes the results of the ALPHA-1062 Pivotal Study BABE Study vs. Immediate Release (completed in June 2022) and an additional BABE Study vs. Extended Release (completed in August 2022).

BABE Study vs. Immediate Release

PK Parameter	ALPHA-1062 Delayed Release 5mg (n=36)	Gal HBr Immediate Release 4mg (n=36)	% to Reference Drug 80-125%	Sufficient Data for NDA Filing
AUC0-inf (μg × h/mL) Fasted State	306.8	321.5	95%	✓
Cmax (ng/mL) Fasted State	30.7	40.5	76%	✓
AUC0-inf (µg × h/mL) Fed State	286.7	329.9	87%	✓
Cmax (ng/mL) Fed State	27.6	30.2	91%	✓

BABE 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%	Sufficient Data for NDA Filing
AUC0-24 (μg × h/mL) Steady State	527.5	492.1	107%	✓
Cmax (ng/mL) Steady State	41.7	32.8	127%	✓

- Data confirms ALPHA-1062 AUC is bioequivalent to galantamine hydrobromide IR and ER
- Cmax for ALPHA-1062 is bracketed between IR and ER (lower than IR, higher than ER) providing necessary data for NDA filing (scientific bridge)
- Minimal Adverse Events reported in these trials of healthy volunteers
- . Allows NDA filing based on 505(b)(2) requirements

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

COPYRIGHT 2021 ALPHA COGNITION, INC

Alpha Cognition: Sublingual and Enteric Coated Tablet equivalent to 8 mg RAZADYNE Data on file
 DA Guidance: https://www.fda.gov/files/drugs/published/Bioavailability-and-Bioequivalence-Studies-Submitted-in-Ni

1

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 galantamine benzoate) 5mg delayed release tablet compared to galantamine hydrobromide tablet 4mg immediate release – the reference drug. 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 tablet. The primary pharmacokinetic outcomes were AUC or area under the curve, and Cmax, 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 Cmax represents the highest peak exposure to galantamine.

Bioequivalence of ALPHA-1062 to galantamine hydrobromide was 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 was 95% (306.8) in the fasted study and 87% (286.7) in the fed study.

The average Cmax ratio to reference drug for ALPHA-1062 was 76% (30.7) in the fasted study and 91% (27.6) in the fed study both Cmax results being higher than the published Cmax data for galantamine hydrobromide 8 mg extended release capsule. Bioequivalence of ALPHA-1062 has been demonstrated based on overall drug exposure in both the fed and fasted states, and the Cmax with ALPHA-1062's delayed release 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 was established on Cmax compared to galantamine hydrobromide in the fed state. When the Cmax of a proposed drug product falls between the reported Cmax of two formulations of an approved reference product (immediate and extended release), this allows for an effective scientific bridge to both formulations of the reference standard galantamine hydrobromide.

Single-dose administration of ALPHA-1062 was well tolerated with no adverse events reported.

BABE Study vs. Extended Release

During August 2022, the Company announced positive 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 5 mg ALPHA-1062 delayed release tablets and 8 mg galantamine hydrobromide extended release capsules, when dosed to steady state. Bioequivalence was established based on total drug exposure (AUC) and the Cmax was expectedly higher than that of the extended release reference. These data, coupled with the positive pivotal data released in June, establish bioequivalence to both formulations of galantamine hydrobromide and strengthen the NDA application for ALPHA-1062 in mild-to-moderate Alzheimer's Disease, planned for July/July 2023. The Company is preparing to file the NDA with the FDA.

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 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.

Topline results confirmed that in healthy adult volunteers treated to steady state, ALPHA-1062 was bioequivalent to galantamine hydrobromide extended release. In the pre-specified primary analysis, ALPHA-1062 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 is bracketed between galantamine hydrobromide immediate release and galantamine hydrobromide extended release (lower than immediate release, higher than extended release) providing a robust and enhanced data set for the NDA filing. These data further describe the delayed release profile of ALPHA-1062 and strengthen the NDA data set by characterizing the therapeutic and acceptable exposures compared to both the immediate release and extended release products.

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. As a result of the agency's feedback, the Company now plans to file its NDA for ALPHA-1062 in mild-to-moderate Alzheimer's Disease in Q3 2023, allowing the Company to include additional CMC stability data in the NDA filing. The Company's projected approval date for ALPHA-1062 is Q3 2024.

RESOLVE Tolerability Study: Following NDA approval for ALPHA-1062 in mild to moderate Alzheimer's Disease, the Company plans to initiate an Alzheimer's Disease tolerability and dosing trial with ALPHA-1062 called the RESOLVE Study which could potentially support prescribing information changes, post-approval, and could allow patients to achieve an efficacious dose more quickly than with current treatments. While not required for ALPHA-1062 NDA approval, RESOLVE data would be utilized to enhance the commercialization of ALPHA-1062. Significant trial preparation has already been completed. Processes and data management support has been established, and a number of potential sites have been identified, evaluated, qualified and readied for activation. Institutional Review Board approval has been received and the final study protocol has been submitted to the IND. The Company expects to initiate its RESOLVE trial in Q4 2024, following NDA approval of ALPHA-1062 and securing additional capital.

mTBI: The Company has also completed a pre-clinical study of ALPHA-1062 in mTBI. The Company is encouraged by the preclinical data and is planning to request a meeting with the FDA in Q3 2023 to discuss IND submission and further clinical development plans. Pending FDA feedback, the Company is targeting the IND submission for intranasal ALPHA-1062 for mTBI in Q4 2023.

In December 2021, the Company announced functional data from 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-1062 treated group was statistically indistinguishable from that of the uninjured cohort.

In a rodent model of TBI, ALPHA-1062 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-1062 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.

In February 2022 the Company announced histology data from their intranasal ALPHA-1062 TBI program. ALPHA-1062 treatment was neuroprotective, preserving hippocampal structure, reducing cell loss and promoting neurogenesis compared to no treatment. These histological results, confirm the functional preservation/recovery data, and taken together, strongly support the further development of ALPHA-1062 for the treatment of TBI.

Compared to vehicle, ALPHA-1062 treatment:

- Demonstrated statistically significant reduction in lesion size measured at 35 days after injury.
- Preserved greater hippocampal structure. The hippocampus plays a critical role in learning, memory formation, and spatial coding and damage to hippocampus can lead to memory disorders like AD, amnesia, and depression.

- Demonstrated statistically, significant reduction in neuronal cell loss. The number of neurons in the ALPHA-1062 treated animals were equivalent to those in the uninjured cohort of animals at the end of treatment.
- Statistically significantly enhanced neurogenesis as evidence by an increase in the number of neuron precursor cells and new neurons in the dentate gyrus, which plays a critical role in learning, information processing, and mood regulation.

ALPHA-1062 Commercialization Strategy

During the second half of 2021 the Company started, in parallel with the Company's regulatory activities, taking steps to develop a commercialization team to manage ensure a successful launch in the U.S. The Company has completed sufficient planning to indicate that ALPHA-1062 could be launched using a bestin-class specialty sales force that will focus on Neurology and Long Term Care (LTC) physicians in the U.S. Neurologists that specialize in Alzheimer's treatment make pharmacologic decisions for Alzheimer's patients in a clinical setting. Long term care 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 these two specialties is large, representing 63% of the over 11 million prescriptions filled in pharmacies each year. The AChEI class includes Aricept, Exelon, Exelon Patch, Razadyne, Adlarity, and generic versions of each brand. 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 ALPHA-1062 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. Success will be further enabled by deploying a highly targeted and efficient multi-channel marketing campaign, by motivating caregivers to request ALPHA-1062, and securing product coverage with U.S. payors. Market research indicates that payors are likely to cover ALPHA-1062 if the product is competitively priced. Additionally, the Company intends to seek strategic partnerships to expand promotional efforts and expand physician promotional coverage. As ALPHA-1062 nears FDA regulatory approval, the Company will seek distribution partners for major territories, identified as Europe, LATAM (Mexico, Central and South America), and Asia. Additionally, the Company intends to seek approval for potential additional indications and product line extensions.

ALPHA-0602

The ALPHA-0602 product candidate originated almost a decade ago when researchers at McGill University in Montreal discovered that a protein called Progranulin seemed to show activity for several neurological disorders. Progranulin is a large protein that was found to be present in virtually all living animals and appears to be used by the body for multiple tasks. Upon further investigation, scientists discovered that the large molecule was made of smaller polypeptides or subunits, referred to as Granulin Epithelin Modules or GEMs.

ALS is a progressive neurodegenerative disease that affects nerve cells in the brain and spinal cord that carry messages from the brain to the muscles (Source: Laird et al. (2010), Chitramuthu et al. (2017)) A safe and effective treatment for ALS remains an unmet medical need. The few treatment options that currently exist for ALS patients, have shown limited effectiveness. ALPHA-0602 is being developed for the treatment of ALS and has been granted Orphan Designation by the FDA.

During the second quarter of 2022 the Company received Rare Pediatric Designation for ALPHA-0602 for treatment of spinal muscular atrophy. This designation allows for priority review.

ALPHA-0602, ALPHA-0702 and ALPHA-0802 Pre-Clinical Development

ALPHA-0602 has been investigated in preclinical studies designed to stimulate the overproduction of progranulin in validated animal models of neurological disorders, specifically ALS. Initial work with animal models of ALS has been completed indicating that Progranulin may be effective in modifying the disease process. Additional in-vitro and in-vivo investigations to validate the effectiveness of Progranulin and the potential of the GEMs are ongoing.

In March 2022 the Company announced positive preclinical data from its ALPHA-0602 ALS gene therapy program. These data underscore the robust preclinical evidence supporting the Company's gene therapy approach to treating ALS and highlight the Company's strategy to validate these data in planned clinical trials.

Highlights of the positive proof of concept pre-clinical results demonstrated with ALPHA-0602 in vitro in motor neurons and in vivo in models of ALS, include:

- ALPHA-0602 demonstrated abundant PGRN expression in motor neurons, suggesting a neurotrophic role for PGRN. ALPHA-0602 further increased PGRN levels and decreased motor neuron cell death in in vitro models.
- Using an in vivo model of ALS to further assess the neurotrophic effects of PGRN, ALPHA-0602 reversed the motor neuron toxicity resulting from both decreased levels of TDP-43 and FUS, and the expression of ALS related toxic forms of these proteins.
- In an ALS transgenic mouse model caused by a toxic form of TDP-43, ALPHA-0602 administered via adeno-associated virus, resulted in successful viral transduction of central nervous system cells and substantially increased cerebrospinal fluid (CSF) levels of PGRN.
- ALPHA-0602 treated TDP-43 transgenic mice persistently gained weight throughout the 10-week study, in contrast to untreated transgenic animals who failed to gain weight. Continued weight gain in the face of a significant and sustained toxic insult, is suggestive of a therapeutic benefit of ALPHA-0602 expression.

In June 2022, the Company announced the discovery of two GEM combinations, ALPHA-0702 and ALPHA-0802, and positive preclinical data from each candidate therapy. ALPHA-0702 and ALPHA-0802 are Granulin Epithelin Motifs, or GEMs, derived from full length progranulin (PGRN) 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 have demonstrated robust results in a recent preclinical study, leading the Company to believe in the future potential of this platform to develop therapeutics to treat a wide array of diseases. These data underscore robust preclinical evidence supporting the Company's approach to treating neurodegenerative disease and highlight the Company's strategy to validate these data in additional pre-clinical studies. The company has paused further development with GEM's and ALPHA-0602 in order to focus all resources toward ALPHA-1062 clinical and regulatory development.

Highlights of the positive proof of concept pre-clinical results demonstrated with ALPHA-0702, ALPHA-0802, and ALPHA-0602 include:

- ALPHA-0702 and ALPHA-0802 maintained prolonged cell survival and neuronal morphology, with a potency equivalent to, or approaching full length progranulin.
- ALPHA-0702 and ALPHA-0802 reduced both mutant and wild type TDP-43 toxicity, with a potency equivalent to, or approaching full length progranulin.

- ALPHA-0602, and both ALPHA-0702 and ALPHA-0802 enhanced Cathepsin D maturation suggestive of improved lysosomal function. These effects were seen in induced pluripotent stem cells, derived from patients harboring toxic TDP-43 mutations, that were terminally differentiated into motor neurons. Both therapeutic candidates have the potential to be as effective as full-length progranulin in promoting Cathepsin D maturation, where under conditions of neuronal stress (FTD models) progranulin has been shown to be inappropriately processed.
- Future studies will seek to confirm reduced neuroinflammation and toxicity associated with ALPHA compounds.

ALPHA-0602 Regulatory Development

The in-vitro and preclinical program to select the lead biological drug candidates was completed in Q2 2022, with final confirmatory activity completed in Q3 2022. The Company will look to meet with community experts in the development of a toxicology program and an appropriate in vivo disease model to provide proof of efficacy. Following this the Company intends to seek FDA guidance regarding, relevant pre-clinical safety studies to be initiated in animal models consistent with FDA requirements to support an Investigational New Drug Application. The lead drug candidate would follow a conventional Biologics License Application ("BLA") approval process requiring Phase I – III clinical trials to support the use of progranulin for use in treating ALS.

In February 2020, ALPHA-0602 was granted Orphan Drug Designation by the FDA for the use of ALPHA-0602 in the treatment of ALS. The Orphan Drug Designation has several significant benefits including:

- (1) tax credits of 50% off the clinical drug testing cost awarded upon approval;
- (2) eligibility for market exclusivity for seven years post approval; and
- (3) waiver of NDA and biologics license application fees, which could amount to up to US\$3,200,000.

The Company has received Rare pediatric designation for ALPHA-0602 for treatment of spinal muscular atrophy. This voucher could be either redeemed by the sponsor of the rare pediatric disease designated product to expedite the review of subsequent NDA or BLA, or sold to another sponsor for use in the same manner.

Business Objectives and Milestones

The Company's principal business objectives are to: 1) file an NDA for ALPHA-1062 in mild-to-moderate Alzheimer's Disease; and 2) continue to advance its development and commercialization activities for ALPHA-1062 in mild-to-moderate Alzheimer's Disease, including the clinical trial program development and clinical manufacturing for ALPHA-1062.

The following table describes the business objectives and milestones of the Company based on available funds and upon the Company completing additional financings:

Business Objectives	Estimated Time Period	Estimated Cost with Available Funds ⁽¹⁾	Estimated Cost with Subsequent Financings
Company will prepare an NDA package for U.S. filing for ALPHA-1062 and prepare for commercialization	12-15 months	US\$1,359,000	US\$3,725,000
Advance commercialization activities for ALPHA-1062	12-15 months	US\$100,000	US\$3,200,000

Notes:

(1) The Company is seeking additional funding to achieve its business objectives and has entered into a Consulting Agreement and Selling Agent Agreement Term Sheet with Spartan pursuant to which the Company and Spartan are proposing to enter into a further placement agent agreement for an equity financing for gross proceeds of US\$6,500,000. In the event additional funding is not obtained, the Company will reduce its expenditures as set out above. Please see "Use of Funds" below.

In order to meet these business objectives, the Company will need to initiate or complete the following milestones in the same 12-15 month period:

- File the NDA Package ALPHA-1062 The Company will prepare a complete NDA package for ALPHA-1062 in mid-to-moderate Alzheimer's Disease to submit to the FDA for drug approval and subsequent commercialization. The Company will meet with the FDA at a pre-NDA meeting to review and discuss the package details and align with FDA expectations. The Company plans to file the NDA package with the FDA during Q3 2023 timeframe. The NDA package will include the preclinical studies, clinical studies, manufacturing and controls, regulatory, quality and any other data necessary for the FDA to review ALPHA-1062 for U.S. approval. Costs for NDA filing are expected to include regulatory and CMC preparation, medical writing, and submission to FDA in its required format.
- Obtain IND for ALPHA-1062 Intranasal for TBI The Company will meet with the FDA to obtain approval for IND ALPHA-1062 Intranasal for TBI. The Company will engage the FDA in a pre-IND meeting in Q3, 2023 and will seek approval to file IND for a second indication. The FDA grants IND's when all preclinical work is completed to enter into human subjects. The Company will prepare a synopsis of all preclinical study work and show the FDA PH1 studies for ALPHA-1062 Intranasal where the medicine was tested for Alzheimer's Disease. If the FDA agrees that an IND is appropriate, the Company will complete the required request for IND and could have an approved IND by December 2023. This would provide the Company business development opportunities to partner the asset with another strategic company or license the indication to another neuroscience company. The cost to complete the work and obtain an IND is <\$100,000 and could provide inflection points from a business development standpoint.
- Commercialization The Company plans to continue its development activities and commercialization preparations around ALPHA-1062. 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 target markets, customer types to prioritize, resources to utilize, commercialization positioning, marketing messages, and operational plans post approval.
- ALPHA-1062 U.S. product approval for treatment of mild-to-moderate Alzheimer's Disease The Company will negotiate the commercial label and approval of the product with FDA, which is anticipated in Q3 2024. If approved, this would be one of four products approved for Alzheimer's Disease in the last 14 years. The approval would represent a next generation oral treatment for disease that ameliorates symptoms of Alzheimer's Disease. Approval could provide the Company with significant new business opportunities for commercial and/or development partners.

The foregoing business objectives will be adjusted based on available funds. The Company may need to extend the estimated timeframe for achieving the milestones and objectives set out above if it does not complete additional financings.

Total Funds Available

The Company currently has funds available of approximately US\$4,100,000. See section 10.7 "Description of Securities – Prior Sales" and section 3.1 "General Development of the Business" regarding the amended agreements with Neurodyn.

As of March 31, 2023, the most recent month end prior to filing the Listing Statement, the Company has an estimated net working capital of US\$2,600,000.

Use of Funds

As at the date of this Listing Statement, the Company has available funds of approximately US\$4,100,000 (estimated working capital of US\$2,600,000). The Company intends to use its working capital as set out below, however the Company maintains flexibility to re-adjust the use of funds depending on the Company's operating needs, the implementation of its strategic plan, and any changes in the business environment. The following table sets out the intended use of funds over the next 12-month period.

Use of Funds	Total USD ⁽¹⁾	Total USD ⁽²⁾
Research and Development and Commercialization Preparation	\$1,459,000	\$5,260,000(3)
Executive Compensation		
CEO	\$162,000 ⁽⁴⁾	\$625,000
CFO	\$149,000 ⁽⁴⁾	\$496,000
	\$311,000	\$1,121,000
General and administrative costs		
Legal	\$132,000	\$255,000
Accounting, Audit	\$266,000	\$518,000
Transfer agent	\$29,000	\$42,000
CSE filing fees	\$15,000	\$15,000
Financing costs	-	\$1,245,000
	\$2,212,000	\$8,456,000
Unallocated working capital	\$388,000	\$1,160,000
Total:	\$2,600,000	\$9,616,000

Notes:

- (1) Operating forecast based on available funds as of date of filing.
- (2) Operating forecast assuming the Company is able to raise additional capital to achieve overall business objectives.
- (3) If additional capital is raised, the additional funds would be applied to the manufacturing costs of additional commercial supply of ALPHA-1062 and additional U.S. commercialization preparation activities. In the event such additional capital is not raised, the manufacturing process and U.S. commercial launch activities would be delayed.
- (4) This amount represents a reduced compensation amount in the event the Company is not able to raise additional capital and would represent a deferral of salary compensation above this amount.

Despite the foregoing, there may be circumstances where, for sound business reasons, a reallocation of funds may be necessary for the Company to achieve its objectives. The Company anticipates that it will require additional funds in order to fulfill all of its expenditure requirements to meet its new business objectives and expects to either issue additional securities or incur debt. There can be no assurance that

additional funding required by the Company will be available if required. However, it is anticipated that the available funds will be sufficient to satisfy the Company's objectives over the next 12 months. See section 17 "Risk Factors".

4.1.2 Principal Products or Services

The Company is focused on the development of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's Disease with a near-term goal of FDA approval and commercial sales of ALPHA-1062 oral tablet formulation. The Company's ALPHA-1062 development program is primarily focused on clinical and regulatory development, Chemistry, Manufacturing and Control (CMC) development, and commercial readiness. The Company has three additional development programs: ALPHA-1062 in combination with memantine for the treatment of moderate-to-severe Alzheimer's, ALPHA-1062 intranasal formulation for the treatment of cognitive impairment with TBI, and ALPHA-0602, previously referred to as 'Progranulin', for the treatment of amyotrophic lateral sclerosis, otherwise known as ALS or Lou Gehrig's disease.

See section 4.1 "Narrative Description of the Business" for more information.

4.1.3 **Production and Sales**

ALPHA-1062 Manufacturing

With respect to the manufacturing of ALPHA-1062, the Company has entered into agreements with specialized contract manufacturing organizations located in Taiwan for the manufacturing of the ALPHA-1062 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.

The Company believes it has completed all required phase 1 studies with ALPHA-1062 in mTBI.

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

ALPHA-1062 Clinical Testing

The Company contracted with Contract Research Organizations (CROs) to conduct both pilot and pivotal BA/BE clinical trials. Based on historical experience with inspections of these CROs, as well as audits and monitoring conducted by the Company at these sites, the Company is satisfied that the CROs and sites meet the international and FDA standards required for successful conduct of the Pilot Pivotal Studies required for NDA approval.

ALPHA-1062 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 which is subject to the receipt of FDA approval for ALPHA-1062, 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. Following an FDA registration, the Company anticipates that it may be possible to enter into license agreements in several of these non-core territories. As at the date of this Listing Statement, no formal licensing or marketing agreements have been entered into, however, initial discussions have been held with distributors in several non-core 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;
- performance of adequate and well-controlled human clinical trials in accordance with Good Clinical Practice ("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 Prescription Drug User Fee Act ("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.

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 lifethreatening 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 recordkeeping, 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.

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 chemical entity 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 abbreviated new drug application ("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 7 1/2 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-selfreferral, 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 will be fully effective starting on January 1, 2023. The CPRA will significantly modify 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 will be 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 inseverable 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, it 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." The most likely time to address this would be in the reauthorization of PDUFA in 2022 as part of a package bill. 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 beginning 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. A similar drug pricing bill, the Elijah E. Cummings Lower Drug Costs Now Act proposes to enable direct price negotiations by the federal government on certain drugs (with the maximum price paid by Medicare capped based on an international index), requires manufacturers to offer these negotiated prices to other payers, and restricts manufacturers from raising prices on drugs covered by Medicare Parts B and D. This Act passed in the House of Representatives when it was introduced in 2019, and it has been introduced again in the 2021 term. 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 ALPHA-1062, should it be approved.

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

It is not expected that the Company's business will be materially affected in the current financial year by the renegotiation or termination of any contracts or sub-contracts.

Employees

The Company currently has six employees/contractors in total. Employees and contractors work virtually and/or in offices located in Vancouver, BC; Charlottetown, PEI; Dallas-Fort Worth, Texas; and Weston, Florida. Employees utilize remote video conferencing and other connection tools to meet and advance business projects.

4.1.4 Competitive Conditions and Position

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. The diagnosis rate for Alzheimer's Disease is approximately 50% and each year greater than 2 million patients are on medication for the disease. Approximately 70% of patients with mild Alzheimer's Disease, 80% with moderate, and 75% with severe Alzheimer's Disease are on drugtreatment. 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 four symptomatic drug treatments that have been approved by the FDA to date for mild to moderate Alzheimer's Disease.

- (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

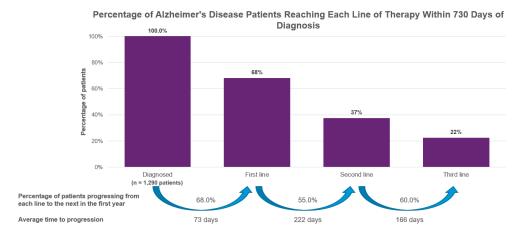
The FDA recently approved Aducanumab (marketed under the branded name Adulhelm® by Biogen) and lecanemab (marketed under the branded name Leqembi® by Easai) for mild-to-moderate Alzheimer's Disease. Adulhelm was the first disease modifying treatment (DMT), but due to several issues associated with the drug, including CMS restricting overage, it is not easily accessible and will only be covered for qualified clinical trial patients. 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.

Approved this year was Adlarity® (donepezil transdermal system), by the marker Corium. It is a onceweekly patch formulation of donepezil for the treatment of dementia due to mild, moderate, or severe Alzheimer's Disease. The Company believes Adlarity® would likely be ALPHA-1062's primary branded competitor. The real unmet need in the marketplace exists for a symptomatic treatment that has a better tolerability profile. The Adlarity® label has its disadvantages as it relates to its' tolerability profile. The Company believes that Adlarity®'s profile has exchanged gastrointestinal side effects for skin irritation issues and headache, which may not be tolerated well by this patient population. Notable adverse reactions in their label are skin irritations 81%, headache 15%, and insomnia 7%. The Company also believes Adlarity®'s tolerability profile and transdermal delivery system is not ideal for elderly patients, as their fragile skin is sensitive and suspectable to tears and abrasions. The Alzheimer's Disease community has learned this firsthand with rivastigmine (Exelon patch). 72% of caregivers noted the rivastigmine patch causes skin irritations issues for their loved one. With this feedback, we believe the oral delivery of ALPHA-1062 will be more convenient and a better option for these patients. Additionally, Adlarity® storage, application and removal process may be burdensome to elderly patients and caregivers. Adlarity® must be stored in a refrigerator until use, warm up to room temperature prior to use, can not be applied to the same body location within 14 days and can not be exposed to excess heat, such as a heating pad. The Company predicts these storage and usage requirements will be seen as inconvenient and coupled with the adverse reactions, will limit market share attainment of this product.

Alzheimer's Disease is a highly genericized market with limited drug development innovation. As noted above, three out of the four approved symptomatic medications are generic and many have been in the market up to two decades. The acetylcholinesterase inhibitors drug class (ie: 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

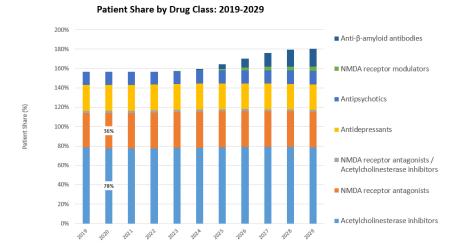


Source: Decision Resources Group, 2021

The perceived limited efficacy or not enough efficacy improvement, and tolerability side effects, including gastrointestinal issues (nausea, diarrhea, and vomiting), dizziness and 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 specialty physicians and 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 expresses dissatisfaction with the currently approved symptomatic treatments options.

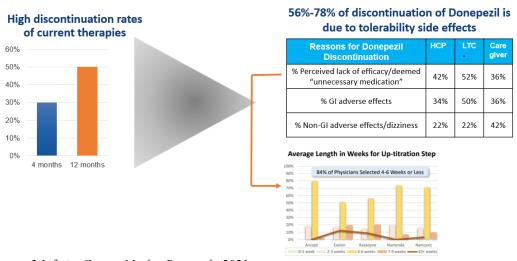
Acetylcholinesterase Inhibitors

As mentioned, acetylcholinesterase inhibitors are the dominate symptomatic drug class, which inhibit cholinesterase and prevent the breakdown of acetylcholine in the brain. They account for approximately 80% of all Alzheimer's Disease drug prescriptions, which equates to 11 million prescriptions each year and \$5B in sales dollars (assuming branded priced market). The use of acetylcholinesterase inhibitors as the goto medication is forecasted to remain consistent well into the future. Donepezil is the staple acetylcholinesterase inhibitor, with approximately 70% total market share.



Source: AD Landscape, 2021

Yet, according to the market research, physicians believe done pezil has reported little clinical improvement and a less than desirable tolerability profile. So, their treatment choice to prescribe it is based on secondary attributes: longevity in the market, low generic cost and once-daily dosing. Physicians and caregivers report 56-78% of the time donepezil tolerability issues are the primary reason for discontinuation. Caregivers perceive these side effects diminish their loved one's quality of life in terms of comfort, eating, and ability for independent toileting. In addition to gastrointestinal issues, long-term care physicians in particular note that nausea and loss of appetite are troublesome side effects because it affects the patient's ability to socialize, disrupts mealtimes and causes family complaints. Additionally, the gastrointestinal issues cause staff burden due to the risk of falls as the patient tries to rush to a bathroom. Physicians and caregivers cite that approximately 40% of the time perceived limited efficacy results or not enough efficacy improvement is the second reason patients discontinue therapy. Increasingly worrisome, as noted in research, is that over half of patients that discontinue donepezil within long-term care homes are not prescribed another Alzheimer's Disease medication. This could result in a patient's disease progressing at a rapid pace without any treatment assistance. Another limitation of the acetylcholinesterase inhibitors is the long titration schedule (4-6 weeks) to reach the maximum efficacious dose. Needless to say, improved efficacy outcomes, a shorter titration schedule and a better tolerability profile are significant unmet needs for future Alzheimer's Disease treatments.



Source: 2 Infinity Group, Market Research, 2021

Forecasted Alzheimer's Disease Treatments

More than 126 drugs are currently in various stages of development for Alzheimer's Disease and the treatments range from symptomatic, disease modifying, and behavioral. Despite the forecasted launches of DMTs, assuming clinical success and FDA approval, symptomatic therapies (specifically acetylcholinesterase inhibitors) will still be a dominant therapy and maintain the largest Rx share in an Alzheimer's Disease patient's treatment algorithm. Symptomatic therapies and DMTs, are projected to be used in combination to maximize efficacy and symptom control for Alzheimer's Disease patients.

There are currently 74 Alzheimer's Disease treatments in phase 2 clinical trials and 28 treatments in Phase 3, a number of which are projected to be approved for mild-to-moderate stages of Alzheimer's Disease. Eli Lilly's solanezumab, Merck's verusbecestat, and Taurz therapeutics LMTX. If approved and commercialized, these disease modifying treatments are projected to increase the rates of Alzheimer's Disease diagnosis and treatment. While there should be much anticipation for their potential approvals, the regrettable circumstances surrounding the real-world obstacles that Biogen faced with the approval of Aduhelm® have caused the Alzheimer's Disease community to be apprehensive. Physicians are skeptical about disease modifying treatment usage due to the lack of available information to date, the anticipated cost and reimbursement challenges, and concerns about their real-world efficacy results.

Within the behavioral drug category, four therapies targeting key neuropsychiatric symptoms are expected in the coming years and will expand the Alzheimer's Disease treatment market. Expected launches include Avanir/Otsuka's AVP-786 (agitation with Alzheimer's dementia), and Axsome's AXS-05 (agitation with Alzheimer's dementia). According to Key Opinion Leaders and market research, these treatments would likely be used in combination with indicated symptomatic treatments, such as ALPHA-1062, in Alzheimer's Disease patients experiencing neuropsychiatric symptoms. We also believe that the approval of these medications will likely increase Alzheimer's Disease diagnosis and treatment rates, which is positive for potential ALPHA-1062 Alzheimer's Disease patients.

Intellectual Property

The Company has developed, filed, and exclusively licensed (from Neurodyn) a significant intellectual property portfolio with respect to ALPHA-1062 and ALPHA-0602, 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 proportion of the ALPHA 1062, in essence delivering the old drug (galantamine) with its attendant limitations. However, by transmucosal oral/nasal delivery or delayed release via enteric formulations, effective delivery of ALPHA-1062 can be achieved. Delivery, polymorph, and formulation patents therefore effectively expand on the original therapeutic use patent. It is the Company's intent to patent all commercially relevant forms, formulations and routes/methods of ALPHA-1062 delivery in order to extend the effective patent protection lifetime. There is potential that effective patent protection of ALPHA-1062 and therapeutically relevant salts, polymorphs and/or formulations thereof can be extended beyond 2042.

The Company's current patents (granted and in prosecution) for ALPHA-1062 are listed below. The Company anticipates filing a number of future patents for ALPHA-1062 focused on active pharmaceutical ingredient manufacturer and formulation.

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	04/2028
China	ZL200880128608.5	Granted	04/2028
Japan	JP 5504253	Granted	04/2028
Europe (11 European Patent	EP 2137192	Granted	04/2028
Convention member states)			
United States	US 9,763,953,	Granted	12/2026
	US 10,265,325		

In Europe, Japan, 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 allowed in this patent family that cover the corresponding method of treatment claims, one of which is directed to nasal administration of ALPHA-1062.

Patent term extension (PTE) of U.S. 9,763,953 appears likely, assuming FDA approval of the gluconate salt of ALPHA-1062 is achieved. An application requesting PTE must be filed within sixty days of FDA regulatory approval of the ALPHA-1062 drug product. 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. Considering the 5-year maximum, the 14-year limit will likely not apply to the '953 patent due to its nominal expiry date (in 2026). A 5-year extension could extend patent term until 2031. A more detailed estimate of the duration of PTE will require a detailed analysis of the timeline of the regulatory approval process.

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 number	Status	Expiry Date
Australia	AU 2013294917	Granted	07/2033
Europe (11, and 18, European	EP 2877165 and	Parent and	07/2033
Patent Convention member	EP 3417862	Divisional	
states)		Granted	
Japan	JP 6272857, JP 6574002 and	Parent and two	07/2033
	JP 6799648	Divisionals	
		Granted	
Canada	CA 2,878,135	Granted	07/2033
United States	US 11,077,119	Granted and	07/2033
	US 16,287,413	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 Japan and 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 PCT/CA2021/050666).

Jurisdiction	Patent number	Filed	Status	Expiry Date
PCT application filed	PCT/CA2021/050666	05/2021	Pending	2041

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

Jurisdiction	Patent number	Filed	Status	Expiry Date
European Priority filing	EP21152317	01/2021	Pending	2041
PCT application filed	PCT/CA2022/050046	01/2022	Pending	2042
United States	US 17/575025	01/2022	Pending	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.

Blood Brain Barrier VI (BBB VI): ALPHA-1062 for Treating mTBI

Jurisdiction	Patent number	Filed	Status	Expiry Date
European Priority filing	EP21210661.1	11/2021	Pending	2042
			(not published)	

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 the API. The European priority application remains pending. An international PCT-application is planned.

Blood Brain Barrier VII (BBB VII): ALPHA-1062 for the Treatment of Mild to Moderate Impaired Cognitive Function in Neurologically Intact Elderly Subjects

Jurisdiction	Patent number	Filed	Status	Expiry Date
European Priority filing	EP22170214.5	04/2022	Pending	2043
			(not published)	

This invention is based on quantitative electroencephalography (qEEG) studies, showing that ALPHA-1062 affects several qEEG biomarker outcomes relevant to Alzheimer's Disease and cognitive functionality. ALPHA-1062 leads to long-lasting improvements on qEEG profiles consistent with positive effects on cognition, especially in neurologically intact subjects aged 65 or older. The European priority application remains pending. An international PCT application is planned.

Additional IP is generated and in preparation for filing, including novel formulations and methods of synthesizing ALPHA-1062.

ALPHA-0602 Patent Portfolio

The ALPHA-0602 patent portfolio is based on methods and compositions for the treatment of neurodegenerative diseases using progranulin, and a combination of effectors that modify progranulin expression. Issued patents include the use of both the full length progranulin and sequences to treat neurological diseases such as (in the European priority divisional) motor neuron disease including ALS, in addition to (the parent patent claiming) treatment of Alzheimer's and Parkinson's.

The Company's current patents (granted and in prosecution) for ALPHA-0602 are listed below.

Progranulin For Use in Treating Parkinson's Disease or Alzheimer's Disease (PCT application WO2009089635).

Jurisdiction	Patent	Filed	Status	Expiry Date
	number			
China	CN102006882	1/16/2009	Granted	04/2028
India	280570	1/16/2009	Granted	04/2028
Europe (6 European	2249861	1/16/2009	Granted parent	04/2028
Patent Convention			and Divisional,	
member states)			Divisional	
			maintained in	
			opposition	
Canada	2,712,276	1/16/2009	Pending	06/2026
United States	16,851,951	1/16/2009	Pending	06/2026

The patent protects the therapeutic use of ALPHA-0602 to treat a variety of neurodegenerative, or neurological diseases. Alzheimer's Disease. A European Divisional patent was granted, covering the treatment of any neurodegenerative disease using progranulin and progranulin polypeptides, and methods of treatment of neurodegenerative diseases using effectors, or combinations of effectors, that modify progranulin expression.

It is the Company's belief that ALPHA-0602 will have seven year marketing exclusivity due to ALPHA-0602 Orphan Drug Designation in the U.S. Per FDA, a sponsor with orphan drug designation may be eligible for seven years of marketing exclusivity upon product approval. This exclusivity would prohibit FDA from approving the same drug as the orphan designated approved drug for the same use or indication for seven years after the marketing approval. (Code of Federal Regulations, or CFR Title 21 Part 316.31)

Method for Increasing Neprilysin Expression and Activity (PCT application WO2012065248A1).

Jurisdiction	Patent number	Filed	Status	Expiry Date
Japan	6312436	11/16/2011	Granted	11/2031

Granulins or Combinations thereof to Treat Neurodegenerative Disease

Jurisdiction	Application number	Filed	Status	Expiry Date
United States	US 63/191255	20/05/2021	Pending	05/2042

Ongoing development has found promising in vitro results for sub-combinations of progranulin fragments and GEMs. A U.S. provisional application has been filed.

4.1.5 Lending and Investment Policies and Restrictions

This section is not applicable.

4.1.6 Bankruptcy and Receivership

The Company has not been the subject of any bankruptcy or any receivership or similar proceedings against the Company or any voluntary bankruptcy, receivership or similar proceedings by the Company, within the three most recently completed financial years or the current financial year.

4.1.7 Material Restructuring

Except for the Qualifying Transaction, the Company has not been subject to any material restructuring transaction within the three most recently completed financial years, nor is the Company proposing any material restructuring transaction for the current financial year. See section 3.1 "General Development of the Business" regarding the Qualifying Transaction.

4.1.8 Social or Environmental Policies

This section is not applicable.

4.2 Asset-Backed Securities

The Company does not have any outstanding asset-backed securities.

4.3 Companies with Mineral Projects

This section is not applicable, as the Company does not have any mineral projects.

4.4 Companies with Oil and Gas Operations

This section is not applicable, as the Company does not have any oil and gas operations.

5. SELECTED CONSOLIDATED FINANCIAL INFORMATION

5.1 Consolidated Financial Information – Annual Information

Summary of the Company's Annual Information

The audited annual financial statements of the Company for the years ended December 31, 2022, December 31, 2021, and July 31, 2020 (the "Annual Financials") are attached hereto as Schedule "A". The management's discussion and analysis of the Company for the years ended December 31, 2022, December 31, 2021, and July 31, 2020 (the "Annual MD&A") are attached hereto as Schedule "B".

The audited annual financial statements of Alpha Canada, as the operating entity of the Company, for the year ended December 31, 2020 (the "Alpha Canada Annual Financials") are attached hereto as Schedule "C" and the management's discussion and analysis of Alpha Canada for the year ended December 31, 2020 (the "Alpha Canada Annual MD&A") is attached hereto as Schedule "D".

The Annual Financials and Annual MD&A are also available under the Company's SEDAR profile at www.sedar.com.

The following table provides a summary of selected financial information of the Company as at December 31, 2022, December 31, 2021, and December 31, 2020.

	Year Ended December 31, 2022 (USD)	Year Ended December 31, 2021 (USD)	Year Ended December 31, 2020 (USD)
Revenue	-	-	-
Net income (loss)	(12,114,698)	(19,545,016)	(5,784,207)
Basic and diluted income (loss) per Common Share	(0.18)	(0.37)	(0.13)
Total assets	2,950,951	12,880,388	8,436,205
Total long-term liabilities	214,284	2,048,127	4,842,839
Cash dividends per Common Share	-	-	-

5.2 <u>Consolidated Financial Information – Quarterly Information</u>

Below is a summary of the quarterly results of the Company, for each of the eight most recently completed financial quarters:

	Year Ended December 31, 2022 (USD)	Period Ended September 30, 2022 (USD)	Period Ended June 30, 2022 (USD)	Period Ended March 31, 2022 (USD)
Revenue	-	-	-	-
Net income (loss)	(4,116,831)	(2,075,204)	(3,003,833)	(2,913,324)
Basic and diluted income (loss) per Common Share	(0.05)	(0.04)	(0.05)	(0.04)
Total assets	2,950,951	4,466,616	6,840,674	10,684,480
Total long-term liabilities	214,284	2,691,678	675,983	1,942,762
Cash dividends per Common Share	-	-	-	-
	Year Ended December 31, 2021 (USD)	Period Ended September 30, 2021 (USD)	Period Ended June 30, 2021 (USD)	Period Ended March 31, 2021 (USD)
Revenue	December 31, 2021	September 30, 2021	June 30, 2021	March 31, 2021
Revenue Net income (loss)	December 31, 2021	September 30, 2021	June 30, 2021	March 31, 2021
	December 31, 2021 (USD)	September 30, 2021 (USD)	June 30, 2021 (USD)	March 31, 2021 (USD)
Net income (loss) Basic and diluted income (loss) per	December 31, 2021 (USD) - (3,149,688)	September 30, 2021 (USD) - (4,289,053)	June 30, 2021 (USD) - 118,673	March 31, 2021 (USD) - (12,224,948)
Net income (loss) Basic and diluted income (loss) per Common Share	December 31, 2021 (USD) - (3,149,688) (0.05)	September 30, 2021 (USD) - (4,289,053) (0.08)	June 30, 2021 (USD) - 118,673 0.00	March 31, 2021 (USD) - (12,224,948) (0.28)

5.3 Dividends

The Company has not paid dividends since incorporation. The future payment of dividends will depend upon the financial requirements of the Company to fund further growth, the financial condition of the Company and other factors which the Board may consider in the circumstances. The Company does not intend, and is not required, to pay any dividends in the immediate or foreseeable future, if at all.

5.4 Foreign GAAP

This section is not applicable.

6. MANAGEMENT'S DISCUSSION AND ANALYSIS

The Company's Annual MD&A is attached to this Listing Statement as Schedule "B".

7. MARKET FOR SECURITIES

The Common Shares and Listed Warrants are currently listed on the TSXV under the stock symbols "ACOG" and "ACOG.WT", respectively. The Company is a Tier 2 issuer on the TSXV. The Common Shares and Listed Warrants will be de-listed from the TSXV on or about May 1, 2023. On or about May 1, 2023, the Common Shares and Listed Warrants will be listed for trading on the CSE.

8. CONSOLIDATED CAPITALIZATION

The following table sets out the capitalization of the Company, as at December 31, 2022, the Company's most recently completed financial year, and as at the date of this Listing Statement.

Designation of Security	Amount Authorized	Outstanding as of December 31, 2022	Amount outstanding as of the date of this Listing Statement
Common Shares	Unlimited	61,023,450	86,900,664
Listed Warrants ⁽¹⁾	9,602,500	9,602,500	9,602,500
Restricted Shares ⁽²⁾	Unlimited	7,000,000	7,000,000
Preferred Shares ⁽³⁾	Unlimited	7,916,380	7,916,380
Performance Shares ⁽⁴⁾	N/A	9,521,057	9,521,057
Warrants	N/A	6,378,790 ⁽⁵⁾	27,833,700(6)
Stock Options	Rolling 10% ⁽⁷⁾	5,506,071	4,906,071

Notes:

- (1) Each Listed Warrant entitles the holder to acquire one Common Share at a price of C\$1.75 per share.
- (2) The Restricted Shares may be converted into Common Shares at a conversion ratio of one Restricted Share to one Common Share. See section 10.1 "Description of the Company's Securities Restricted Shares".
- (3) The Preferred Shares may be converted into Common Shares at a conversion ratio of one Preferred Share to one Common Share. See section 10.1 "Description of the Company's Securities Preferred Shares".
- (4) See section 15 "Executive Compensation Stock option plans and other incentive plans Legacy Compensation Plan" for the terms of the Performance Shares.
- (5) Each Warrant entitles the holder to acquire one Common Share at the following prices: (i) 659,627 Warrants at a price of C\$1.50 per share expiring October 1, 2023; (ii) 3,101,783 Warrants at a price of US\$0.40 per share, of which 3,06,783 expire August 30, 2024 and 40,000 expire July 5, 2023; (iii) 2,486,647 Warrants at a price of C\$2.10 per share which expired on March 18, 2023; (iv) 130,733 Warrants at a price of C\$1.60 per share which expired on March 18, 2023;
- (6) Includes the unexpired warrants in Note 5 and 24,072,290 Warrants exercisable at a price of C\$0.39 per share expiring in February and March of 2028.
- (7) In connection with the CSE Listing, the Company expects to adopt the CSE Stock Option Plan upon listing on the CSE. See section 15 "Executive Compensation Stock option plans and other incentive plans CSE Stock Option Plan".

The Company has no loans. A detailed breakdown of the capital structure of the Company is provided in section 14 "Capitalization".

9. OPTIONS TO PURCHASE SECURITIES

As at the date of this Listing Statement, the Company had an aggregate of 4,906,071 Common Shares reserved for issuances pursuant to Options, as set forth below:

Optionee	Amount outstanding as of December 31, 2022	Amount outstanding as of the date of this Listing Statement
Executive officers of the Company	3,600,000	3,200,000
Directors of the Company	1,371,513	1,371,513
Executive officers of subsidiaries of the Company	-	-
Directors of subsidiaries of the Company	-	-
Employees of the Company	60,000	256,250
Employees of subsidiaries of the Company	-	-
Consultants	274,558	78,308
Other persons	200,000(1)	-

Notes:

Options are currently granted under the Stock Option Plan, which was amended and approved by the board of directors on December 31, 2021 and approved by the shareholders of the Company at the annual general meeting held July 19, 2022. Pursuant to the Stock Option Plan, the Board may from time to time, in its discretion, grant to directors, officers, employees and consultants of the Company, non-transferable options to purchase Common Shares, provided that the aggregate number of Common Shares that may be reserved for issuance from time to time, under the Stock Option Plan shall not exceed 10% of the total issued and outstanding Common Shares, exercisable for a period of up to ten years from the date of grant. In connection with the CSE Listing and in accordance with the policies of the CSE, the Company intends to adopt the CSE Stock Option Plan upon listing on the CSE. Following adoption of the CSE Stock Option Plan, the Stock Option Plan will continue to govern outstanding stock options granted pursuant to the Stock Option Plan, however no further stock options will be granted thereunder. The Company intends to seek shareholder approval of the CSE Stock Option Plan at its next annual shareholder meeting, expected to be held in June of 2023. See section 15 "Executive Compensation – Stock option plans and other incentive plans – CSE Stock Option Plan".

10. DESCRIPTION OF THE SECURITIES

10.1 Description of the Company's Securities

Authorized Capital

The authorized capital of the Company consists of an unlimited number of Common Shares without par value, an unlimited number of Restricted Shares and an unlimited number of Preferred Shares. As at the date of this Listing Statement, there are 86,900,664 Common Shares issued and outstanding, 7,000,000 Restricted Shares issued and outstanding and 7,916,380 Preferred Shares issued and outstanding.

See section 14 "Capitalization", for a breakdown of share capital.

⁽¹⁾ Held by a former investor relations service provider of the Company, these Options expired on March 18, 2023.

Common Shares

The holders of the Common Shares are entitled to notice of, to attend, and to vote at all meetings of the Company's shareholders. The holders of the Common Shares are entitled to receive dividends if, as and when declared by the directors, and rank *pari passu* with one another in any distribution of property or assets upon the liquidation, winding-up or other dissolution of the Company.

The Common Shares carry no pre-emptive rights, conversion or exchange rights, retraction, sinking fund or purchase fund provisions. There are no provisions requiring the holders the Common Shares of the Company to contribute additional capital and no restrictions on the issuance of additional securities by the Company. There are no restrictions on the repurchase or redemption of shares by the Company except as otherwise set out herein and to the extent that any such repurchase or redemption would render the Company insolvent pursuant to the BCBCA.

Restricted Shares

The Company's Restricted Shares were issued to certain holders of common shares of Alpha Canada who are resident in the United States in connection with the Company's Qualifying Transaction 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 and the Company expects that the Restricted Shares will be converted to Common Shares. The conversion of the Restricted Shares to Common Shares may be effected by resolution of the Board, which the Company currently anticipates will be completed in the second quarter of 2023. The Restricted Shares differ 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 windingup, 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 rateably, 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 will 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.

Preferred Shares

The Preferred Shares were issued to certain founders of Alpha Canada in connection with the Company's Qualifying Transaction.

The Preferred Shares include the following restrictions, conditions and limitations:

- (1) The Preferred Shares have a deemed issue price of \$0.25 ("Deemed Issue Price").
- (2) The holders of the Preferred 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 Preferred Shares will vote together with holders of Common Shares and Restricted Shares as a single class.
- (3) The holders of Preferred Shares will be entitled to receive dividends as and when declared by the Board. The Preferred Shares rank in priority to the Common Shares and Restricted Shares for payment of dividends. Dividends on the Preferred Shares are non-cumulative. If the holders of the Preferred Shares receive dividends in an aggregate amount equal to or greater than the Deemed Issue Price, the Preferred 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 Preferred 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 Preferred Shares (as appropriately adjusted for any stock dividends, combinations or splits) plus all accrued or declared but unpaid dividends on such Preferred Shares (the "Liquidation Preference"). After payment in full of the Liquidation Preference has been made to the holders of the Preferred Shares, all remaining assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Preferred Shares, Common Shares and Restricted Shares. Upon payment of the Liquidation Preference, each Preferred Shares will convert into one Common Share.
- (5) Each Preferred 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 Preferred 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 US\$40 million, and a price per share which values the Company at US\$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 US\$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 US\$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 US\$160 million; or
- (d) a third party makes a bona fide offer to acquire certain specific Company asset(s), for sale proceeds of at least US\$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 US\$160 million,

If the Preferred 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.

Listed Warrants

The Listed Warrants will be listed on the CSE. On October 1, 2021, the Company issued the Listed Warrants pursuant to a prospectus offering and the Listed Warrants were listed for trading on the TSXV under the symbol "ACOG.WT" effective as of October 5, 2021. Each Listed Warrant entitles the holder to acquire one Common Share at a price of \$1.75 per share until October 1, 2023.

The Listed Warrants are governed by the Listed Warrant Indenture. The holders of Listed Warrants are not entitled to notice of, or to attend or to vote at, any meetings of the Company's shareholders. The holders of the Listed Warrants are not entitled to receive dividends of the Company. The Listed Warrants carry no pre-emptive rights, conversion or exchange rights, retraction, sinking fund or purchase fund provisions. There are no provisions requiring the holders the Listed Warrants of the Company to contribute additional capital and no restrictions on the issuance of additional securities by the Company. Pursuant to the Listed Warrant Indenture, the Listed Warrants are subject to customary adjustment provisions in the event of a subdivision, consolidation, or capital reorganization of the Common Shares or an amalgamation or other business combination with another company.

10.2 <u>Debt Securities</u>

This section is not applicable.

10.3 Not numbered in the Form 2A

10.4 Other Securities

The Company has no other securities outstanding.

10.5 **Modification of Terms**

There are no provisions to modify or amend rights of Common Shares or Listed Warrants and all material attributes of the Common Shares and Listed Warrants are described above in sections 10.1 and 10.4, respectively.

10.6 Other Attributes

See sections 10.1 and 10.4 above.

10.7 Prior Sales

The following table sets forth details regarding the Common Shares that have been sold within the 12 months before the date of this Listing Statement, or are to be sold, by the Company. No Listed Warrants have been sold within the 12 months prior to the date of this Listing Statement.

Date Issued	Type of Security	Number of Securities	Issue/Exercise Price per Security (\$)
February 16, 2023	Common Shares	16,795,221(1)	\$0.255
February 16, 2023	Warrants	16,795,221(1)	\$0.39
March 15, 2023	Common Shares	6,952,427(2)	\$0.255
March 15, 2023	Warrants	6,952,427 (2)	\$0.39
March 15, 2023	Common Shares	2,129,566 ⁽³⁾	\$0.255
March 15, 2023	Warrants	324,642(3)	\$0.39
TOTAL:		49,949,504	

Notes:

- (1) The Company issued 16,795,221 units consisting of one Common Share and one Warrant, pursuant to a private placement. The warrants are exercisable at \$0.39 and will expire five years from the date of issuance.
- (2) The Company issued 6,952,427 units consisting of one Common Share and one Warrant, pursuant to a private placement. The warrants are exercisable at \$0.39 and will expire five years from the date of issuance.
- (3) Spartan received compensation of 2,129,566 Common Shares and 324,642 warrants for its role as a broker in connection with a private placement. The warrants are exercisable at \$0.39 and will expire five years from the date of issuance.

10.8 Stock Exchange Price

Common Shares

The Common Shares were listed and quoted for trading on the TSXV on September 21, 2018. The following table sets forth the trading ranges (high/low) in Canadian dollars and volumes of the Common Shares traded on the TSXV for the periods identified.

Period	High	Low	Volume
April 1, 2023 to April 27, 2023	\$0.26	\$0.22	217,368
Quarter ended March 31, 2023	\$0.49	\$0.21	796,596
Quarter ended December 31, 2022	\$0.55	\$0.24	724,669

Period	High	Low	Volume
Quarter ended September 30, 2022	\$0.85	\$0.43	342,699
Quarter ended June 30, 2022	\$1.03	\$0.49	2,149,935
Quarter ended March 31, 2022	\$1.19	\$0.88	1,059,232
Quarter ended December 31, 2021	\$1.47	\$0.92	2,763,490
Quarter ended September 30, 2021	\$2.49	\$0.76	1,401,597

Listed Warrants

The Listed Warrants were listed and quoted for trading on the TSXV on October 5, 2021. The following table sets forth the trading ranges (high/low) in Canadian dollars and volumes of the Listed Warrants traded on the TSXV for the periods identified.

Period	High	Low	Volume
April 1, 2023 to April 27, 2023	\$0.005	\$0.005	Nil
Quarter ended March 31, 2023	\$0.005	\$0.005	20,000
Quarter ended December 31, 2022	\$0.05	\$0.005	19,000
Quarter ended September 30, 2022	\$0.06	\$0.05	3,000
Quarter ended June 30, 2022	\$0.30	\$0.06	41,500
Quarter ended March 31, 2022	\$0.40	\$0.20	486,600
Quarter ended December 31, 2021	\$0.58	\$0.20	390,000
Quarter ended September 30, 2021	n/a	n/a	n/a

11. ESCROWED SECURITIES

The following table outlines the number of securities held, to the knowledge of the Company, in escrow or that are subject to a contractual restriction on transfer, as at the date of this Listing Statement.

Designation of Class	Number of securities held in escrow or that are subject to a contractual restriction on transfer	Percentage of Class
Common Shares	14,820,555(1)(2)(3)	17.05%
Restricted Shares	2,448,696 ⁽⁴⁾	34.98%
Preferred Shares	4,044,889 ⁽⁵⁾	51.1%
Performance Shares	5,055,085 ⁽⁶⁾	53.09%
Warrants	311,600 ⁽⁴⁾	<1%

Notes:

- (1) 10,060,719 common shares are subject to the Escrow Agreement.
- (2) 186,557 common shares are subject to the CPC Escrow Agreement.
- (3) 4,573,279 common shares are subject to the TSXV seed share resale restrictions (the "Seed Share Resale Restrictions").
- (4) These securities are subject to the Escrow Agreement.
- (5) 3,514,969 Preferred Shares are subject to the Escrow Agreement. 529,920 Preferred Shares are subject to the Seed Share Resale Restrictions.
- (6) 4,920,085 Performance Shares are subject to the Escrow Agreement. 135,000 Performance Shares are subject to the Seed Share Resale Restrictions.

Escrow Agreement

Pursuant to the terms of the Escrow Agreement, the securities are released in accordance with the TSXV Tier 2 surplus escrow schedule as follows:

Release Dates	Percentage of Total Escrowed Securities to be Released	Total Number of Escrowed Securities to be Released
March 29, 2021	5%	1,972,172
September 29, 2021	5%	1,972,172
March 29, 2022	10%	3,944,345
September 29, 2022	10%	3,944,345
March 29, 2023	15%	5,916,518
September 29, 2023	15%	5,916,518
March 29, 2024	40%	15,777,389

CPC Escrow Agreement

Pursuant to the terms of the CPC Escrow Agreement, the 621,850 common shares initially subject to the CPC Escrow Agreement are released in accordance with the TSXV Tier 2 value escrow schedule as follows:

Release Dates	Percentage of Total Escrowed Securities to be Released	Total Number of Escrowed Securities to be Released
March 29, 2021	10%	62,185
September 29, 2021	15%	93,277
March 29, 2022	15%	93,277
September 29, 2022	15%	93,277
March 29, 2023	15%	93,277
September 29, 2023	15%	93,278
March 29, 2024	15%	93,279

TSXV Seed Share Resale Restrictions

There were an aggregate of 15,409,612 common shares, 1,766,400 Preferred Shares and 500,000 Performance Shares held by non-principals of the Company which were subject to the TSXV seed share resale restrictions. The resale restrictions are removed from these securities in accordance with the TSXV Tier 2 value escrow schedule as follows:

Release Dates	Percentage of Securities to be Released	Total Number of Securities to be Released
March 29, 2021	10%	1,767,601
September 29, 2021	15%	2,651,401
March 29, 2022	15%	2,651,401
September 29, 2022	15%	2,651,401
March 29, 2023	15%	2,651,401
September 29, 2023	15%	2,651,401
March 29, 2024	15%	2,651,406

12. PRINCIPAL SHAREHOLDERS

12.1 Principal Shareholders

As of the date of this Listing Statement, except as set out below, no person beneficially owns, directly or indirectly, or exercises control or direction over 10% or more of the outstanding Common Shares and Restricted Shares (either on an undiluted or fully diluted basis).

Name of Principal Shareholder	Number of Common Shares	Percentages of Common Shares ⁽¹⁾
Manchester Management Company LLC	9,483,568 ⁽²⁾	10.09%

Notes:

- (1) Based on 93,900,664 issued and outstanding Common Shares and Restricted Shares.
- (2) With joint partner JEB Partners L.P. as reported in an early warning report filed February 16, 2023. With JEB Partners L.P., Manchester Management Company LLC would hold 18,576,836 Common Shares representing 12.06% of the outstanding Common Shares on a fully-diluted basis.

12.2 Fundamental Change

This section is not applicable.

12.3 **Voting Agreements**

This section is not applicable.

12.4 Affiliated Principal Shareholders

This section is not applicable.

13. DIRECTORS AND OFFICERS

13.1 <u>Directors and Officers</u>

As at the date of this Listing Statement, the names, place of residence, positions, offices and principal occupations of the directors and officers of the Company are as follows:

Name, Position & Municipality of Residence	Director/Officer Since	Principal Occupation for Past Five Years ⁽¹⁾	Number of Common Shares, Restricted Shares and Preferred Shares Beneficially Owned, Directly or Indirectly, or Over Which Control or Discretion is Exercised (2)
Michael McFadden	CEO since April	Mr. McFadden's principal	220,166
Texas, United States	12, 2021	occupation is acting as the	Common Shares and Nil
CEO and Director		CEO of the Company. Prior	Restricted Shares
	Director since	to this he was Chief	(<1%)
	March 28, 2022	Commercial Officer (CCO)	
		for MPower Health.	

Name, Position & Municipality of Residence	Director/Officer Since	Principal Occupation for Past Five Years ⁽¹⁾	Number of Common Shares, Restricted Shares and Preferred Shares Beneficially Owned, Directly or Indirectly, or Over Which Control or Discretion is Exercised (2)
Don Kalkofen Texas, United States CFO	April 11, 2022	From 2018 to 2019 Mr. Kalkofen was acting as the CFO a financial services and global SAAS company. From 2019 to 2022 Mr. Kalkofen served as CFO of Protagonist Therapeutics Inc. (NASDAQ: PTGX), a publicly-traded biopharmaceutical company.	10,000 Common Shares and Nil Restricted Shares (<1%)
Lauren D'Angelo Texas, United States Chief Commercial Officer	May 4, 2021	Ms. D'Angelo's principal occupation is acting as the CCO of the Company. Previously, Ms. D'Angelo served as Vice President, Marketing and Commercial Strategy at Urovant Sciences.	Nil
Kenneth Cawkell ⁽³⁾ New Westminster, British Columbia Corporate Secretary and Director	March 18, 2021	Mr. Cawkell is a founder and CEO of Neurodyn Life Sciences Inc., a private biotech company focused on developing natural based products to promote healthy ageing. Mr. Cawkell is also a founder of Alpha Cognition Inc.	5,361,899 Common Shares and Nil Restricted Shares (5.7%) 2,000,000 Preferred Shares (25.3%)
Len Mertz ⁽³⁾⁽⁵⁾⁽⁶⁾ Texas, United States Chairman and Director	March 18, 2021	Mr. Mertz is Chairman of Shannon West Texas Memorial Hospital and a cofounder of Mayne & Mertz, Inc. an oil & gas exploration company. Mr. Mertz is also on the board of the First National Bank of Mertzon.	8,100,167 (5,956,423 Common Shares and 2,143,744 Restricted Shares) (8.6%) 3,266,780 Preferred Shares (41.3%)

Name, Position & Municipality of Residence	Director/Officer Since	Principal Occupation for Past Five Years ⁽¹⁾	Number of Common Shares, Restricted Shares and Preferred Shares Beneficially Owned, Directly or Indirectly, or Over Which Control or Discretion is Exercised (2)		
John Havens ⁽⁴⁾⁽⁵⁾ Texas, United States Director	March 18, 2021	Mr. Havens is the President of Seismic Exchange, Inc. Mr. Havens also serves as Vice Chairman/Board Member of the Houston Astros.	7,030,988 (5,708,482 Common Shares and 1,322,506 Restricted Shares) (7.5%)		
Phillip Mertz ⁽⁴⁾⁽⁵⁾⁽⁶⁾ Virginia, United States <i>Director</i>	March 18, 2021	Mr. Mertz is the CEO of Subtle Technology, a neurotechnology company, and is a partner in Mertz Holdings. Mr. Mertz is also a cofounder of Secure Open Solutions, a cybersecurity and compliance management company. Previously Mr. Mertz led business development for CNG Energy, and worked as a management consultant with Touchstone Consulting Group.	1,255,822 (269,910 Common Shares and 985,912 Restricted Shares) (1.3%) 883,200 Preferred Shares (11.2%)		
Rajeev 'Rob' Bakshi ⁽³⁾⁽⁵⁾ White Rock, British Columbia Director	November 15, 2017	Mr. Bakshi has been the CEO of Active Witness Corp. from 2018 to present. In 2013, Mr. Bakshi was appointed CEO of Apivio Systems Inc.	296,079 Common Shares and Nil Restricted Shares (<1%)		

Notes:

- (1) The information as to principal occupation and business or employment, has been provided by the directors and officers.
- (2) The information as to securities of the Company beneficially owned or controlled has been provided by the directors and officers. Percentages of ownership has been calculated on the basis of 93,900,664 issued and outstanding Common Shares and Restricted Shares.
- (3) Member of the Audit Committee.
- (4) Member of the Compensation Committee.
- (5) Member of the Governance Committee.
- (6) Len Mertz is the father of Phillip Mertz. Len Mertz and Phillip Mertz do not reside in the same household.

13.2 Period of Service of Directors

The current directors of the Company will be elected annually at each annual general meeting of Shareholders and will hold office until the next annual general meeting unless a director's office is earlier vacated in accordance with the constating documents of the Company, or if they become disqualified to serve as a director.

13.3 Directors and Officers Common Share Ownership

The directors and officers of the Company as a group beneficially own, directly or indirectly, or control: (i) 22,275,121 Common Shares and Restricted Shares, or approximately 23.7% of the 93,900,664 Common Shares and Restricted Shares issued and outstanding as of the date of this Listing Statement, on a non-diluted basis; and (ii) 6,149,980 Preferred Shares, or approximately 77.7% of the Preferred Shares issued and outstanding as of the date of this Listing Statement.

13.4 **Board Committees**

The Company has no other committees, other than the Audit Committee, the Compensation Committee and the Governance Committee.

Audit Committee

Pursuant to Section 224(1) of the *Business Corporations Act* (British Columbia) and NI 52-110 the Company is required to have an audit committee comprised of not less than three directors, a majority of whom are not officers, control persons or employees of the Company or an affiliate of the Company.

The primary function of the Audit Committee is to assist the Board in fulfilling its financial oversight responsibilities by: (i) reviewing the financial reports and other financial information provided by the Company to regulatory authorities and shareholders; (ii) reviewing the systems for internal corporate controls which have been established by the Board and management; and (iii) overseeing the Company's financial reporting processes generally. In meeting these responsibilities, the Audit Committee monitors the financial reporting process and internal control system; reviews and appraises the work of external auditors and provides an avenue of communication between the external auditors, senior management and the Board. The Audit Committee is also mandated to review and approve all material related party transactions.

Audit Committee Charter

The Company has adopted an Audit Committee Charter, a copy of which is attached to this Listing Statement as Schedule "E".

Composition of the Audit Committee

The Audit Committee is currently comprised of the following members: Kenneth Cawkell, Len Mertz and Rajeev 'Rob' Bakshi. Len Mertz is Chair of the Audit Committee. Each member of the Audit Committee is considered to be financially literate, as defined by NI 52-110, in that they have the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can presumably be expected to be raised by the Company's financial statements.

The members of the Audit Committee are elected by the Board at its first meeting following the annual shareholders' meeting. Unless a chair is elected by the full Board, the members of the Audit Committee designate a chair by a majority vote of the full Audit Committee membership.

The following members of the Audit Committee currently do not meet the definition of 'independent' under NI 52-110: Kenneth Cawkell as he is currently the Corporate Secretary of the Company and served as CEO within the last three years; Len Mertz as he is currently the Chairman of the Company; and Rajeev 'Rob' Bakshi as he served as CEO, President and Chairman within the last three years.

Relevant Education and Experience

All three current Audit Committee members have the ability to read and understand financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements and are therefore considered "financially literate".

Kenneth Cawkell – Mr. Cawkell is a retired, non-practicing member of the British Columbia Bar Association, and, in 1987, he co-founded the law firm Cawkell Brodie LLP, where he acted as managing partner until 2022. Mr. Cawkell has been involved for over 25 years in the biotech industry as both a professional advisor, investor and as the founding principal of the Neurodyn Group. Mr. Cawkell has gained extensive strategic and development experience as a result of his long-term association with numerous public and private biotechnology companies and he has been involved in several successful exits. He is a past member of the National Research Council of Canada IMB/INH Advisory Board and a number of biotech industry associations.

Len Mertz – Mr. Mertz began his career as a certified public accountant obtaining his BBA in Finance with highest honors and his Masters in Professional Accounting from the University of Texas at Austin. Since 1980, Mr. Mertz has been a co-founding partner at Mayne & Mertz, Inc., an oil and gas exploration and production company with offices in Texas. Mr. Mertz is an experienced board member with investments in several early-stage healthcare and biotech companies including Triumvira Immunologics, Photodynamic. He currently serves as Chairman of Shannon West Texas Memorial Hospital and as a director of the First National Bank of Mertzon and an honorary director of The Texas & Southwestern Cattle Raisers Association. Mr. Mertz previously served as Chairman for the Tucker Foundation and PeraHealth, Inc.

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 of 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.

Audit Committee Oversight

Since the commencement of the Company's most recently completed financial year, the Board have not failed to adopt a recommendation of the Audit Committee to nominate or compensate an external auditor.

Reliance on Certain Exemptions

Since the commencement of the Company's most recently completed financial year, the Company has not relied on the exemptions contained in sections 2.4, 6.1.1(4), 6.1.1(5), 6.1.1(6) or Part 8 of NI 52-110. Section 2.4 provides an exemption from the requirement that the Audit Committee must pre-approve all non-audit services to be provided by the auditor, where the total amount of fees related to the non-audit services are not expected to exceed 5% of the total fees payable to the auditor in the fiscal year in which the non-audit services were provided. Section 6.1.1(4), (5) and (6) provide exemptions in certain circumstances from the requirement that a majority of the members of the Audit Committee must not be executive officers, employees or control persons of the venture issuer. Part 8 permits a company to apply to a securities regulatory authority for an exemption from the requirements of NI 52-110, in whole or in part.

Pre-Approval Policies and Procedures

The Audit Committee has not adopted specific policies and procedures for the engagement of non-audit services. Subject to the requirements of NI 52-110, the engagement of non-audit services is considered by the Board, and where applicable the Audit Committee, on a case-by-case basis.

External Auditor Service Fees

In the following table, "audit fees" are fees billed by the Company's external auditor for services provided in auditing the Company's annual financial statements for the subject year. "Audit-related fees" are fees not included in audit fees that are billed by the auditor for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements. "Tax fees" are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning. "All other fees" are fees billed by the auditor for products and services not included in the foregoing categories.

The fees paid by the Company to its auditor in respect of each of the last two fiscal years, by category, are as follows:

Financial Year Ending	Audit Fees	Audit Related Fees	Tax Fees	All Other Fees
December 31, 2022	\$110,000	\$124,975	Nil	Nil
December 31, 2021	\$120,000	\$37,200	Nil	Nil

Corporate Governance

Corporate governance relates to the activities of the Board, the members of which are elected by and are accountable to the Company's shareholders, and takes into account the role of the individual members of management who are appointed by the Board and charged with the day to day management of the Company. The Canadian Securities Administrators ("CSA") have adopted National Policy 58-201 *Corporate Governance Guidelines*, which provides non prescriptive guidelines on corporate governance practices for reporting issuers such as the Company. In addition, the CSA have implemented National Instrument 58-101 *Disclosure of Corporate Governance Practices*, which prescribes certain disclosure by the Company of its corporate governance practices. This disclosure is presented below.

Board of Directors

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. There are two members of the Board, John Havens, and Phillip Mertz, who are considered to be independent for purposes of membership on the Board. For this purpose, a director is independent if he has no direct or indirect "material relationship" with the Company. A "material relationship" is a relationship which could, in the view of the Board, be reasonably expected to interfere with the exercise of the director's independent judgment. Rajeev 'Rob' Bakshi (former President, CEO and Chairman), Kenneth Cawkell (Corporate Secretary), Michael McFadden (CEO), and Len Mertz (Chairman) are considered to be non-independent directors.

Other Directorships

The following table sets forth the directors of the Company who are directors of other reporting issuers as at the date of this Listing Statement:

Name	Name of other reporting issuer		
Kenneth Cawkell	Centurion Minerals Inc. (TSXV) Well Health Technologies Corp. (TSX) Westmount Minerals Inc. (CSE)		

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 and is on the mailing list of the CSE and TSXV to receive updates to any of those policies. Any such changes or new requirements are then brought to the attention of the Company's directors either by way of Director or committee meetings or circulated in a memorandum.

The Company has adopted written corporate governance guidelines to support continuing education opportunities for all directors. The Governance Committee is comprised of four directors of the Company, Rajeev 'Rob' Bakshi, John Havens, Len Mertz and Phillip Mertz, and is responsible for determining appropriate orientation and education programs for new Board members. The corporate governance guidelines adopted by the Company also include the following written policies and charters:

- Code of Business Conduct and Ethics
- Insider Trading Policy
- Disclosure Policy
- Governance and Nomination Committee Charter
- Audit Committee Charter
- Compensation Committee Charter

Copies of the Governance and Nomination Committee Charter, Audit Committee Charter and Compensation Committee Charter are available on the Company's website.

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. The director must then abstain from voting on the contract or transaction unless the contract or transaction (i) relates primarily to their remuneration as a director, officer, employee or agent of the Company or an affiliate of the Company, (ii) is for indemnity or insurance for the benefit of the director in connection with the Company, or (iii) is with an affiliate of the Company. 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 the contract or transaction being invalid.

Accordingly, the Company has adopted a written Code of Business Conduct and Ethics (the "**Ethics Code**") to help the directors, officers and employees of the Company understand what is expected of them and to carry out their responsibilities. The Board has instructed its management and employees to abide by the Ethics Code and to bring any breaches of the Ethics Code to the attention of the Board.

Nomination of Directors

The Board and the Governance Committee consider the size of the Board 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 Board has adopted a written Governance and Nomination Committee Charter that sets forth the responsibilities, powers and operations of the Governance Committee. A copy of the Governance and Nomination Committee Charter is available on the Company's website.

Compensation

The Compensation Committee is comprised of two directors of the Company, John Havens (Chair) and Phillip Mertz. 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 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. See also the discussion under the heading "Statement of Executive Compensation – Compensation Governance".

To assist with the oversight of the Company's compensation program, the Board established a Compensation Committee Charter. A copy of the Compensation Committee Charter is available on the Company's website.

Assessments

The Board annually, and at such other times as it deems appropriate, reviews the performance and effectiveness of the Board, the directors and its committees to determine whether changes in size, personnel or responsibilities are warranted. To assist in its review, the Board conducts informal surveys of its directors and receives reports from each committee respecting its own effectiveness. As part of the assessments, the Board or the individual committee may review their respective mandate or charter and conduct reviews of applicable corporate policies.

13.5 Principal Occupation of Directors and Executive Officers

Information regarding the directors' and executive officers' principal occupation is set out in section 13.11 "Management".

13.6 Cease Trade Orders and Bankruptcies

Other than disclosed herein, to the best of the Company's knowledge, no director or executive officer of the Company, or Shareholder holding a sufficient number of Common Shares to affect materially the control of the Company, is, or within the 10 years before the date of this Listing Statement has been, a director or officer of any company that:

- (a) was the subject of a cease trade or similar order, or an order that denied the Company access to any statutory exemptions, for a period of more than 30 consecutive days which was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer;
- (b) was subject to an event that resulted, after the director or executive officer ceased to be a director or executive officer, in the Company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days;
- (c) 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

(d) 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.

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.

13.7 Penalties or Sanctions

No proposed director or executive officer of the Company, or a Shareholder holding a sufficient number of the Company's securities to affect materially the control of the Company has been subject to:

- (a) any penalties or sanctions imposed by a court relating to Canadian securities legislation or by a Canadian securities regulatory authority or has entered into a settlement agreement with a Canadian securities regulatory authority; or
- (b) any other penalties or sanctions imposed by a court or regulatory body that would be likely to be considered important to a reasonable investor making an investment decision.

13.8 Settlement Agreements

This section is not applicable.

13.9 Personal Bankruptcies

No director or officer of the Company, or a Shareholder holding sufficient securities of the Company to affect materially the control of the Company, or a personal holding company of any such persons has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or been 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 or officer.

13.10 Conflicts of Interest

Conflicts of interest may arise as a result of the directors and officers of the Company also holding positions as directors or officers of other companies. Some of the individuals who will be directors and officers of the Company have been and will continue to be engaged in the identification and evaluation of assets, businesses and companies on their own behalf and on behalf of other companies, and situations may arise where the directors and officers of the Company will be in direct competition with the Company. Conflicts, if any, will be subject to the procedures and remedies provided under BCBCA.

13.11 Management

Brief descriptions of the biographies for all officers and directors of the Company are set out below.

Michael McFadden, age 55 – CEO and Director. 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 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 section 15 "Executive Compensation – Employment, consulting, and management agreements—Current employment, consulting and management agreements". Mr. McFadden anticipates devoting 100% of his time to the business of the Company to effectively fulfill his duties.

Don Kalkofen, age 59 – **CFO.** Mr. Kalkofen has experience acting as CFO of both public and private companies for the past 20 years. Mr. Kalkofen has a B.A. in accounting from Washington State University and is an inactive Certified Public Accountant. From 2019 to 2022 Mr. Kalkofen served as CFO of Protagonist Therapeutics Inc. (NASDAQ: PTGX), a publicly-traded biopharmaceutical company. From 2018 to 2019 Mr. Kalkofen was acting as the CFO a financial services and global SAAS company. Mr. Kalkofen provides services to the Company as an employee. See section 15 "Executive Compensation – Employment, consulting, and management agreements—Current employment, consulting and management agreements". Mr. Kalkofen anticipates devoting 100% of his time to the business of the Company to effectively fulfill his duties.

Lauren D'Angelo, age 45 – **Chief Commercial Officer.** 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 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. Ms. D'Angelo provides services to the Company as an employee. See section 15 "Executive Compensation – Employment, consulting, and management agreements—Current employment, consulting and management agreements". Ms. D'Angelo anticipates devoting 100% of her time to the business of the Company to effectively fulfill her duties.

Kenneth Cawkell, age 71 – Corporate Secretary and Director. Mr. Cawkell is a retired, non-practicing member of the British Columbia Bar Association, and, in 1987, he co-founded the law firm Cawkell Brodie LLP, where he acted as managing partner until 2022. Mr. Cawkell has been involved for over 25 years in the biotech industry as both a professional advisor, investor and a founding principal. Mr. Cawkell has gained extensive strategic and development experience as a result of his long-term association with numerous public and private biotechnology companies and he has been involved in several successful exits. He is a past member of the National Research Council of Canada IMB/INH Advisory Board and a number of biotech industry associations. Mr. Cawkell received a B.A. and an LL.B from the University of Alberta. Mr. Cawkell anticipates devoting 20% of his time to the business of the Company to effectively fulfill his duties. Mr. Cawkell provides services to the Company pursuant to a consulting agreement. See section 15 "Executive Compensation – Employment, consulting, and management agreements—Current employment, consulting and management agreements".

Len Mertz, age 68 – Director. As a Partner of Mertz Holdings, Mr. Mertz is an experienced board member with investments in several early-stage healthcare and biotech companies including Triumvira Immunologics, and Photodynamic. In addition, he is also Chairman of Shannon West Texas Memorial Hospital, a CMS rated 5-star hospital with annual revenues in excess of US\$1 billion. Mr. Mertz is a cofounder of Mayne & Mertz, Inc. an oil & gas exploration company and is on the board of the First National Bank of Mertzon. He began his career as a certified public accountant obtaining his BBA in Finance and his Masters in Professional Accounting from the University of Texas at Austin. Mr. Mertz anticipates devoting 10% of his time to the business of the Company to effectively fulfill his duties.

John Havens, age 66 – Director. Mr. Havens received his geology degree from Louisiana State University and has been the President of Seismic Exchange Inc. for over 40 years. SEI is a source for premium 2D and 3D seismic data for the upstream oil and gas industry and is the largest 2D seismic data owner and one of the largest 3D seismic data owners in North America. Mr. Havens is also the owner of a health spa in California and the owner of the Vista Valley Country Club. Mr. Havens has also served on the board of directors of The Fay School, Houston Oaks Club, Cal-a-Vie Health Spa and as Chairman-Elect of the YPO Gold Houston Chapter. Mr. Havens anticipates devoting 5% of his time to the business of the Company to effectively fulfill his duties.

Phillip Mertz, age 39 – Director. Mr. Mertz is a co-founder and partner of Cenizas Capital, an investment firm focused on public and private equity. He is an initial investor and board member of Secure Open Solutions, a cybersecurity firm that provides compliance services to defense contractors. He also cofounded 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 A.B. in economics. Mr. Mertz anticipates devoting 5% of his time to the business of the Company to effectively fulfill his duties.

Rajeev 'Rob' Bakshi, age 63 – Director. 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 of 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 received a Bachelor's degree in computer science from Simon Fraser University. Mr. Bakshi anticipates devoting 5% of his time to the business of the Company to effectively fulfill his duties.

14. CAPITALIZATION

14.1 <u>Issued Capital</u>

	Number of Securities (non- diluted)	Number of Securities (fully- diluted)	% of Issued (non- diluted)	% of Issued (fully-diluted)
Public Float				
Total outstanding (A)	93,900,664 ⁽¹⁾	153,680,372	100%	100%
Held by Related Persons or employees of the Issuer or Related Person of the Issuer, or by persons or companies who beneficially own or control, directly or indirectly, more than a 5% voting position in the Issuer (or who would beneficially own or control, directly or indirectly, more than a 5% voting position in the Issuer upon exercise or conversion of other securities held) (B)	35,626,087	53,919,738	37.94%	35.09%
Total Public Float (A-B)	58,274,577	99,760,634	62.06%	64.91%
Freely-Tradeable Float				
Number of outstanding securities subject to resale restrictions, including restrictions imposed by pooling or other arrangements or in a shareholder agreement and securities held by control block holders (C)	43,146,465	51,992,119	45.95%	33.83%
Total Tradeable Float (A-C)	50,754,199	101,688,253	54.05%	66.17%

Note:
(1) Includes 7,000,000 Restricted Shares.

Public Securityholders (Registered)

Class of Security

Size of Holding	Number of Holders	Total Number of Securities	
1 – 99 securities	1	1	
100 – 499 securities	1	100	
500 – 999 securities	0	0	
1,000 – 1,999 securities	0	0	
2,000 - 2,999 securities	0	0	
3,000 - 3,999 securities	3	9,250	
4,000 - 4,999 securities	3	13,864	
5,000 or more securities	139	58,274,577(1)	
Unknown		$2,553,514^{(2)}$	
TOTAL	147	58,297,792 ⁽¹⁾⁽²⁾	

Note:

- (1) Includes 2,547,838 Restricted Shares.
- (2) Represents discrepancy due to limitations on beneficial shareholding data available through reports prepared by Broadridge as at March 2, 2023.

Public Securityholders (Beneficial)

Class of Security

Size of Holding	Number of Holders	Total Number of Securities		
1 – 99 securities	111	2,863		
100 – 499 securities	162	32,242		
500 – 999 securities	62	39,129		
1,000 - 1,999 securities	115	142,830		
2,000 - 2,999 securities	58	128,585		
3,000 - 3,999 securities	41	127,686		
4,000 – 4,999 securities	20	83,857		
5,000 or more securities	409	$60,294,114^{(1)}$		
Unknown		$2,553,514^{(2)}$		
TOTAL	978	62,504,987		

Note:

- (1) Includes 2,547,838 Restricted Shares.
- (2) Represents discrepancy due to limitations on beneficial shareholding data available through reports prepared by Broadridge as at March 2, 2023.

Non-Public Securityholders (Registered)

Class of Security

Size of Holding	Number of Holders	Total Number of Securities	
1 – 99 securities	0	0	
100 – 499 securities	0	0	
500 – 999 securities	0	0	
1,000 - 1,999 securities	0	0	
2,000 - 2,999 securities	0	0	
3,000 - 3,999 securities	0	0	
4,000 - 4,999 securities	0	0	
5,000 or more securities	9	$35,626,087^{(1)}$	
TOTAL	9	35,626,087 ⁽¹⁾	

Note:

14.2 Convertible / Exchangeable Securities

Other than the Warrants and Listed Warrants, the Company has no convertible or exchangeable securities issued and outstanding.

14.3 Other Listed Securities

The Company has no other listed securities reserved for issuance.

15. EXECUTIVE COMPENSATION

For the purposes of this Listing Statement, "Named Executive Officer" or "NEO" means:

- (a) the Company's CEO;
- (b) the Company's CFO;
- (c) each of the Company's three most highly compensated executive officers, or the three most highly compensated individuals acting in a similar capacity, other than the CEO and CFO, at the end of the most recently completed financial year whose total compensation was, individually, more than \$150,000 for that financial year; and
- (d) each individual who would be an NEO under paragraph (c) but for the fact that the individual was neither an executive officer of the Company, nor acting in a similar capacity, at the end of that financial year.

As at December 31, 2022, the end of the most recently completed financial period of the Company, the Company had four (4) NEOs, whose names and positions held within the Company are set out in the summary compensation table below.

⁽¹⁾ Includes 4,452,162 Restricted Shares.

An NEO or director of the Company is not 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 equity securities granted as compensation or held, directly by the NEO or director.

Director and Named Executive Officer Compensation

The following table is a summary of compensation awarded to, earned by, paid to, or payable to each director and NEO of the Company for the two most recently completed financial periods ended December 31, 2022 and December 31, 2021.

Table of compensation excluding compensation securities							
Name and Position	Fiscal Year Ended Decemb er 31	Salary, consulting fee, retainer or commissio n (US\$)	Bonus (US\$)	Committee or meeting fees (US\$)	Value of perquisites (US\$)	Value of all other compensati on (US\$)	Total compensati on (US\$)
Michael McFadden ⁽¹⁾	2022	500,000(2)	Nil	Nil	Nil	28,551(3)	528,551
CEO and Director	2021	414,360	Nil	Nil	Nil	15,423 ⁽³⁾	429,783
Don Kalkofen ⁽⁴⁾ CFO	2022	305,455 ⁽⁵⁾	Nil	Nil	Nil	16,350 ⁽³⁾	321,805
Cro	2021	Nil	Nil	Nil	Nil	Nil	Nil
Kenneth Cawkell ⁽⁶⁾	2022	230,063	Nil	Nil	Nil	Nil	230,063
Corporate Secretary and Director	2021	264,600 ⁽⁷⁾	Nil	Nil	Nil	Nil	264,600
Lauren D'Angelo	2022	359,712(8)	Nil	Nil	Nil	25,551(3)	385,263
Chief Commercial Officer	2021	232,658	64,320(9)	Nil	Nil	15,423(3)	312,401
Len Mertz Chairman and	2022	Nil	Nil	Nil	Nil	Nil	Nil
Director	2021	Nil	Nil	Nil	Nil	Nil	Nil
John Havens Director	2022	Nil	Nil	Nil	Nil	Nil	Nil
Director	2021	Nil	Nil	Nil	Nil	Nil	Nil
Phillip Mertz Director	2022	Nil	Nil	Nil	Nil	Nil	Nil
	2021	30,000	Nil	Nil	Nil	Nil	30,000
Rob Bakshi	2022	Nil	Nil	Nil	Nil	Nil	Nil
Director and former CEO	2021	Nil	Nil	Nil	Nil	Nil	Nil
Jeremy Wright ⁽¹⁰⁾ Former CFO	2022	140,409	Nil	Nil	Nil	Nil	140,409
	2021	171,367	Nil	Nil	Nil	Nil	171,367
Denis Kay ⁽¹¹⁾ Former Chief	2022	180,000	Nil	Nil	Nil	Nil	180,000
Scientific Officer	2021	207,000	31,568 ⁽¹²⁾	Nil	Nil	Nil	238,568

Table of compensation excluding compensation securities							
Name and Position	Fiscal Year Ended Decemb er 31	Salary, consulting fee, retainer or commissio n (US\$)	Bonus (US\$)	Committee or meeting fees (US\$)	Value of perquisites (US\$)	Value of all other compensati on (US\$)	Total compensati on (US\$)
Cedric O'Gorman ⁽¹³⁾	2022	400,000	Nil	Nil	Nil	21,623(3)	421,623
Former Chief Medical Officer	2021	52,804	16,667 ⁽¹⁴⁾	Nil	Nil	Nil	69,471
Frederick Sancilio ⁽¹⁵⁾	2022	289,992(16)	Nil	Nil	Nil	Nil	289,992
Former President and former Director	2021	285,833 ⁽¹⁷⁾	110,000	Nil	Nil	21,503 ⁽³⁾	417,336

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) Includes \$72,917 in deferred compensation paid February 16, 2023.
- (3) Healthcare benefit.
- (4) Mr. Kalkofen was appointed as CFO of the Company effective as of April 11, 2022.
- (5) Includes \$61,250 in deferred compensation paid February 16, 2023.
- (6) Mr. Cawkell was appointed as a director of the Company effective as of March 18, 2021. Mr. Cawkell received compensation for acting as the Corporate Secretary of the Company.
- (7) Includes \$9,450 accrual for administrative expenses.
- (8) Includes \$46,840 in deferred compensation paid February 16, 2023.
- (9) Includes an accrual for a bonus of \$64,320 which was paid in February 2022.
- (10) Mr. Wright was appointed as the part-time CFO of the Company on August 5, 2020 and became the full-time CFO on October 5, 2020. Mr. Wright ceased to act as CFO of the Company effective as of April 11, 2022.
- (11) Mr. Kay was appointed as the Chief Scientific Officer effective as of March 18, 2021. Mr. Kay ceased to act as Chief Scientific Officer of the Company effective as of July 19, 2022.
- (12) Includes an accrued for a bonus of \$27,450 including \$4,118 GST taxes.
- (13) Mr. O'Gorman was appointed as the Chief Medical Officer effective as of November 30, 2021. Mr. O'Gorman ceased to act as Chief Medical Officer of the Company effective as of January 1, 2023.
- (14) Includes an accrual for a bonus of \$16,667 which was paid in February 2022.
- (15) Mr. Sancilio was appointed as the President and a director of the Company effective as of March 18, 2021. Mr. Sancilio ceased to act as the President and a director of the Company effective as of December 22, 2021. Mr. Sancilio received compensation for acting as the President of the Company.
- (16) Mr. Sancilio received compensation under a consulting agreement with the Company, at \$24,166 per month through December 31, 2022, includes \$24,166 paid in 2023.
- (17) Includes an accrual for a bonus of \$50,000 which was paid to Mr. Sancilio in the first quarter of 2022.

Options and Other Compensation Securities

The following table discloses all compensation securities granted or issued to each director and NEO by the Company in the most recently completed financial year for services provided or to be provided, directly or indirectly, to the Company, and outstanding compensation securities held by each director and NEO.

Compensation Securities							
Name and Position	Type of compensatio n security	Number of compensation securities, number of underlying securities and percentage of class	Date of issue or grant	Issue, conversion or exercise price (US\$)	Closing price of security or underlying security on date of grant (US\$)	Closing price of security or underlying security at year end (US\$)	
Michael McFadden ⁽¹⁾ CEO and Director	Bonus Rights ⁽¹⁶⁾	8,195,740	April 28, 2022	See note 16	\$0.78 (C\$1.00)	\$0.22 (C\$0.295)	See note 16
Don Kalkofen ⁽³⁾ CFO	Options	450,000(13)	April 11, 2022	\$0.74 (C\$0.93)	\$0.74 (C\$0.93)	\$0.22 (C\$0.295)	April 11, 2032
Kenneth Cawkell ⁽⁴⁾ Corporate Secretary and Director	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Lauren D'Angelo ⁽⁵⁾	Options	150,000(14)	February 14, 2022	\$0.87 (C\$1.05)	\$0.87 (C\$1.06)	\$0.22 (C\$0.295)	February 14, 2032
Chief Commercial Officer	Bonus Rights ⁽¹⁶⁾	1,065,446	May 10, 2022	See note 16	\$0.57 (C\$0.74)	\$0.22 (C\$0.295)	See note 16
Len Mertz ⁽⁶⁾ Chairman and Director	Options	100,000(15)	May 31, 2022	\$0.51 (C\$0.64)	\$0.51 (C\$0.64)	\$0.22 (C\$0.295)	May 31, 2032
John Havens ⁽⁶⁾ Director	Options	100,000(15)	May 31, 2022	\$0.51 (C\$0.64)	\$0.51 (C\$0.64)	\$0.22 (C\$0.295)	May 31, 2032
Phillip Mertz ⁽⁷⁾ Director	Options	100,000(15)	May 31, 2022	\$0.51 (C\$0.64)	\$0.51 (C\$0.64)	\$0.22 (C\$0.295)	May 31, 2032
Rob Bakshi ⁽⁸⁾ Director and former CEO	Options	100,000(15)	May 31, 2022	\$0.51 (C\$0.64)	\$0.51 (C\$0.64)	\$0.22 (C\$0.295)	May 31, 2032

	Compensation Securities						
Name and Position	Type of compensatio n security	Number of compensation securities, number of underlying securities and percentage of class	Date of issue or grant	Issue, conversion or exercise price (US\$)	Closing price of security or underlying security on date of grant (US\$)	Closing price of security or underlying security at year end (US\$)	Expiry Date
Jeremy Wright ⁽⁹⁾ Former CFO	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Denis Kay ⁽¹⁰⁾ Former Chief Scientific Officer	Options	65,000 ⁽¹⁴⁾	February 14, 2022	\$0.87 (C\$1.05)	\$0.87 (C\$1.06)	\$0.22 (C\$0.295)	February 14, 2032
Cedric O'Gorman ⁽¹¹⁾ Former Chief Medical Officer	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Frederick Sancilio ⁽¹²⁾ Former President and former Director	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes:

- (1) Mr. McFadden held a total of 2,000,000 compensation securities as of the last day of the most recently completed financial year, of which 750,000 Options have vested. Mr. McFadden has also earned 8,195,740 bonus rights.
- (2) Mr. Kalkofen held a total of 450,000 compensation securities as of the last day of the most recently completed financial year, of which 75,000 have vested.
- (3) Mr. Cawkell held a total of 3,491,057 compensation securities as of the last day of the most recently completed financial year, of which 3,121,057 have vested.
- (4) Ms. D'Angelo held a total of 750,000 compensation securities as of the last day of the most recently completed financial year, of which 225,000 Options have vested. Ms. D'Angelo has also earned 737,616 bonus rights.
- (5) Mr. L. Mertz held a total of 400,000 compensation securities as of the last day of the most recently completed financial year, of which 287,500 have vested.
- (6) Mr. Havens held a total of 340,000 compensation securities as of the last day of the most recently completed financial year, of which 242,500 have vested.
- (7) Mr. P. Mertz held a total of 300,000 compensation securities as of the last day of the most recently completed financial year, of which 212,500 have vested.
- (8) Mr. Bakshi held a total of 331,513 compensation securities as of the last day of the most recently completed financial year, of which 318,013 have vested.
- (9) Mr. Wright did not hold any compensation securities as of the last day of the most recently completed financial year.
- (10) Mr. Kay held a total of 3,065,000 compensation securities as of the last day of the most recently completed financial year, of which 2,580,000 have vested.
- (11) Mr. O'Gorman held a total of 400,000 compensation securities as of the last day of the most recently completed financial year, of which 100,000 have vested. Mr. O'Gorman's compensation securities will expire on April 1, 2023.
- (12) Mr. Sancilio held a total of 2,700,000 compensation securities as of the last day of the most recently completed financial year, all of which are fully vested.

- (13) 25% of the Options will vest in equal monthly instalments commencing on April 11, 2022 with the first instalment vesting on May 11, 2022 and the final instalment vesting on April 11, 2023. The remaining 75% of the Options will vest in equal monthly instalments commencing on April 12, 2023 with the first instalment vesting on May 11, 2023 and the final instalment vesting on April 11, 2025.
- (14) 25% of Options will vest on the first anniversary of the date of grant, the remaining Options 75% will vest in equal monthly instalments until the third anniversary of the date of grant, months 13-36.
- (15) 50% of Options will vest immediately upon grant. The remaining Options (50%) will vest quarterly, over a 24-month period, on the first day of each calendar quarter, commencing June 1, 2022.
- (16) These Bonus Rights are issued pursuant to the Bonus Rights Plan and entitle the holder 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 VWAP per Common Share) exceeds \$1.58 multiplied by the number of bonus rights vested. The bonus rights earned will 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 Common Shares exceeding certain thresholds. See section 15 "Executive Compensation Stock option plans and other incentive plans Bonus Rights Plan". As at December 31, 2022, the holders had earned an aggregate of 2,376,764 bonus rights.

No compensation securities were exercised by the directors or NEOs during the most recently completed financial year. On January 16, 2023, the Company repriced an aggregate of 4,655,000 Options with exercise prices ranging from C\$0.64 to C\$1.05. These Options now have an exercise price of US\$0.28 and will vest in monthly installments over either an 8 month, 18 month or 24 month term.

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 Stock Option 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"). In connection with the CSE Listing and in accordance with the policies of the CSE, the Company intends to adopt the CSE Stock Option Plan upon listing on the CSE. Following adoption of the CSE Stock Option Plan, the Stock Option Plan will continue to govern outstanding stock options granted pursuant to the Stock Option Plan, however no further stock options will be granted thereunder.

Stock Option Plan

The purpose of the Stock Option Plan is to provide an incentive to directors, officers, employees and consultants to acquire a proprietary interest in the Company, to continue their participation in the affairs of the Company, to increase their efforts on behalf of the Company, and to reward or compensate their contributions towards the long-term goals of the Company.

The following summary of the material terms of the Stock Option Plan does not purport to be complete and is qualified in its entirety by reference to the Stock Option Plan.

<u>Eligible Participants.</u> Options may be granted under the Stock Option Plan to directors and senior officers of the Company or its subsidiaries, management company employees, employees of the Company or its subsidiaries (collectively, the "**Employees**") or consultants of the Company or its subsidiaries (collectively, the "**Consultants**"). The Board, in its discretion, determines which of the directors, officers, Employees or Consultants will be awarded options under the Stock Option Plan.

Number of Shares Reserved. The number of Common Shares which may be issued pursuant to options granted under the Stock Option Plan may not exceed 10% 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 Stock Option Plan.

Limitations. Under the 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 and Restricted 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 and Restricted 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 and Restricted Shares of the Company in any 12-month period, calculated at the date an option is granted to any such person. Disinterested shareholder approval will be required for any grant of options which will 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 and Restricted Shares of the Company.

<u>Exercise Price</u>. The exercise price of options granted under the Stock Option Plan is determined by the Board, in accordance with the policies of such exchange or quotation system on which the Common Shares are listed or quoted for trading. The exercise price of Options granted to Insiders may not be decreased without disinterested Shareholder approval at the time of the proposed amendment.

<u>Term of Options</u>. Subject to the termination and change of control provisions noted below, the term of any options granted under the Stock Option Plan is 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 Options granted to individuals that are Insiders at the time of the proposed amendment.

<u>Vesting.</u> All options granted pursuant to the Stock Option Plan will be subject to such vesting requirements as may be prescribed by the policies of such exchange or quotation system on which the Common Shares are listed or quoted for trading, if applicable, or as may be imposed by the Board. 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 Stock Option Plan, all unvested options will vest immediately.

<u>Dividend entitlement.</u> The Stock Option 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.

<u>Termination.</u> Any options granted pursuant to the Stock Option 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.

<u>Exercise of Options</u>. The exercise price of an option must be paid in cash, other than as described below as determined by the Board:

- (a) <u>Cashless Exercise</u> ("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) and Sections 6(f)(i)-(iii) of the Stock Option Plan.

<u>Adjustments.</u> Any adjustment to Options granted or issued (except in relation to a consolidation or share split) will be subject to the prior acceptance of the policies of such exchange or quotation system on which the Common Shares are listed or quoted for trading.

The Stock Option 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.

CSE Stock Option Plan

The following summary of the CSE Stock Option Plan does not purport to be complete and is qualified in its entirety by reference to CSE Stock Option Plan.

The CSE Stock Option Plan was approved by the Board on April 13, 2023 and will be put to the shareholders of the Company for approval at the Company's next annual general meeting scheduled to be held in June, 2023. In connection with the CSE Listing and in accordance with the policies of the CSE, the Company intends to adopt the CSE Stock Option Plan upon listing on the CSE. The purpose of the CSE Stock Option 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 CSE Stock Option Plan provides that, subject to the requirements of the CSE, the aggregate number of

Common Shares reserved for issuance under the CSE Stock Option Plan may not exceed 20% of the issued and outstanding Common Shares at the time of granting of Options.

The CSE Stock Option Plan will be administered by the Board, which will have full and final authority with respect to the granting of all Options thereunder. Options may be granted under the CSE Stock Option Plan to such directors, officers, employees or consultants of the Company or any of its subsidiaries, as the Board may from time to time designate. Options may also be granted to employees of management companies providing management services to the Company. The exercise price of any Options granted under the CSE Stock Option Plan will be determined by the Board, but (if the Common Shares are listed on the CSE) may not be lower than the greater of the last closing price of the Common Shares as quoted on the CSE on (i) the trading day prior to the date of grant of the Option; and (ii) the date of grant of the Option. The term of any Options granted under the CSE Stock Option Plan will be determined by the Board at the time of grant but will be subject to earlier termination in the event of dismissal for cause, termination other than for cause or in the event of death. The term of any Options granted under the CSE Stock Option Plan may not exceed 10 years. Options granted under the CSE Stock Option Plan may be subject to vesting. Subject to certain exceptions, Options will expire on a date fixed by the Board, which date will be no more than one year after such director or officer ceases to hold office or after an employee, consultant or management company employee ceases to act in that capacity in relation to the Company or any of its subsidiaries, as applicable. In the event of death or disability of an option holder, Options granted under the CSE Stock Option Plan will expire one year from the date of the death or disability of the option holder.

Pursuant to the CSE Stock Option Plan, the exercise price of an Option must be paid in cash, by Cashless Exercise, or by Net Exercise, as determined by the Board.

The CSE Stock Option 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; (vi) the applicable settlement date; and (vii) 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.

Legacy Compensation Plan

Prior to the completion of the Company's Qualifying Transaction, 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 Qualifying Transaction 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.

<u>Transferability.</u> The Performance Shares are non-assignable and non-transferable.

<u>Termination.</u> 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.

<u>Vesting</u>. An aggregate of 790,000 Performance Shares remain subject to vesting upon the following criteria having been met:

- 1. filing of an IND with the FDA for ALPHA-0602, or the filing of an IND-equivalent in a regulated jurisdiction other than the United States (for more information regarding ALPHA-0602 see section 3 "General Development of the Business");
- 2. 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
- 3. grant of the first Orphan Drug Designation for ALPHA-0602. 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.

Employment, consulting and management agreements

Other than disclosed herein, the Company does not have any agreement or arrangement under which compensation was provided during the most recently completed financial year or is payable in respect of services provided to the Company that were performed by a director or NEO.

Current employment, consulting and management 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 salary of US\$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 salary of US\$420,000 and Mr. Kalkofen was granted 450,000 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.

The Company, through its subsidiary, Alpha Canada (formerly Neurodyn Cognition Inc.), entered into a consulting agreement dated September 1, 2018, as amended on June 1, 2019 and further amended on September 1, 2022, with CMI Cornerstone Management Corporation, a company beneficially owned and controlled by Kenneth Cawkell, pursuant to which the Company retained Mr. Cawkell as CEO. Mr. Cawkell resigned as the CEO on April 12, 2021 and is now the Corporate Secretary and remains a director of the Company. Pursuant to the agreement, the Company agreed to pay Mr. Cawkell US\$9,000 per month and granted 2,500,000 Performance Shares, subject to performance-based vesting criteria. Mr. Cawkell may terminate the agreement at any time upon material breach or default of any term of the agreement by the Company. In such circumstances the Company shall pay Mr. Cawkell US\$54,000, and all Performance Shares shall immediately vest and be valid for their full term. Mr. Cawkell may terminate the agreement any other time, effective 90 days from the delivery of written notice. The Company may terminate the agreement at any time with cause. The Company may terminate the agreement at any time without cause

by giving Mr. Cawkell 30 days' written notice, paying US\$54,000, and causing all Mr. Cawkell's Performance Shares to immediately vest and be valid for the full term of such Performance Shares. On September 1, 2022, the Company amended the agreement to decrease the monthly fees to \$9,000 and include a provision that if a change of control or significant financing is initiated prior to December 31, 2022, CMI will receive a one-time payment equal to number of months worked subsequent to September 1, 2022 multiplied by \$9,000.

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. Pursuant to the agreement, the Company agreed to pay Ms. D'Angelo an annual salary which is currently US\$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, through its subsidiary, Alpha Canada (formerly Neurodyn Cognition Inc.), entered into a consulting agreement dated September 1, 2018, as amended on June 1, 2019 and further amended on August 15, 2022, with 9177-5866 Quebec Inc., a company beneficially owned and controlled by Denis Kay, pursuant to which the Company retained Mr. Kay as Chief Scientific Officer. Pursuant to the agreement, the Company agreed to pay Mr. Kay US\$7,500 per month and granted 2,500,000 Performance Shares, subject to performance-based vesting criteria. If a change of control or significant financing was initiated prior to December 31, 2022, Mr. Kay would receive a one-time payment equal to number of months worked subsequent to August 15, 2022 multiplied by \$7,500. Mr. Kay may terminate the agreement at any time upon material breach or default of any term of the agreement by the Company. In such circumstances the Company shall pay Mr. Kay US\$45,000, and all Performance Shares shall immediately vest and be valid for their full term. Mr. Kay may terminate the agreement any other time, effective 90 days from the delivery of written notice. The Company may terminate the agreement at any time with cause. The Company may terminate the agreement at any time without cause by giving Mr. Kay 30 days' written notice, paying US\$45,000, and causing all Mr. Kay's Performance Shares to immediately vest and be valid for the full term of such Performance Shares. Pursuant to the agreement, if a change of control occurs, or if a significant financing is initiated prior to December 31, 2022, Mr. Kay will receive a one-time payment equal to the number of months worked subsequent to August 15, 2022 multiplied by US\$7,500.

Terminated employment, consulting and management agreements

The Company, through its subsidiary, Alpha Canada (formerly Alpha Cognition Inc.), entered into a services agreement dated August 5, 2020, as amended on October 5, 2020 and December 15, 2020, with Seatrend Strategy Group ("Seatrend"), a company beneficially owned and controlled by Jeremy Wright, pursuant to which the Company retained Mr. Wright to provide Chief Financial Officer services to the Company. Mr. Wright ceased to act as the CFO of the Company effective as of April 11, 2022 and the agreement was terminated. Pursuant to the agreement, the Company agreed to pay to Seatrend an initial engagement fee of C\$100,000 and a monthly retainer of C\$15,000 thereafter. Seatrend agreed to subscribe to the Company's next available equity offering for the amount of the initial engagement fee. The Company could terminate the agreement by providing 30 days' written notice to Seatrend and, if the agreement was terminated within the first 12 months, the Company would pay six months of Seatrend's monthly fee to Seatrend. Seatrend could terminate the agreement by providing written notice, and the agreement would terminate immediately. All fees incurred prior to Seatrend providing written notice to the Company would become due at the time written notice of termination was provided to the Company.

The Company, through its subsidiary Alpha Cognition (USA), Inc., entered into an employment agreement dated November 15, 2021, as amended on June 14, 2022, with Cedric O'Gorman, pursuant to which the Company retained Mr. O'Gorman to act as Chief Medical Officer of the Company. Pursuant to the agreement, the Company agreed to pay Mr. O'Gorman an annual salary of US\$\$400,000 and Mr. O'Gorman was eligible for cash bonuses and additional compensation, subject to Board approval. Mr. O'Gorman also to received 400,000 Options, which will expire on April 1, 2023 in accordance with the terms of the Stock Option Plan or the CSE Stock Option Plan, as applicable. Mr. O'Gorman ceased to act as the Chief Medical Officer of the Company effective as of January 1, 2023 and the agreement was terminated.

The Company, through its subsidiary, Alpha Canada (formerly Neurodyn Cognition Inc.), entered into a consulting agreement dated September 1, 2018, as amended June 1, 2019, with Clearway Global LLC, a company beneficially owned and controlled by Fred Sancilio, pursuant to which the Company retained Mr. Sancilio as a consultant. Mr. Sancilio acted as a director and the President of the Company until December 22, 2021. Pursuant to the agreement, the Company agreed to pay Mr. Sancilio US\$20,000 per month. Mr. Sancilio also received 3,000,000 Performance Shares, subject to performance-based vesting. Effective as of December 22, 2021 the agreement with Mr. Sancilio was terminated and Mr. Sancilio ceased to act as a director and the President of the Company. The agreement was replaced by a consulting agreement dated December 22, 2021 which increased Mr. Sancilio's monthly payments to US\$24,166, payable through December 31, 2022.

16. INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS

Since the beginning of the most recently completed financial year of the Company, no officer, director or employee, or former officer, director or employee of the Company, or person who acted in such capacity since the beginning of the most recently completed financial year of the Company, is or has been indebted to the Company, nor has any such persons indebtedness to another entity been the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by the Company.

17. RISK FACTORS

17.1 Risk Factors Relating to the Company

Risks Relating to the Loss of Foreign Private Issuer Status

The Company has determined that it ceased to qualify as a "foreign private issuer", as such term is defined in Rule 405 of the U.S. Securities Act and Rule 3b-4 under the United States Securities Exchange Act of 1934 (the "U.S. Exchange Act"), as of June 30, 2022, being the last business day of our most recently completed second fiscal quarter. From January 1, 2023, the Company will be subject to the U.S. Securities and Exchange Commission's ("SEC") reporting requirements applicable to U.S. domestic companies. The SEC's reporting requirements will require, among other things, the Company to comply with enhanced periodic reporting, proxy requirements, and the Company's officers, directors and principal shareholders will become subject to the short-swing profit disclosure and recovery provisions of Section 16 of the U.S. Exchange Act. The Company will be required to file periodic reports and registration statements on U.S. domestic issuer forms containing financial statements and financial data prepared in accordance with U.S. GAAP, which are more detailed and extensive than the forms available to a "foreign private issuer". As a result, the Company's regulatory and compliance costs may be significantly higher once it ceases to be a "foreign private issuer". The Company will also become subject to liability under the U.S. Securities Act and the U.S. Exchange Act. Liability

under these acts can lead to monetary fines, limitations on future financings and, if imposed, may impede the Company's ability to finance its business.

Once an issuer fails to qualify for foreign private issuer status it will remain unqualified unless it meets the requirements for foreign private issuer status as at the last business day of its second fiscal quarter. If the Company subsequently qualifies as a foreign private issuer on the last business day of a subsequent second fiscal quarter, the Company will immediately be able to use the forms and rules designated for foreign private issuers.

Risks Related to Our Financial Condition

We are a clinical-stage biopharmaceutical company in the early stages of development with no products approved for commercial sale and have incurred significant losses since our inception. We expect to incur significant losses over 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 \$12.1 million and \$19.6 million for the years ended December 31, 2022 and 2021, respectively. As of December 31, 2022, we had an accumulated deficit of \$50.0 million. Our clinical trials have been funded which has been primarily financed by equity. We have no products approved for 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 until we have achieved sufficient sales from a commercialized product. Our net losses may fluctuate significantly from quarter to quarter and year to year. Factors that may significantly increase our foreseeable expenses include:

- our ongoing and planned clinical trials of ALPHA-1062, as well as initiate and complete additional clinical trials;
- advancing regulatory approval of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's Disease;
- continuing clinical validation of ALPHA-1062 for moderate-to-severe Alzheimer's Disease and exploring the potential related to cognitive impairment with TBI; and
- establishing a commercialization infrastructure and scaling up external manufacturing and distribution capabilities to commercialize any product candidates for which we may obtain regulatory approval, including ALPHA-1062.

Our ability to generate revenue and achieve profitability depends significantly on our ability to achieve several objectives relating to the development and commercialization of our product candidates, if approved.

To generate revenue and become and remain profitable, we must succeed in developing and eventually commercializing product candidates. This will require us to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of our product candidates, obtaining regulatory approval, and manufacturing, marketing and selling any product candidates for which we may obtain regulatory approval, as well as discovering and developing additional product candidates. 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.

We have not yet completed an Alzheimer's Disease patient tolerability study for ALPHA-1062, 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 to date, we have not yet demonstrated our ability to successfully complete an Alzheimer's Disease patient tolerability study for ALPHA-1062, obtain regulatory approvals, manufacture a product on a commercial scale or arrange for a third party to do so on our behalf. 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.

We will need substantial capital to meet our financial obligations and to pursue our business objectives. 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. 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 ongoing clinical trials of our product candidates, initiate future clinical trials of our product candidates, seek marketing approval for ALPHA-1062 for mild-to-moderate Alzheimer's Disease, prepare for commercialization activities 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.

As of December 31, 2022, we had \$2.1 million in cash and cash equivalents and have not generated positive cash flows from operations. We will need to raise additional capital. Additional capital 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 Canada, 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.

Risks Related to Our Business Development

Our business is heavily dependent on the successful development, regulatory approval and commercialization of ALPHA-1062 and any future product candidates that we may develop or acquire.

The success of our business, including our ability to finance our company and generate revenue in the future, will primarily depend on the successful development, regulatory approval and commercialization of our product candidates and, in particular, the advancement of ALPHA-1062, currently our only clinical-stage product candidate We cannot be certain that our product candidates will receive regulatory approval or be successfully commercialized even if we receive regulatory approval. The clinical and commercial

success of ALPHA-1062 and any future product candidates that we may develop or acquire will depend on a number of factors, including the following:

- 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;
- 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; and
- 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;

These factors, many of which are beyond our control, could cause us to experience significant delays or an inability to obtain 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.

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. Only one disease-modifying therapeutic option has been approved by the FDA. Biogen's Aduhelm®, a monoclonal antibody administered via infusion, received accelerated approval from the FDA on June 7, 2021. Adlarity®, transdermal formulation of donepezil from the markers 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 approvable or marketable products. Since 2003, over 500 clinical studies have been completed and only Aduhelm® and Adlarity® have been approved by the FDA, compared to a success rate of 50% to 80% for all other drug candidates. The FDA could conduct a longer than expected regulatory review process, increased expected development costs or the delay or prevention of commercialization of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's Disease.

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.

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, related to the biotechnology industry.

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.

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 current or 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.

The FDA approval process is rigorous, and there is no guarantee that a new drug will be approved.

The FDA approval process is rigorous, and there is no guarantee that a new drug will be approved. Any delays or denials in the approval process can impact the Company's revenue and reputation. Clinical trials are a critical component of the NDA filing process, and any issues related to the quality or quantity of clinical trial data can delay or impact FDA approval. Inadequate data may also lead to questions around the safety and efficacy of the drug. The NDA filing process involves numerous regulations, and any failure to comply with them can result in legal and financial penalties, as well as damage to the Company's reputation. It is critical for biopharma companies to ensure that their NDA filings are accurate, complete, and comply with all regulatory requirements. The NDA filing process requires the disclosure of proprietary information, including data from clinical trials and manufacturing processes. Any unauthorized disclosure of this information can harm the Company's potential revenue and reputation. The biopharma industry is highly competitive, and any delay in FDA approval or failure to obtain approval can give competitors an advantage. Additionally, the approval of similar drugs can impact the market potential for a new drug. The NDA filing process involves the manufacturing and distribution of pharmaceutical products. Any issues related to the manufacturing process or disruptions in the supply chain can impact the quality, safety, and efficacy of pharmaceutical products, leading to product recalls or delays in commercialization.

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, or GLP, requirements or GCP requirements. 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. 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.

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 result in 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. If unacceptable side effects arise in the development of our product candidates, we, the FDA, the Institutional Review Boards 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. 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. 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.

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 local 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.

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. 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.

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. 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 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 these risks 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.

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.

The development and commercialization of new drug products is highly competitive. 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. 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, cognitive impairment with TBI, and Amyotrophic Lateral Sclerosis. 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. 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 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.

Risks Related to Commercialization and Manufacturing

Even if our current or future product candidates obtain regulatory approval, they 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.

Even if one or more of our product candidates receive FDA or other regulatory approvals, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. 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 our 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 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;
- physician and patient willingness to adopt a new therapy over other available therapies to treat approved indications;
- 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; and
- limitations or warnings contained in the FDA-approved labeling for our products.

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 if we receive regulatory approval to market any of our 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 ALPHA-1062, if approved, may be smaller than we anticipate.

We expect to initially seek approval for ALPHA-1062 for mild-to-moderate 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 ALPHA-1062 after FDA approval, the potential target populations 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. 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 and we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates.

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 scaling 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, due to supply chain disruptions, compliance and regulatory matters, Good Manufacturing Practices (GMP), Quality Control (QC), and environmental risks. 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, if approved, 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.

Any problems with the manufacturing process, such as deviations from standard operating procedures or difficulties in scaling up production, can impact the quality, safety, and efficacy of pharmaceutical products, leading to product recalls or delays in commercialization.

Manufacturing difficulties can include:

- Supply chain disruptions: Disruptions in the supply chain, such as shortages of raw materials, transportation issues, or delays in regulatory approvals, can negatively impact the production and distribution of pharmaceutical products, leading to revenue loss and reputational damage.
- Compliance and regulatory risks: The pharmaceutical industry is highly regulated, and any failure to comply with regulations can result in legal and financial penalties, as well as damage to the Company's reputation.
- CMC-related regulations include Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP), and Good Clinical Practices (GCP).
- Quality control and product safety risks: Any issues related to the quality, purity, or stability of pharmaceutical products can impact their safety and efficacy, leading to adverse events or product recalls. It is critical for pharmaceutical companies to maintain robust quality control systems to ensure the safety and efficacy of their products.
- Environmental risks: Pharmaceutical manufacturing can have environmental impacts, including the generation of hazardous waste and the release of pollutants into the air and water. Failure to manage these risks adequately can result in legal and financial liabilities, as well as reputational damage.

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.

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. 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.

BioPharma companies may face risks related to healthcare laws, Medicare, and other government programs, which can have significant implications for their business operations, financial performance, and reputation. Some potential risk factors related to healthcare laws and government programs:

- Changes in healthcare laws and regulations: Healthcare laws and regulations are subject to change, which can impact the pharmaceutical industry. Any new laws or regulations related to drug pricing, access to healthcare, or insurance coverage can impact the demand for pharmaceutical products, leading to revenue loss and reputational damage.
- Compliance risks related to government programs: Biopharma companies that during commercialization participate in government programs, such as Medicare and Medicaid, are subject to numerous regulations and compliance requirements. Any failure to comply with these requirements can result in legal and financial penalties, as well as damage to the Company's reputation.
- Reimbursement risks: The reimbursement of pharmaceutical products by government programs, such as Medicare and Medicaid, can impact the demand for pharmaceutical products. Any changes in reimbursement rates or policies can impact the Company's revenue and profitability.
- Pricing risks: The pricing of pharmaceutical products is subject to scrutiny by government agencies, healthcare providers, and consumers. Any allegations of price gouging or other pricing improprieties can lead to negative publicity, regulatory investigations, and legal liabilities.

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.

In order to commercialize our product candidates in the United States and foreign jurisdictions, we must build or partner 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. 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. 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 candidate, 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.

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. 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.

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. 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. 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 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 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.

Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products. and may subject us to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims, which could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

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. We have not submitted for, or obtained, regulatory approval for any product candidate, and it is possible that none of our product candidates will ever obtain regulatory approval.

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.

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.

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. 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. 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, ALPHA-1062 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.

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 December 31, 2022, we employed four full-time employees and three recurring consultants. We also use third party consultants and contractors to support our operations. 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 ALPHA-1062, 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. 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 ALPHA-1062, if approved, and our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

If we fail to attract and retain senior management and key scientific personnel, our business may be materially and adversely affected.

We are highly dependent upon members of 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 planned clinical trials or the commercialization of our product candidates or any future product candidates. 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 hire additional personnel as we expand our clinical development and if we initiate commercial activities. 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.

Risks Related to Our Common Shares and Warrants

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 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 Canada, the United States economies and world 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 issuer. 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 is currently limited and may not develop further, and you may not be able to resell your Common Shares at or above the public offering price.

Prior to this Listing Statement, there has been limited trading of our Common Shares on the TSXV and OTCQB exchanges. In addition, an active trading market may not further develop or may not be sustained. The lack of an active market may impair your ability to sell your 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 believe that we may be a "passive foreign investment company" for the current taxable year which may result in materially adverse United States federal income tax consequences for United States investors.

We generally will be designated as a "passive foreign investment company" under the meaning of Section 1297 of the United States Internal Revenue Code of 1986, as amended (a "PFIC") if, for a tax year, (a) 75% or more of our gross income for such year is "passive income" (generally, dividends, interest, rents, royalties, and gains from the disposition of assets producing passive income) or (b) if at least 50% or more of the value of our assets produce, or are held for the production of, passive income, based on the quarterly average of the fair market value of such assets. United States shareholders should be aware that we believe we were classified as a PFIC during our tax year ended December 31, 2021, and based on current business plans and financial expectations, believe that we may be a PFIC for the current and future taxable years. If we are a PFIC for any year during a U.S. shareholder's holding period, then such U.S. shareholder generally will be required to treat any gain realized upon a disposition of Common Shares, or any "excess distribution" received on its Common Shares, as ordinary income, and to pay an interest charge on a portion of such gain or distribution, unless the shareholder makes a timely and effective "qualified electing fund" election ("QEF Election") or a "mark-to-market" election with respect to the Common Shares. A U.S. shareholder who makes a QEF Election generally must report on a current basis its share of our net capital gain and ordinary earnings for any year in which we are a PFIC, whether or not we distribute any amount to our shareholders. A U.S. shareholder who makes a mark-to-market election 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. 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 the Company is a PFIC and a U.S. Holder wishes to make a QEF Election. Accordingly, U.S. Holders may not be able to make a QEF Election with respect to their Common Shares. This paragraph is qualified in its entirety by the discussion below under the heading "Certain United States Federal Income Tax Considerations." Each U.S. shareholder should consult its own tax advisors regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares.

If we sell our Common Shares in future financings, shareholders 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, we believe that any net proceeds from future financings, together with our existing cash, cash equivalents and marketable securities, will be insufficient for us to fund our operating and capital expenditures beyond the date that is months after the date of this Listing Statement, we may from time to time issue additional Common Shares. These issuances may be at a discount from the current trading price of our Common Shares. As a result, our shareholders would experience immediate dilution upon the purchase of any Common Shares 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 or Common Shares. If we issue Common Shares or securities convertible into Common Shares, our shareholders will experience additional dilution and, as a result, our stock price may decline.

Concentration of ownership of our Common Shares among our existing executive officers, directors and principal shareholders may prevent new investors from influencing significant corporate decisions.

Our executive officers, directors and current beneficial owners of 5% or more of our Common Shares and their respective affiliates beneficially own approximately 23.7% of our outstanding Common Shares and Restricted Shares as the date of this Listing Statement. As a result, these persons, acting together, would be able to significantly influence all matters requiring shareholder 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 shareholders purchased their shares at prices substantially below the current market price of our Common Shares 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 shareholders.

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

At December 31, 2022, the Company had, for Canadian tax purposes, non-capital losses aggregating approximately \$32.3 million. These losses are available to reduce taxable income earned by the Alpha Canada in future years and expire between 2035 and 2042.

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 Income 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 Income 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 Shares, and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our Common Shares.

We do not currently intend to pay any cash dividends on our Common Shares 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 Shares 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 Shares. There is no guarantee that our Common Shares will appreciate or even maintain the price at which our holders have purchased it.

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. Based on the plans of the Company to raise future capital through the U.S. capital markets, it is reasonable to assume the Company's functional currency will change from the Canadian Dollar to the U.S. Dollar. If this occurs, 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.

17.2 Risk Factors Resulting in Shareholder Liability

There are no risks that Shareholders of the Company may become liable to make an additional contribution beyond the price of the Common Shares.

17.3 Other Material Risk Factors

There are no foreseeable additional risk factors material to the Company that a reasonable investor would consider relevant to an investment in the Common Shares being listed and that are not otherwise described under section 17.1 "Risk Factors Relating to the Company".

18. PROMOTERS

The Company is not a party to any written or oral agreement or understanding pursuant to which it would receive any promotional or investor relations services as at the date of this Listing Statement, or the two years immediately preceding the date of this Listing Statement.

19. LEGAL PROCEEDINGS

19.1 <u>Legal Proceedings</u>

To the knowledge of management of the Company, there are no legal proceedings material to the Company to which the Company is a party or of which any of its property is the subject matter, which, if adversely determined, would be expected to have a material adverse effect on the Company.

19.2 Regulatory Actions

The Company is not subject to:

(a) any penalties or sanctions imposed by any court authority relating to provincial and territorial securities legislation or by a securities regulatory authority within the three years prior to the date of this Listing Statement; or

(b) any other penalties or sanctions imposed by a court or regulatory body against the Company necessary to contain full, true and plain disclosure of all material facts relating to the Common Shares.

The Company has not entered into any settlement agreement before a court relating to provincial and territorial securities legislation or with a securities regulatory authority within the three years prior to the date of this Listing Statement.

20. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

For the purpose of this Listing Statement, an "Informed Person" of the Company means: (a) a director or executive officer of the Company; (b) a director or executive officer of a person or company that is itself an Informed Person or subsidiary of the Company; (c) any person or company who beneficially owns, directly or indirectly, voting securities of the Company or who exercises control or direction over voting securities of the Company or a combination of both, carrying more than 10% of the voting rights attached to all outstanding voting securities of the Company; and (d) the Company, if it has purchased, redeemed or otherwise acquired any of its own securities, for so long as it holds any of its securities.

To the knowledge of the Company, no Informed Person of the Company, and no associate or affiliate of any such person, at any time, has or had any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any transaction that has materially affected the Company or in any proposed transaction that could materially affect the Company.

21. AUDITORS, TRANSFER AGENTS AND REGISTRARS

21.1 Auditors

The auditors of the Company are Manning Elliott LLP, Chartered Accountants, of 1030 W Georgia Street, Suite 1700, Vancouver, British Columbia, V6E 2Y3.

21.2 Transfer Agent and Registrar

The Company's Registrar and Transfer Agent for the Common Shares is Computershare Investor Services Inc. of 510 Burrard Street, 3rd Floor, Vancouver, British Columbia, V6C 3B9.

The Company's Registrar and Transfer Agent for the Listed Warrants is Computershare Trust Company of Canada of 510 Burrard Street, 3rd Floor, Vancouver, British Columbia, V6C 3B9.

22. MATERIAL CONTRACTS

22.1 <u>Material Contracts</u>

During the two years prior to the date of this Listing Statement, the Company has entered into the following material contracts, other than contracts entered into in the ordinary course of business:

- 1. the Escrow Agreement dated March 18, 2021 (see section 11 "Escrowed Securities");
- 2. the Listed Warrant Indenture October 1, 2021 (see section 3.1 "General Development of the Business");

- 3. second amended ALPHA-1062 Memogain Technology License Agreement dated March 1, 2023 (see section 3.1 "General Development of the Business"); and
- 4. second amended expense reimbursement promissory note dated March 1, 2023 (see section 3.1 "General Development of the Business").

Copies of the Company's material contracts are available under the Company's SEDAR profile at www.sedar.com.

22.2 **Special Agreements**

The Company is not a party to any co-tenancy, unitholders' or limited partnership agreements.

23. INTEREST OF EXPERTS

No person or company whose profession or business gives authority to a statement made by the person or company and who is named as having prepared or certified a part of this Listing Statement or as having prepared or certified a report or valuation described or included in this Listing Statement holds any beneficial interest, direct or indirect, in any securities or property of the Company or of an associate or affiliate of the Company and no such person is expected to be elected, appointed or employed as a director, senior officer or employee of the Company or of an associate or affiliate of the Company and no such person is a promoter of the Company or an associate or affiliate of the Company.

24. OTHER MATERIAL FACTS

Other than as set out in this Listing Statement, there are no other material facts about the Company and its securities which are necessary in order for this Listing Statement to contain full, true and plain disclosure of all material facts relating to the Company and its respective securities.

25. FINANCIAL STATEMENTS

25.1 Financial Statements for the Company

The Annual Financials are attached hereto as Schedule "A" and the Annual MD&A are attached hereto as Schedule "B".

The Alpha Canada Annual Financials are attached hereto as Schedule "C" and the Alpha Canada Annual MD&A are attached hereto as Schedule "D".

The Annual Financials, Annual MD&A, Alpha Canada Annual Financials, and Alpha Canada Annual MD&A are also available under the Company's SEDAR profile at www.sedar.com.

SCHEDULE "A" ANNUAL FINANCIALS

(See attached)

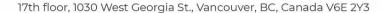


ALPHA COGNITION INC.

Consolidated Financial Statements

(Expressed in United States Dollars)

For the Years Ended December 31, 2022 and 2021







INDEPENDENT AUDITORS' REPORT

To the Shareholders and Directors of Alpha Cognition Inc.

Opinion

We have audited the consolidated financial statements of Alpha Cognition Inc. and its subsidiaries (the "Company") which comprise the consolidated statements of financial position as at December 31, 2022 and 2021, and the consolidated statements of loss and comprehensive loss, changes in equity (deficiency) and cash flows for the years then ended, and the related notes comprising a summary of significant accounting policies and other explanatory information (together, the "Financial Statements").

In our opinion, the accompanying Financial Statements present fairly, in all material respects, the financial position of the Company as at December 31, 2022 and 2021, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

We conducted our audits in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audits of the Financial Statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Material Uncertainty Related to Going Concern

We draw attention to Note 1 of the accompanying Financial Statements, which describes matters and conditions that indicate the existence of a material uncertainty that may cast significant doubt about the Company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Financial Statements for the year ended December 31, 2022. These matters were addressed in the context of our audit of the Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Except for the matter described in the Material Uncertainty Related to Going Concern section, we have determined that there are no key audit matters to communicate in our report.

Other Information

Management is responsible for the other information, which comprises the information included in the Company's Management Discussion & Analysis to be filed with the relevant Canadian securities commissions.

Our opinion on the Financial Statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Financial Statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the Financial Statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the Financial Statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, design and
 perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a
 basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting
 from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal
 control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the Financial Statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are, therefore, the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditors' report is Michael Ryan Ayre.

CHARTERED PROFESSIONAL ACCOUNTANTS

Manning Elliott LLP

Vancouver, Canada March 8, 2023

CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS

(Expressed in United States Dollars)

2,083,696 249,045 2,332,741 3,824 614,386	11,301,793 868,832
2,083,696 249,045 2,332,741 3,824	11,301,793
249,045 2,332,741 3,824	
249,045 2,332,741 3,824	
249,045 2,332,741 3,824	
2,332,741 3,824	868,832
3,824	
	12,170,62
614 386	13,00
017,500	696,76
2,950,951	12,880,38
2,845,381	726,85
1,211,463	1,075,82
4,056,844	1,802,67
8,295	
205,989	2,048,12
4,271,128	3,850,79
40,258,943	40,011,77
8,492,459	7,153,25
(84,728)	(101,53
(49,986,851)	(38,033,90
(1,320,177)	9,029,59
2,950,951	12,880,38
-	(84,728) (49,986,851) (1,320,177)

Approved on behalf of the Board on March 8, 2023

/s/ Kenneth Cawkell , Director /s/ Len Mertz , Director

ALPHA COGNITION INC. CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS (Expressed in United States Dollars)

		For	the year ended December 31,
	Note	2022	2021
		\$	\$
Operating expenses			
Accretion expenses	6,7	135,643	494,554
Amortization expense	4	82,376	82,375
Consulting fees		162,287	48,758
Depreciation		8,547	7,502
Interest	6,7	37,237	33,606
Investor relations		191,515	376,116
Management fees and salaries	11	1,478,791	822,228
Marketing		31,733	103,250
Other general and administrative	11	324,871	227,887
Professional fees	11	899,271	825,101
Registrar and filing fees		57,336	106,860
Research and development	10,11	8,816,842	7,973,340
Share-based compensation	9	1,151,046	979,886
Subcontractors		243,316	-
Travel and related		17,693	15,425
		13,638,504	12,096,888
Loss before other income (expenses)		(13,638,504)	(12,096,888)
Other income (expenses)			
Foreign exchange gain (loss)		(296,057)	48,214
Interest income		1,925	2,074
Business investigation costs	3	-	(37,504)
Listing expense	3	_	(1,404,200)
Write-off of equipment	3	(5,506)	(1,101,200)
Gain (loss) on recognition and revaluation of derivative liability	6,9	1,823,444	(6,056,712)
cum (1686) on 1666ginton und 1674udurion of 461174urive nacinty	0,5	1,523,806	(7,448,128)
Loss for the year		(12,114,698)	(19,545,016)
Other comprehensive loss that may be reclassified to net loss:			
Currency translation adjustment		16,806	(101,534)
Comprehensive loss for the year		(12,097,892)	(19,646,550)
Basic and diluted net loss per share		(0.18)	(0.37)
Basic and diluted weighted average number of shares outstanding		67,972,194	53,333,061

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

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (DEFICIENCY)

(Expressed in United States Dollars)

				Class A		Class B				Accumulated Other		
	Co	ommon shares	Rest	ricted shares	Prefe	rred shares	Tota	al share capital		Comprehensive	Accumulated	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Reserves	Loss	Deficit	Total
		\$		\$		\$		\$	\$	\$	\$	\$
Balance, December 31, 2020 Units issued for cash prior to RTO	42,996,524	14,568,250	-	-	7,916,380	62	50,912,904	14,568,312	3,936,583	-	(18,488,887)	16,008
for ACI Canada Shares issued for conversion of convertible promissory notes and	2,771,749	2,690,170	-	-	-	-	2,771,749	2,690,170	720,807	-	-	3,410,977
interest Units issued for conversion of	2,234,036	2,053,711	-	-	-	-	2,234,036	2,053,711	-	-	-	2,053,711
convertible promissory notes and interest Eliminate capital stock of Alpha	1,613,186	2,686,104	-	-	-	-	1,613,186	2,686,104	-	-	-	2,686,104
Cognition Canada Inc. Opening balance of Alpha	(49,615,495)	-	-	-	(7,916,380)	-	(57,531,875)	-	-	-	-	-
Cognition Inc. Issuance of shares to former	1,640,057	1,685,085	-	-	-	-	1,640,057	1,685,085	62,749	-	-	1,747,834
shareholders of ACI Canada Units issued for cash prior to RTO	42,615,495	(3,103,620)	7,000,000	3,103,620	7,916,380	-	57,531,875	-	-	-	-	-
for ACI	588,375	602,653	-	-	-	-	588,375	602,653	153,009	-	-	755,662
Units issued for cash after RTO	9,602,500	11,383,284	-	-	-	-	9,602,500	11,383,284	-	-	-	11,383,284
Share issuance costs	-	(1,716,505)	-	-	-	-	-	(1,716,505)	521,042	-	-	(1,195,463)
Options exercised	60,504	40,395	-	-	-	-	60,504	40,395	(33,870)	-	-	6,525
Warrants exercised	6,100,000	6,018,567	-	-	-	-	6,100,000	6,018,567	-	-	-	6,018,567
Share-based compensation	-	-	-	-	-	-	-	-	1,792,932	-	-	1,792,932
Foreign exchange on translation	-	-	-	-	-	-	-	-	-	(101,534)	-	(101,534)
Loss for the year		-	-	-	-	-		-	-		(19,545,016)	(19,545,016)
Balance, December 31, 2021	60,606,931	36,908,094	7,000,000	3,103,620	7,916,380	62	75,523,311	40,011,776	7,153,252	(101,534)	(38,033,903)	9,029,591

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

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (DEFICIENCY)

(Expressed in United States Dollars)

										Accumulated		
				Class A		Class B				Other		
	C	ommon shares	Rest	ricted shares	Prefe	erred shares	Tota	al share capital		Comprehensive	Accumulated	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Reserves	Loss	Deficit	Total
		\$		\$		\$		\$	\$	\$	\$	\$
Balance, December 31, 2021	60,606,931	36,908,094	7,000,000	3,103,620	7,916,380	62	75,523,311	40,011,776	7,153,252	(101,534)	(38,033,903)	9,029,591
Options exercised	416,519	247,167	-	-	-	-	416,519	247,167	(206,382)	-	-	40,785
Forfeited share options	-	-	-	-	-	-	-	-	(161,750)	-	161,750	-
Share-based compensation	-	-	-	-	-	-	-	-	1,707,339	-	-	1,707,339
Foreign exchange on translation	-	-	-	-	-	-	-	-	-	16,806	-	16,806
Loss for the year	-	-	-	-	-	-	-	-	-	-	(12,114,698)	(12,114,698)
Balance, December 31, 2022	61,023,450	37,155,261	7,000,000	3,103,620	7,916,380	62	75,939,830	40,258,943	8,492,459	(84,728)	(49,986,851)	(1,320,177)

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Expressed in United States Dollars)

		F	or the year ended
	Note	2022	December 31, 2021
		\$	
Cash flows used in operating activities			
Loss for the year		(12,114,698)	(19,545,016
Adjustments for non-cash items			
Amortization of intangible assets		82,376	82,375
Accretion of discount on convertible promissory notes		-	376,633
Accretion of discount on promissory note		135,643	117,921
Accrued interest		24,230	23,651
Accrued bonus rights		8,295	-
Depreciation of equipment		8,547	7,502
Listing expense	3	-	1,404,200
Loss (gain) on revaluation of derivative liability		(1,823,444)	6,056,712
Share-based compensation		1,701,807	1,792,932
Write-off of equipment		5,506	_
Changes in non-cash operating working capital items:			
Prepaid expenses and other current assets		619,787	(528,468
Accounts payable and accrued liabilities		2,110,301	239,509
• •		(9,241,650)	(9,879,338
Cash flows (provided by) used in investing activities			
Cash acquired in RTO	3	-	523,041
Acquisition of intangible assets	J	_	(50,000)
Acquisition of equipment		(4,876)	(13,666
requisition of equipment		(4,876)	459,375
Cash flows provided by financing activities			
Units issued for cash		_	13,651,183
Exercise of options		40,785	6,525
Exercise of warrants		-	2,440,000
Interest paid on promissory notes		(16,000)	(24,000
Share issuance costs		(10,000)	(1,195,463
Share issuance costs		24,785	14,878,245
Effect of foreign exchange on cash		3,644	(82,839
Change in cash during the year		(9,218,097)	5,375,443
Cash, beginning of year		11,301,793	5,926,350
/ G G 1)- · - j · · -	- ,- = -,5000

Note 15 – Supplemental disclosure with respect to cash flows

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

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 Company operates from its three offices located in Charlottetown, Prince Edward Island; Vancouver, British Columbia; and Frisco, Texas. The head office and registered and records office of the Company is 301 - 1228 Hamilton Street, Vancouver, BC, V6B 6L2. The Company's common shares trade on the TSX Venture Exchange ("TSX-V") under the trading symbol "ACOG" and on the Over-The-Counter Markets ("OTC") under the trading symbol "ACOGF".

On March 18, 2021, the Company announced the successful closing of its Qualifying Transaction with Alpha Cognition Canada Inc. ("ACI Canada") (the "Transaction" as defined in Note 3). Pursuant to the Transaction, ACI Canada was acquired by and became a wholly-owned subsidiary of ACI. As part of the Transaction, on March 18, 2021, ACI changed its name to Alpha Cognition Inc. and ACI Canada changed its name to Alpha Cognition Canada Inc. At the time of completion of the Transaction, ACI had 59,171,932 shares issued and outstanding which included 57,531,875 common shares issued to former ACI Canada shareholders, representing 97.23% of the Company's issued and outstanding shares. Initially, the common shares of the Company issued in connection with the Transaction were listed on TSX-V under the ticker symbol "CRYS". Effective March 30, 2021, the trading symbol of ACI was changed to "ACOG".

Upon closing of the Transaction, the shareholders of ACI Canada owned 97.23% of the shares of the Company, and as a result, the transaction is considered a reverse acquisition of the Company by ACI Canada. All previous common shares, share options, and warrants were exchanged at a ratio of one share of ACI Canada for one of ACI. For accounting purposes, ACI Canada is considered the acquirer and the Company, the acquiree. Accordingly, the consolidated financial statements are in the name of Alpha Cognition Inc.; however, they are a continuation of the financial statements of ACI Canada (Note 3).

On March 18, 2021, immediately before the Transaction, the Company completed a share consolidation on the basis of one new post-consolidation common share for every 7.14 pre-consolidation common shares.

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 at December 31, 2022, had a working capital deficiency of \$1,724,103 and accumulated deficit of \$49,986,851 (2021 - \$38,033,903) 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 upcoming 12 months. 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 to meet its obligations and fund continuing operations. 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.

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 statement of financial position classifications used. Such adjustments could be material.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of the significant accounting policies used in the preparation of these consolidated financial statements.

Statement of compliance

These consolidated financial statements, including comparatives, have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and Interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC").

These consolidated financial statements of the Company were approved and authorized for use by the Board of Directors on March 8, 2023.

Basis of presentation

The consolidated financial statements of the Company have been prepared on an accrual basis and are based on historical costs, except for certain financial assets and liabilities, including derivative instruments, which are measured at fair value. The consolidated financial statements are presented in United States dollars ("USD") unless otherwise noted.

Basis of consolidation

These consolidated financial statements include the accounts of the Company and its subsidiaries at the end of the reporting period as follows:

	Incompation	Percentage owned		
	Incorporation –	2022	2021	
Alpha Cognition Canada Inc.	Canada	100%	100%	
Alpha Cognition USA Inc. ("ACI USA")	USA	100%	100%	

All significant intercompany accounts and transactions between the Company and its subsidiaries have been eliminated upon consolidation.

Functional and presentation currency

The functional currency of an entity is the currency of the primary economic environment in which the entity operates. The functional currency of the Company is Canadian dollars ("CAD") and the functional currencies of its subsidiaries is USD. The functional currency determinations were conducted through an analysis of the consideration factors identified in IAS 21, *The Effects of Changes in Foreign Exchange Rates*.

Transactions in currencies other than the functional currency are recorded at exchange rates prevailing on the dates of the transactions. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are translated at the period end exchange rate while non-monetary assets and liabilities in foreign currencies are translated at historical rates. Revenues and expenses are translated at the average exchange rates approximating those in effect during the reporting period.

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

Significant accounting estimates and judgments

The preparation of the consolidated financial statements in conformity with IFRS requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported revenues and expenses during the period. Although management uses historical experience and its best knowledge of the amount, events or actions to form the basis for judgments and estimates, actual results may differ from these estimates. Significant estimates and judgements made by management in the preparation of these consolidated financial statements are outlined below.

Uncertainty of COVID-19 Global Pandemics

The Company is subject to risks and uncertainties as a result of the ongoing COVID-19 pandemic. The Company is continuing to closely monitor the impact of the COVID-19 pandemic on its business and has taken and continues to take proactive efforts to protect the health and safety of its patients, clinical research staff and employees, and to maintain business continuity. The extent of the impact of the COVID-19 pandemic on the Company's activities remains uncertain and difficult to predict, as the response to the pandemic is ongoing and information continues to evolve. Capital markets and economies worldwide have been negatively impacted by the COVID-19 pandemic and may be further impacted in the future. Such economic disruption could have a material adverse effect on the Company's business. Policymakers around the globe have responded with fiscal policy actions to support the healthcare industry and economy as a whole. The magnitude and overall effectiveness of these actions remains uncertain.

The severity of the impact of the COVID-19 pandemic on the Company's activities will depend on a number of factors, including, but not limited to, the duration and severity of the pandemic, including the severity of any additional periods of increases or spikes in the number of cases in the areas the Company its suppliers and its manufacturers operate and areas where the Company's clinical trial sites are located; the development and spread of COVID-19 variants, the timing, extent, effectiveness and durability of COVID-19 vaccine programs or other treatments; and new or continuing travel and other restrictions and public health measures, such as social distancing, business closures or disruptions. Accordingly, the extent and severity of the impact on the Company's existing and planned clinical trials, manufacturing, collaboration activities and operations is uncertain and cannot be fully predicted. The Company may experience delays in its existing and planned clinical trials due to the worldwide impacts of the pandemic. The Company's future results of operations and liquidity could be adversely impacted by delays in existing and planned clinical trials, continued difficulty in recruiting patients for these clinical trials, delays in manufacturing and collaboration activities, supply chain disruptions, the ongoing impact on its operating activities and employees, and the ongoing impact of any initiatives or programs that the Company may undertake to address financial and operational challenges. As of the date of issuance of these consolidated financial statements, the extent to which the COVID-19 pandemic may materially impact the Company's future financial condition, liquidity or results of operations remains uncertain

Functional currency

Management is required to assess the functional currency of each entity of the Company. In concluding on the functional currencies of the parent and its subsidiaries, management considered the currency that mainly influences the sale prices of goods and services and the cost of providing goods and services in each jurisdiction in which the Company operates. When no single currency was clearly dominant, the Company also considered secondary indicators including the currency in which funds from financing activities are denominated and the currency in which funds are retained.

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.

Going concern

The assessment of the Company's ability to continue as a going concern involves management judgement about the Company's resources and future prospects.

Significant accounting estimates and judgments (continued)

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.

Share-based payment transactions and valuation of derivative liability

The Company uses the Black-Scholes Option Pricing Model to determine the fair value of stock options, standalone share purchase warrants issued, bonus rights 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.

Valuation of bonus rights

The Company uses the Black-Scholes Option Pricing Model to determine the fair value of the bonus rights. This model requires the input of subjective assumptions including expected share price volatility, interest rate, and forfeiture rate. Additionally, the Company applies a probability of the likelihood of certain thresholds being met. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity reserves.

Financial instruments

Financial assets

On initial recognition, financial assets are recognized at fair value and are subsequently classified and measured at: (i) amortized cost; (ii) fair value through other comprehensive income ("FVOCI"); or (iii) fair value through profit or loss ("FVTPL"). The classification of financial assets is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. A financial asset is measured at fair value net of transaction costs that are directly attributable to its acquisition except for financial assets at FVTPL where transaction costs are expensed. All financial assets not classified and measured at amortized cost or FVOCI are measured at FVTPL. On initial recognition of an equity instrument that is not held for trading, the Company may irrevocably elect to present subsequent changes in the financial asset's fair value in other comprehensive income.

The classification determines the method by which the financial assets are carried on the consolidated statement of financial position subsequent to initial recognition and how changes in value are recorded. Other current assets is measured at amortized cost with subsequent impairments recognized in profit or loss. Cash is classified as FVTPL.

Impairment

An 'expected credit loss' impairment model applies which requires a loss allowance to be recognized based on expected credit losses. The estimated present value of future cash flows associated with the asset is determined and an impairment loss is recognized for the difference between this amount and the carrying amount as follows: the carrying amount of the asset is reduced to estimated present value of the future cash flows associated with the asset, discounted at the financial asset's original effective interest rate, either directly or through the use of an allowance account and the resulting loss is recognized in profit or loss for the period.

Financial instruments (continued)

<u>Impairment (continued)</u>

In a subsequent period, if the amount of the impairment loss related to financial assets measured at amortized cost decreases, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For the years presented, the Company did not record an expected credit loss.

Financial liabilities

Financial liabilities are designated as either: (i) fair value through profit or loss; or (ii) amortized cost. All financial liabilities are classified and subsequently measured at amortized cost except for financial liabilities at FVTPL. The classification determines the method by which the financial liabilities are carried on the statement of financial position subsequent to inception and how changes in value are recorded. Accounts payable and promissory note are classified as other financial liabilities and carried on the statement of financial position at amortized cost. Bonus rights and derivative liability is measured at FVTPL.

Equipment

Equipment is stated at historical cost less accumulated depreciation and accumulated impairment losses.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in profit or loss.

Amortization is charged over the estimated useful lives using the declining balance method as follows:

Computer equipment 55% Other equipment 20%

Intangible assets

Intangible assets are carried at cost less accumulated amortization and any impairment losses. The amortization method, useful life and residual values are assessed annually. Amortization expense is recorded on a straight-line basis beginning with the month the corresponding assets are available for use and over the estimated useful lives provided below:

Licenses 15 years

If, after expenditures are capitalized, events or changes in circumstances indicate that the carrying amount may not be recoverable, the amount capitalized is written off in profit or loss in the period the new information becomes available.

Upon retirement or disposal, the cost of the asset disposed of and the related accumulated amortization are removed from the accounts and any gain or loss is reflected in profit and loss.

Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. An impairment loss is recognized whenever the carrying amount of an asset or its cash generating unit exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

The recoverable amount of assets is the greater of an asset's fair value less cost to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects the current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is only reversed if there is an indication that the impairment loss may no longer exist and there has been a change in the estimates used to determine the recoverable amount, however, not to an amount higher than the carrying amount that would have been determined had no impairment loss been recognized in previous years.

Assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment.

Leases

The Company recognizes a right-of-use asset and a lease liability at the commencement date of a lease. The right-of-use asset is initially measured at cost, which is comprised of the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any decommissioning and restoration costs, less any lease incentives received. The right-of-use asset is subsequently depreciated from the commencement date to the earlier of the end of the lease term, or the end of the useful life of the asset. In addition, the right-of-use asset may be reduced due to impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

A lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by the interest rate implicit in the lease, or if that rate cannot be readily determined, the incremental borrowing rate. The lease term is determined as the non-cancellable periods of a lease, together with periods covered by a renewal option if the Company is reasonably certain to exercise that option and a termination option if the Company is reasonably certain not to exercise that option. Lease payments included in the measurement of the lease liability are comprised of:

- fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee;
- exercise prices of purchase options if the Company is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, or if there is a change in the estimate or assessment of the expected amount payable under a residual value guarantee, purchase, extension, or termination option. Variable lease payments not included in the initial measurement of the lease liability are charged directly to profit or loss.

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 and leases of low-value assets. The lease payments associated with these leases are charged directly to profit or loss on a straight-line basis over the lease term. During the years ended December 31, 2022 and 2021, all of the Company's leases were short-term leases with a term of 12 months or less and were charged directly to profit or loss on a straight-line basis over the lease term. As at December 31, 2022, the Company did not have any outstanding leases.

Convertible debentures and derivative liability

Upon initial recognition, the Company determines whether the convertible debentures consist of liability and equity components, or if both components represent liabilities. For convertible debentures which provide conversion into a fixed number of shares (the "fixed-for-fixed" criteria), the liability component is initially recorded at fair value and subsequently at amortized cost using the effective interest rate method. The liability component is accreted to the face value over the term of the convertible debenture. The equity component is recognized as the difference between the fair value of the instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

For convertible debentures which provide conversion into a variable number of shares or into a fixed number shares for a variable amount of consideration, the conversion option is accounted for as an embedded derivative, which is separated from the host contract. The conversion option of the convertible debentures outstanding at December 31, 2020 met the criteria of a derivative instrument liability because the conversion price of the promissory notes varied depending on certain factors and thus did not meet the "fixed-for-fixed" criteria. As a result, the Company separately account for the conversion feature as a derivative liability recorded at fair value and marked-to-market each period with the changes in the fair value recognized in profit or loss. The liability component is recognized as the difference between the fair value of the instrument as a whole and the fair value of the derivative liability.

Derivative liability

Share purchase warrants outstanding during the year ended December 31, 2022 and 2021 met the criteria of a derivative instrument liability because they were exercisable in a currency other than the functional currency of the Company and thus did not meet the "fixed-for-fixed" criteria. As a result, the Company was required to separately account for the warrants as a derivative instrument liability recorded at fair value and marked-to-market each period with the changes in the fair value each period charged or credited to loss. Changes in fair value are recognized as gain/loss on derivative liability until the warrants are exercised or expire.

Share capital

Financial instruments issued by the Company are classified as equity only to the extent that they do not meet the definition of a financial liability or financial asset. The Company's preferred shares, restricted shares, common shares, warrants and options are classified as equity instruments.

The Company has adopted a residual value method with respect to the measurement of shares and warrants issued as private placement units. The residual value method first allocates value to the more easily measurable component based on fair value and then the residual value, if any, to the less easily measurable component. The fair value of the common shares issued in private placements is determined to be the more easily measurable component as they are valued at their fair value which is determined by the closing price on the issuance date. The remaining balance, if any, is allocated to the attached warrants. Any fair value attributed to the warrants is recorded to reserves. If the warrants expire unexercised, the value attributed to the warrants is transferred to share capital.

Incremental costs directly attributable to the issue of new shares or options are recognized as a deduction from equity, net of tax.

Loss per share

Basic loss per share is computed by dividing net loss available to ordinary shareholders by the weighted-average number of ordinary shares outstanding during the reporting period where ordinary shares include Common shares and Class A restricted common shares. 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 ordinary shares for the assumed exercise of share options, warrants, and convertible debentures, if dilutive. The number of potential ordinary shares is calculated by assuming that outstanding share options, warrants and convertible debentures were exercised or converted and that the proceeds from such exercises were used to acquire common shares at the average market price during the reporting periods. For the years presented, this calculation proved to be anti-dilutive.

Share-based compensation

Share-based compensation to employees is measured at the fair value of the instruments issued and amortized over the vesting periods. Share-based compensation to non-employees are measured at the fair value of goods or services received or the fair value of the equity instruments issued, if it is determined the fair value of the goods or services cannot be reliably measured, and are recorded at the date the goods or services are received. The corresponding amount is recorded to the share option reserve. The Company records stock-based compensation expense for service-based stock options on a graded method over the requisite service period. The Company records stock-based compensation expense for non-market performance-based stock options on a graded 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.

The Company transfers the previously expensed value of forfeited and expired unexercised vested stock options and compensatory warrants to deficit or share capital from reserves on the date of expiration based on the nature of the item.

Income taxes

Current income tax

Current income tax assets and liabilities for the current period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date, in the country where the Company operates and generates taxable income.

Deferred income tax

Deferred income tax is provided for based on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. The carrying amount of deferred income tax assets is reviewed at the end of each reporting period and recognized only to the extent that it is probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred income tax assets and deferred income tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred income taxes relate to the same taxable entity and the same taxation authority.

Deferred income tax (continued)

Current income and deferred tax relating to items recognized directly in other comprehensive income or equity is recognized in other comprehensive income or equity and not in profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Research and development

Research and development costs are typically expensed as incurred and can only be capitalized where a development project meets certain conditions, including technical feasibility of the intangible asset, intention to complete the project, ability to sell the intangible asset, probability that the intangible asset can produce future economic benefits, availability of resources to complete the project, and ability to reliably measure the expenditure attributable to the intangible asset. Development projects are reviewed as they arise and on an on-going basis to assess whether all conditions have been met. For capitalized development assets, amortization is calculated over the cost of the asset, or revalued amount, less its residual value. Capitalized development amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset.

Accounting pronouncements not yet adopted

Accounting standards or amendments to existing accounting standards that have been issued but have future effective dates are either not applicable or are not expected to have a significant impact on the Company's consolidated financial statements.

NOTE 3 – REVERSE ACQUISITION

On October 27, 2020, ACI Canada entered into an Arrangement Agreement with ACI whereby ACI would acquire 100% of the issued and outstanding shares of ACI Canada by issuing to the shareholders of ACI Canada one common share of ACI ("CPC Share") for every one common share of ACI Canada share held by each ACI Canada shareholder (the "Transaction"). Certain US resident ACI Canada shareholders agreed to receive a restricted voting share (a "Restricted Voting Share") in place of a CPC Share which is equivalent to a CPC Share except that it will not be counted in a shareholder vote for the election of directors. In addition, holders of Class C Preferred shares of ACI Canada received one Class B Preferred Share of ACI for each Class C Preferred share of ACI Canada held by such shareholder. The outstanding options and warrants of ACI Canada became convertible into options and warrants of ACI.

On March 18, 2021, the Transaction completed resulting in ACI acquiring 100% of the shares of ACI Canada and ACI Canada's shareholders receiving 42,615,495 post-consolidated common shares, 7,000,000 restricted voting shares, 7,916,380 preferred shares, 11,819,169 warrants, and 10,069,365 share options of ACI. The ACI shareholders retained 1,640,507 common shares on completion of the transaction and the former ACI share option holders were deemed granted 108,543 share options.

The transaction constituted a reverse acquisition of ACI and has been accounted for as a reverse acquisition transaction in accordance with the guidance provided under IFRS 2, *Share-based Payment* and IFRS 3, *Business Combinations*. As ACI did not qualify as a business according to the definition in IFRS 3, *Business Combination*, this reverse acquisition did not constitute a business combination; rather the transaction was accounted for as an asset acquisition by the issuance of shares of the Company, for the net assets of ACI and its public listing. Accordingly, the transaction has been accounted for at the fair value of the equity instruments granted by the shareholders of ACI Canada to the shareholders and option holders of ACI. The sum of the fair value of the consideration paid (based on the fair value of the ACI shares just prior to the reverse acquisition) less the ACI net assets acquired, has been recognized as a listing expense in the net loss for the year ended December 31, 2021.

NOTE 3 – REVERSE ACQUISITION (continued)

For accounting purposes, ACI Canada was treated as the accounting parent company (legal subsidiary) and ACI has been treated as the accounting subsidiary (legal parent) in these consolidated financial statements. As ACI Canada was deemed to be the acquirer for accounting purposes, its assets, liabilities and operations since incorporation are included in these consolidated financial statements at their historical carrying value. The results of operations of ACI are included in these consolidated financial statements from the date of the reverse acquisition of March 18, 2021.

The following represents management's estimate of the fair value of the ACI net assets acquired as at March 18, 2021 as a result of the reverse acquisition.

	Total
	\$
Cost of acquisition:	
Shares retained by public company shareholders	
- 1,640,057 shares at CAD \$1.28 x 0.8027	1,685,085
Fair value of stock options	62,749
	1,747,834
Allocated as follows:	
Cash	523,041
Prepaid expenses	5,706
Liabilities	(185,113)
	343,634
Allocated to listing expense	1,404,200
	1,747,834

Share options deemed granted were valued using the Black Scholes model using the following weighted average assumptions: risk free rate of 0.23%, volatility of 123%, dividend yield of \$nil, and expected lives of 1.85 years.

During the year ended December 31, 2022, the Company incurred costs of \$nil (2021 - \$37,504) related to the reverse acquisition that were recorded as business investigation costs.

NOTE 4 – INTANGIBLE ASSET

	Licenses
	\$
Cost:	
At December 31, 2020	1,185,633
Additions	50,000
At December 31, 2021 and December 31, 2022	1,235,633
Amortization:	
At December 31, 2020	456,496
Additions	82,375
At December 31, 2021	538,871
Additions	82,376
At December 31, 2022	621,247
Net book value:	
At December 31, 2021	696,762
At December 31, 2022	614,386

NOTE 5 – ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	2022	2021
	\$	\$
Accounts payable	2,016,057	454,992
Accrued liabilities	278,664	271,858
Accrued bonus and wages	550,660	-
	2,845,381	726,850

NOTE 6 - CONVERTIBLE DEBENTURES AND DERIVATIVE LIABILITY

	Convertible Debentures	Derivative liability	Total
	\$	\$	\$
Balance, December 31, 2020	2,257,109	1,651,831	3,908,940
Accretion	376,633	-	376,633
Accrued interest	5,529	-	5,529
Revaluation of derivative liability	-	448,713	448,713
Conversion	(2,639,271)	(2,100,544)	(4,739,815)
Balance, December 31, 2021 and 2022	-	-	-

NOTE 6 – CONVERTIBLE DEBENTURES AND DERIVATIVE LIABILITY (continued)

On April 27, 2020, the Company received \$212,299 from various third party lenders and \$1,787,701 from various directors and officers of the Company for the issuance of convertible debentures ("First Note") bearing interest at 5% per annum, minimum six months interest guaranteed, and expiring on October 27, 2021, and one warrant ("First Note Warrant") giving the lender the right to purchase a second convertible promissory note ("Second Note") having the same terms as the First Note, upon payment equal to the principal amount of the First Note and expiring October 30, 2020. At the option of the lender, the lender could convert their promissory note and any accrued interest into Common shares of the Company, for a price equal to the lower of 20% discount to the per share price of a Value Transaction, being any transaction which had the effect directly or indirectly of valuing the Company, its assets or undertaking including but not limited to a merger or acquisition, a private placement of the Company, issuance of convertible debentures, an initial public offering ("IPO"), a reverse take-over or merger ("RTO"), or a valuation report completed by an independent banker or certified business valuator, or \$1.60. In the event the convertible promissory notes remained outstanding at October 27, 2021, the promissory notes would automatically convert into Common shares of the Company at \$1.28 per Common share.

As the conversion price of the promissory notes varied depending on certain factors, the Company recorded an embedded derivative liability on its consolidated statements of financial position with a corresponding debt discount which is netted against the principal amount of the convertible debentures. The Company accreted the debt discount associated with the embedded derivative liability to accretion expense over the term of the convertible debentures using the effective interest rate method. The embedded derivative liability was initially measured at fair value and re-measured at the end of each reporting period with any changes in fair value reported in profit and loss.

In October 2020, the Company offered the holders of the First Note Warrants the option to purchase Subscription Receipts (defined in Note 9) at a 20% discount through the exercising of their warrants, conditional on the closing of the Transaction. If the Transaction terminated or did not complete by December 31, 2020, or such later date as agreed to by ACI Canada and ACI, the holders would receive the Second Note. The Company received \$2,000,000 for the exercise of the First Note Warrants of which \$59,319 was received for a Second Note and \$1,940,681 was received for the elected Subscription Receipts. In March 2021, the Transaction closed and all First Note Warrant holders were issued Subscription Receipts.

The initial fair value of the embedded derivative for the First Note and warrant was determined to be \$1,253,963 while the initial fair value of the embedded derivative for the Second Note was determined to be \$1,132,212.

Prior to the conversion into units on March 18, 2021, the fair value of the embedded derivative for the First and Second Note was determined to be \$2,100,544 using the Black-Scholes Option Pricing model with the following assumptions:

Risk-free interest rate	0.03% - 0.23%
Dividend yield	=
Expected life	0.61-2.00 years
Volatility	121% - 141%
Probability of automatic conversion	-%
Probability of conversion at \$1.60 per share	-%
Probability of conversion at a 20% discount to the per share price of a Funding Transaction	100%

During the year ended December 31, 2022, the Company recognized interest expense of \$nil (2021 – \$1,733) to third party lenders and \$nil (2021 – \$3,796) to various directors and officers of the Company.

During the year ended December 31, 2022, the Company recognized accretion of the debt discount of \$nil (2021 - \$376,633) and loss on revaluation of derivative liability of \$nil (2021 - \$448,713).

NOTE 7 – PROMISSORY NOTE

The following is a continuity schedule of the carrying value of the promissory notes and accrued interest:

	Principal	Accrued Interest
	\$	\$
Balance, December 31, 2020	957,899	2,542
Interest payments	· -	(24,000)
Accretion	117,921	-
Accrued interest	-	24,229
Balance, December 31, 2021	1,075,820	2,771
Interest payments	-	(16,000)
Accretion	135,643	-
Accrued interest	-	24,230
Balance, December 31, 2022	1,211,463	11,001

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 12). In April 2015, the Company and NLS entered into an amendment to the License Agreement (defined in Note 12) 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. The Company may pay all or any portion of the note and accrued interest prior to the maturity date.

During the year ended December 31, 2022, the Company recorded interest expense of \$24,230 (2021 - \$24,229) and amortization of the discount, included in accretion expense, of \$135,643 (2021 - \$117,921).

As at December 31, 2022, the principal balance owing on the promissory note was \$1,211,463 (2021 - \$1,211,463) and the remaining debt discount was \$nil (2021 - \$135,643). Additionally, the accrued interest of \$11,001 (2021 - \$2,771) is included in accrued liabilities. As at December 31, 2022, the promissory note remained unpaid and continued to incur interest at 2% per annum.

On March 6, 2023, the Company and NLS agreed to an amendment to the promissory note (Note 18).

NOTE 8 – OTHER LONG-TERM LIABILITIES

The Company adopted a cash bonus policy which 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 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.

During the year ended December 31, 2022, Officers of the Company were granted the ability to earn up to 9,261,196 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 \$1.58 multiplied by the number of bonus rights vested. The bonus rights earned will 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 at December 31, 2022, the Officers had earned 2,376,764 bonus rights.

NOTE 8 – OTHER LONG-TERM LIABILITIES (continued)

On initial recognition, the Company recorded an expense of \$56,988 to recognize the proportionate unvested bonus rights. As at December 31, 2022, the Company revalued the bonus rights and reduced the expense by \$48,693.

	2022
	\$
Balance, beginning of year	-
Initial recognition of bonus rights	56,988
Adjustment	(48,693)
Balance, end of year	8,295

On initial valuation, the outstanding bonus rights had a value of \$677,555 which was revalued to \$24,352 at December 31, 2022. The following weighted average assumptions were used in the Black-Scholes option-pricing model for the initial valuations and the valuation of the bonus rights as at December 31, 2022:

	December 31, 2022	Initial Valuation
Risk-free interest rate	4.51%	1.47%
Dividend yield	-	-
Forfeiture rate	-	-
Expected life	1.29 years	1.13 years
Volatility	94%	60%
Weighted average fair value per bonus right	\$0.01	\$0.16
Number of probable bonus rights to vest	2,444,625	2,434,134

A continuity of bonus rights is as follows:

	Number of Bonus Rights Outstanding	Number of Bonus Rights Earned
Balance, December 31, 2020 and 2021	-	_
Issued	9,261,186	2,376,764
Balance, December 31, 2022	9,261,186	2,376,764

NOTE 9 – SHARE CAPITAL

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 with a par value of \$0.25 per share, convertible on a 1:1 basis into Common shares ("Class B preferred shares")

Issued share capital

During the year ended December 31, 2022, the Company issued the following shares:

- 350,000 Common shares for the exercise of 350,000 ACI Canada legacy performance options at a price of \$0.01 per share for total proceeds of \$3,500. As a result, the Company transferred \$174,285 from reserves to share capital.
- 66,519 Common shares for the exercise of 66,519 Common share options at a price of CAD\$0.714 per share for total proceeds of \$37,285 (CAD\$47,495). As a result, the Company transferred \$32,097 from reserves to share capital.

During the year ended December 31, 2021, the Company issued the following shares:

- Concurrent to the Transaction, ACI Canada and ACI completed a brokered private placement by raising \$4,166,639 by way of the sale of 3,360,124 subscription receipts at a price of CAD\$1.60 per subscription receipt ("Subscription Receipt") with each Subscription Receipt consisting of one common share and one-half warrant ("Private Placement"). Each whole warrant is exercisable at a price of CAD\$2.10 per warrant for a term of 24 months from the closing date. The Company allocated \$873,816 to reserves representing the value of the warrants issued. Of the funds raised, \$3,410,977 was raised by ACI Canada for 2,771,749 Subscription Receipts and \$755,662 was raised by ACI for 588,375 Subscription Receipts. In connection with the Private Placement, ACI Canada agreed to pay a cash commission of \$209,174 and issue 130,733 warrants with an estimated fair value of \$76,156 under the Private Placement to the agents. Each agent warrant is exercisable into common shares of ACI at an exercise price of CAD\$1.60 for a term of 2 years.
- Concurrent to the Transaction, ACI Canada issued 1,613,186 Subscription Receipts on the conversion of \$2,698,028 worth of net convertible debentures (Note 6).
- Concurrent to the Transaction, ACI Canada issued 2,139,763 Common shares on the conversion of \$1,962,976 worth of net convertible debentures and 94,273 Common shares on the conversion of \$90,735 worth of interest on the convertible debentures (Note 6).
- 50,000 common shares at a price of \$0.01 per share for total proceeds of \$500 for the exercise of Common share options. As a result, the Company transferred \$24,898 from reserves to share capital.
- Completed a public offering by raising funds of \$11,383,284 (CAD\$14,403,750) for 9,602,500 subscription receipts at a price of CAD\$1.50 per subscription receipt with each subscription receipt consisting of one Common share and one warrant exercisable at a price of CAD\$1.75 per warrant for a term of 24 months from the closing date. In connection with the public offering, the Company agreed to pay cash commissions of \$852,094 and issue 659,627 warrants with an estimated fair value of \$444,886 to the agents. Each agent warrant is exercisable into Common shares of the Company at an exercise price of CAD\$1.50 for a term of 2 years.
- 6,100,000 Common shares for the exercise of 6,100,000 warrants at a price of \$0.40 per share for total proceeds of \$2,440,000. As a result, the Company transferred \$3,813,754 from the derivative liability to share capital.
- 10,504 Common shares for the exercise of 10,504 Common share options at a price of CAD\$0.714 per share for total proceeds of \$6,025 (CAD\$7,500). As a result, the Company transferred \$8,972 from reserves to share capital.

Escrow shares

As at December 31, 2022, the Company had 19,754,347 (2021 – 28,524,110) Common shares, 3,116,518 (2021 – 4,006,846) Restricted Shares, and 5,099,866 (2021 – 6,859,782) Class B preferred shares held in escrow.

Warrants

During the year ended December 31, 2021, ACI Canada issued the following warrants:

- 1,385,866 warrants with an exercise price of CAD\$2.10 and an expiry of March 18, 2023, in connection with the Company's private placement.
- 130,733 warrants with an exercise price of CAD\$1.60 and an expiry of March 18, 2023, to the agents of the Company's Private Placement.
- 806,591 warrants with an exercise price of CAD\$2.10 and an expiry of March 18, 2023, in connection with the conversion of the convertible debentures into Subscription Receipts.

All warrants outstanding in ACI Canada were transferred and assigned to ACI upon completion of the Transaction.

During the year ended December 31, 2021, the Company issued the following warrants:

- 294,190 warrants with an exercise price of CAD\$2.10 and an expiry of March 18, 2023, in connection with the conversion of the convertible debentures into Subscription Receipts.
- 9,602,500 warrants with an exercise price of CAD\$1.75 and expiry of October 1, 2023, in connection with the public offering.
- 659,627 warrants with an exercise price of CAD\$1.50 and an expiry of October 1, 2023, to the agents of the Company's public offering.

A continuity of warrants is as follows:

	Number of Warrants	Weighted Average Exercise Price
		\$
Balance, December 31, 2020	9,201,783	0.40
Issued	12,879,507	1.42 (CAD\$1.80)
Exercised	(6,100,000)	0.40
Balance, December 31, 2021 and 2022	15,981,290	1.15

A summary of the warrants outstanding and exercisable December 31, 2022, is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
	\$	• •
2,486,647	1.55 (CAD\$2.10)	March 18, 2023
130,733	1.18 (CAD\$1.60)	March 18, 2023
40,000	0.40	July 5, 2023
9,602,500	1.29 (CAD\$1.75)	October 1, 2023
659,627	1.11 (CAD\$1.50)	October 1, 2023
3,061,783	0.40	August 30, 2024
15,981,290		

The weighted average life of warrants outstanding at December 31, 2022 was 0.84 years.

Share Options

Common share options

The Company has a Stock Option Plan for its directors, officers, employees and consultants under which the Board of Directors of the Company may 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.

All stock options outstanding in ACI Canada were transferred and assigned to ACI upon completion of the Transaction.

During the year ended December 31, 2022, the Company had the following share option transactions:

- In February 2022, the Company granted 230,000 share options with an exercise price of CAD\$1.05 per share to certain employees of ACI USA and a consultant of ACI Canada. The options will be subject to the following vesting terms: 25% will vest on February 14, 2023 and the remaining 75% will vest in equal monthly instalments until February 14, 2025.
- In April 2022, the Company granted 450,000 share options to the CFO of the Company with an exercise price of CAD\$0.93 per share for a period of ten years from date of grant. The options will be subject to the following vesting terms: 25% will vest in equal monthly instalments until April 11, 2023 and the remaining 75% will vest in equal monthly instalments until April 11, 2025.
- In May 2022, the Company granted 400,000 share options to certain directors of the Company with an exercise price of CAD\$0.64 per share. The options will be subject to the following vesting terms: 50% will vest on date of grant and the remaining 50% will vest quarterly over a 24-month period.
- In May 2022, the Company granted 90,000 share options with an exercise price of CAD\$0.64 per share. The options will be subject to the following vesting terms: 25% will vest on date of grant and the remaining 75% will vest in equal monthly instalments over a 24-month period.
- During the year ended December 31, 2022, 895,007 stock options were forfeited, of which \$161,750 reallocated from reserves to deficit, \$5,532 was reallocated from reserves to share-based compensation under general and administrative, and \$112,017 was reallocated from reserves to share-based compensation under research and development.

During the year ended December 31, 2021, the Company had the following share option transactions:

- In connection with the Transaction, the Company had deemed granted 108,543 share options, with an estimated fair value of \$62,749, to former option holders of ACI of which all have been vested. The total fair value granted was considered to be part of the cost of acquisition of ACI. Of these share options 31,513 are exercisable up to September 21, 2023, and 77,030 were exercisable up to June 16, 2021. In April 2021, the Company extended the life of the 77,030 share options to March 18, 2022.
- The Company granted 200,000 common share options to a consultant of the Company with an estimated fair value of \$113,507 which vest quarterly over four tranches of 50,000 commencing June 18, 2021.
- In April 2021, the Company repriced 77,030 share options with an exercise price of CAD\$0.714 for the extension of the expiry date to March 18, 2022 from June 16, 2021. All other terms remained unchanged. The Company recorded share-based compensation of \$9,272.
- In August 2021, the Company granted 3,150,000 share options to certain officers of the Company and employees of ACI USA with an exercise price of CAD\$0.90 per share. The options will be subject to the following vesting terms: 25% will vest on the first anniversary of the date of grant and the remaining 75% will vest in equal monthly instalments until the third anniversary of the date of grant. In October 2021, 450,000 of these share options were cancelled.
- In August 2021, the Company granted 400,000 share options with an exercise price of \$1.22 per share to an employee of ACI USA. The options will be subject to the following vesting terms: 25,000 options vest on date of grant, 175,000 options will vest quarterly over a 24-month period, and 200,000 options vest upon the completion of certain performance criteria. In December 2021, the vesting terms were revised to: 100,000 options vest on date of grant, 100,000 options will vest quarterly over a 12 month period, and 200,000 options vest upon completion of certain performance criteria.

Share options (continued)

Common share options (continued)

- In August 2021, the Company granted 300,000 share options with an exercise price of \$0.80 per share to an employee of the Company. The options will be subject to the following vesting terms: 37,500 options vest on date of grant, 112,500 options will vest quarterly over a 24-month period, and 150,000 options vest upon the completion of certain performance criteria. In December 2021, the Company amended the number of options granted to 131,250 options which will vest immediately.
- In December 2021, the Company granted 300,000 share options to a certain officer of the Company with an exercise price of CAD\$1.12 per share. The options will be subject to the following to the following vesting terms: 100,000 options vest on date of grant and 200,000 options vest upon the completion of certain performance criteria.
- In December 2021, the Company granted 450,000 share options to employees of ACI USA with an exercise price of CAD\$1.12 per share. The options will be subject to the following vesting terms: 25% will vest on the first anniversary of the date of grant and remaining 75% will vest in equal monthly instalments until the third anniversary of the date of grant.
- In December 2021, the Company granted 940,000 share options to certain directors of the Company with an exercise price of CAD\$1.12 per share. The options will be subject to the following vesting terms: 50% will vest on date of grant and the remaining 50% will vest quarterly over a 24-month period.

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the share options issued:

	2022	2021
Risk-free interest rate	2.62%	1.26%
Dividend yield	-	-
Forfeiture rate	-	-
Expected life	10 years	9.61 years
Volatility	84%	87%
Weighted average fair value per option	\$0.56	\$0.58

For the year ended December 31, 2022, share-based compensation expense relating to service condition awards amounted to \$1,597,788 (2021 - \$1,093,704) of which \$446,742 (2021 - \$276,381) was allocated to research and development and \$1,151,046 (2021 - \$817,323) to general and administrative, the latter which has been presented in share-based compensation expense.

Share options (continued)

Common share options (continued)

Common share option continuity is as follows:

	Year ended December 31, 2022			Decem	Year ended ber 31, 2021	
	Number of Options	Weighted Average Exercise Price	Weighted Average Share Price on Exercise	Number of Options	Weighted Average Exercise Price	Weighted Average Share Price on Exercise
	-	\$	\$		\$	\$
Balance, beginning of year	5,297,597	0.81	-	78,308	0.40	-
Granted	1,170,000	0.61	-	5,848,543	0.81	-
Cancelled	(895,007)	0.64	-	(618,750)	0.73	-
Exercised	(66,519)	0.53	0.81	(10,504)	0.56	0.95
Balance, end of year	5,506,071	0.72	-	5,297,597	0.81	-
Options exercisable, end of year	2,546,071			1,127,597		

A summary of the common share options outstanding at December 31, 2022, is as follows:

Options Outstanding	Options Exercisable	Exercise Price	Expiry Date
		\$	
200,000	200,000	1.55 (CAD\$2.10)	March 29, 2023
31,513	31,513	0.53 (CAD\$0.714)	September 21, 2023
39,154	39,154	0.40	June 1, 2029
39,154	39,154	0.40	July 22, 2030
2,600,000*	975,000	0.66 (CAD\$0.90)	August 3, 2031
131,250	131,250	0.80	August 16, 2031
1,340,000**	805,000	0.83 (CAD\$1.12)	December 20, 2031
215,000*	-	0.78 (CAD\$1.05)	February 14, 2032
450,000*	75,000	0.69 (CAD\$0.93)	April 11, 2032
460,000***	250,000	0.47 (CAD\$0.64)	May 31, 2032
5,506,071	2,546,071		

^{*} cancelled and reissued in January 2023 (see Note 18).

The weighted average life of common share options outstanding at December 31, 2022, was 8.47 years.

^{** 940,000} options were cancelled and reissued in January 2023 (see Note 18).

^{*** 450,000} options were cancelled and reissued in January 2023 (see Note 18).

Share options (continued)

ACI Canada legacy performance options

The Company retained ACI Canada's stock 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.

For the year ended December 31, 2022, share-based compensation expense relating to service condition awards for the ACI Canada legacy performance options amounted to \$nil (2021 - \$44,510, of which \$32,797 was allocated to research and development and \$11,713 to general and administrative, the latter which has been presented in share-based compensation expense).

For the year ended December 31, 2022, share-based compensation expense relating to performance condition options for the ACI Canada legacy performance options amounted to \$109,551 (2021 – \$654,718) of which \$109,551 (2021 - \$503,868) was allocated to research and development and \$nil (2021 - \$150,850) to general and administrative, the latter which has been presented in share-based compensation expense.

ACI Canada legacy performance option continuity is as follows:

	Year ended December 31, 2022				Year ended per 31, 2021	
	Number of Options	Weighted Average Exercise Price	Weighted Average Share Price on Exercise	Number of Options	Weighted Average Exercise Price	Weighted Average Share Price on Exercise
	_	\$	\$	-	\$	\$
Balance, beginning of year	9,941,057	0.01		9,991,057	0.01	
Cancelled	(70,000)	0.01		-	-	
Exercised	(350,000)	0.01	0.83	(50,000)	0.01	0.68
Balance, end of year	9,521,057	0.01		9,941,057	0.01	
Options exercisable, end of year	8,731,057			8,861,057		

Share options (continued)

ACI Canada legacy performance options

A summary of the Common share options outstanding at December 31, 2022, is as follows:

Options Outstanding	Options Exercisable	Exercise Price	Expiry Date
		\$	
900,000	900,000	0.001	February 1, 2026
691,057	691,057	0.01	December 31, 2027
4,400,000	3,960,000	0.01	September 1, 2028
3,530,000	3,180,000	0.01	June 1, 2029
9,521,057	8,731,057		

The weighted average life of ACI Canada legacy performance options outstanding at December 31, 2022 was 5.66 years.

Derivative liability

Due to the Company acquiring warrants from ACI Canada on the completion of the Transaction with an exercise price in a currency different from its functional currency, a derivative liability was recorded on the date of the transfer of ACI Canada's previously issued warrants with USD exercise prices. This derivative liability is being revalued at each reporting period.

On initial recognition, the Company recorded a loss of \$7,810,547 to recognize the derivative liability. As at December 31, 2022, the Company revalued the derivative liability to \$205,989 (2021 - \$2,048,127) and recorded a gain on revaluation of \$1,842,138 (2021 - \$2,183,853). During the year ended December 31, 2021, 6,100,000 warrants with an exercise price of \$0.40 per warrant were exercised, which resulted in \$3,578,567 of the derivative liability being reallocated to share capital.

	2022	2021
	\$	\$
Balance, beginning of year	2,048,127	-
Initial recognition of derivative liability	-	7,810,547
Conversion	-	(3,578,567)
Revaluation of derivative liability	(1,842,138)	(2,183,853)
Balance, end of year	205,989	2,048,127

A summary of the warrants with USD exercise prices outstanding and exercisable at December 31, 2022, is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
	\$	
40,000	0.40	July 5, 2023
3,061,783	0.40	August 30, 2024

Derivative liability (continued)

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the initial valuation, and the re-valuations as at December 31, 2021 and 2022:

	December 31, 2022	December 31, 2021	March 18, 2021
Risk-free interest rate	4.03%	0.62%	0.48%
Dividend yield	-	-	-
Forfeiture rate	-	-	-
Expected life	1.65 years	3.21 years	3.40 years
Volatility	93%	114%	113%
Weighted average fair value per warrant	\$0.07	\$0.80	\$1.07

NOTE 10 - RESEARCH AND DEVELOPMENT

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

		For th	
	Note	2022	2021
		\$	\$
Consulting fees		343,408	442,392
Legal and patent costs		168,828	297,802
Management fees and salaries	11	1,127,095	1,116,622
Other research and development		19,516	60,723
Product development		5,737,915	4,304,612
Share-based compensation	9,11	556,293	813,046
Salaries and benefits		-	226,684
Subcontractors		863,787	711,459
		8,816,842	7,973,340

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, the former Chief Executive Officer 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 Company amended the agreement to decrease the monthly fees to \$9,000 and include a provision that if a change of control or significant financing is initiated prior to December 31, 2022, CMI will receive a one-time payment equal to number of months worked subsequent to September 1, 2022 multiplied by \$9,000.

NOTE 11 – RELATED PARTY TRANSACTIONS AND BALANCES (continued)

In September 2018, the Company signed a management agreement with 9177 – 586 Quebec Inc. ("9177 Quebec"), a company controlled by Denis Kay, the 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 and to include a provision that if a change of control or significant financing is initiated prior to December 31, 2022, 9177 Quebec will receive a one-time payment equal to number of months worked subsequent to August 15, 2022 multiplied by \$7,500.

In September 2018, the Company signed a management agreement with Clearway Global, LLC ("Clearway Global"), a company controlled by Fred Sancilio, the former President and a director of the Company, which requires monthly payments of \$10,000 per month for an effective term of two years. In June 2019, the Company amended the agreement to increase the monthly fees to \$20,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$480,000 less any fees previously paid under the agreement between June 1, 2019 and the date of termination or (ii) \$60,000. In February 2021, the Company amended the agreement to increase the monthly fees to \$24,166 through December 31, 2022. On December 22, 2021, Fred Sancilio resigned as the President and director of the Company. The management agreement was replaced with a consulting agreement which no longer contains a provision for a termination payment.

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, the 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 8,195,740 bonus rights of which 1,639,148 bonus rights had been earned at December 31, 2022 (Note 8).

In May 2021, the Company hired Lauren D'Angelo, the Chief Commercial Officer ("CCO") of the Company, requiring an annual base compensation of \$350,000. Included in the agreement is a provision for termination payment due to a change of control, the CCO 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 May 2022, Ms. D'Angelo was granted the ability to earn up to 1,065,446 bonus rights of which 737,616 bonus rights had been earned at December 31, 2022 (Note 8).

NOTE 11 – RELATED PARTY TRANSACTIONS AND BALANCES (continued)

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.

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, 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.

As at December 31, 2022, \$619,361 (2021 - \$182,086) 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 at December 31, 2022, the Company owed NLS \$1,211,463 for an outstanding promissory note (Note 7).

Summary of key management personnel compensation:

	For the year ended December 31,	
	2022	2021
	\$	\$
Other general and administrative	9,555	40,028
Management fees and salaries	1,166,371	822,228
Professional fees	-	3,642
Research and development - management fees and salaries	939,712	957,764
Share-based compensation	1,576,235	1,485,601
	3,691,873	3,309,263

NOTE 12 – COMMITMENTS

a) 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 €10,000,000, the cumulative total may be increased to €15,000,000 subject to certain provisions, which is to be paid as follows (collectively the "Galantos Royalty Payments"):
 - o 3% of the net sales revenue received by the Company from the sale of any products relating to the Alpha-1062 Technology;
 - o 10% of any sublicensing revenue; and
 - o 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).

On January 1, 2016, the Company assumed NLS's obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consisted of cumulative total payments to Galantos Consulting of €2,000,000, the cumulative total may be increased to €3,000,000 subject to certain provisions, which is to be paid as follows:

- 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.

b) 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 in excess of \$2,000,000.

The total amount payable to NLS under this agreement shall not exceed \$2,000,000.

NOTE 13 - CAPITAL DISCLOSURE AND MANAGEMENT

The Company defines its capital as all components of equity. 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 - FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 Unobservable inputs that are supported by little or no market activity, therefore requiring an entity to develop its own assumptions about the assumption that market participants would use in pricing.

The Company's financial instruments consist of cash, other current assets, accounts payable, bonus rights (presented in other long-term liabilities), derivative liability, and promissory note. The fair values of other current assets, accounts payable, and promissory note approximates 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. Bonus rights and derivative liability are measured at fair value on a recurring basis using level 3 inputs. The continuity and valuation techniques that are used to determine the fair values of the bonus rights and derivative liability are described in Notes 8 and 9.

The Company is exposed to a variety of financial risks by virtue of its activities including currency, credit, interest rate, and liquidity risk.

a) 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 at December 31, 2022, the Company had net monetary assets of approximately \$690,000 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 \$51,000. 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.

b) Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

The Company's cash is held in a large Canadian financial institution and a United States of America based financial institution. The Company maintains certain cash deposits with Schedule I financial institutions, which from time to time may exceed federally insured limits. The Company has not experienced any significant credit losses and believes it is not exposed to any significant credit risk. The Company's tax recoverable is due from the Government of Canada; therefore, the credit risk exposure is low. The Company's maximum credit risk is equal to the carrying value of cash and other current assets at December 31, 2022 and 2021.

c) 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 at December 31, 2022, the promissory note bears interest of 2% per annum 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.

NOTE 14 – FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (continued)

d) Liquidity risk

The Company's ability to continue as a going concern is dependent on management's ability to raise required funding through future equity issuances and through short-term borrowing. 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. As at December 31, 2022, the Company had a working capital deficiency of \$1,724,103 (see Note 1).

Contractual undiscounted cash flow requirements for financial liabilities as at December 31, 2022 are as follows:

	≤1 Year	>1-3 Years	Total
	\$	\$	\$
Accounts payable	2,845,381	-	2,845,381
Promissory note	1,211,463	-	1,211,463
	4,056,844	-	4,056,844

NOTE 15 - SUPPLEMENTAL DISCLOSURES WITH RESPECT TO CASH FLOWS

	For the year ended December 31,	
	2022	2021
	\$	\$
Supplemental non-cash disclosures		
Forfeited share options	161,750	-
Shares issued for funds previously received	-	1,898,740
Shares issued for conversion of convertible debentures and interest	-	4,739,815
Warrants issued for share issuance costs	-	521,042
Reallocation of fair value of share options upon exercise	206,382	33,870
Reallocation of fair value of warrants upon exercise	=	3,578,567

NOTE 16 – SEGMENTED INFORMATION

The Company currently operates in a single reportable operating segment, being the researching and developing pharmaceutical treatments for neurological diseases. Geographic information is as follows:

	As at December 31, 2022		
	United States		_
	Canada	of America	Total
	\$	\$	\$
Non-current assets other than financial instruments	614,977	3,233	618,210

	As at December 31, 2021		
		United States	_
	Canada	of America	Total
	\$	\$	\$
Non-current assets other than financial instruments	698,075	11,688	709,763

NOTE 17 – INCOME TAXES

A reconciliation of income taxes at statutory rates with the reported taxes is as follows:

	2022	2021
	\$	\$
Net loss before income taxes	(12,114,698)	(19,545,016)
Canadian statutory income tax rate	27.00%	27.00%
Expected income tax recovery at statutory rate Tax effect of:	(3,271,000)	(5,277,000)
Permanent differences and others	225,000	2,364,000
Change in unrecognized deferred income tax assets	3,046,000	2,913,000
Income tax recovery	-	-

The significant components of deferred income tax assets and liabilities are as follows:

	2022	2021
	\$	\$
Deferred income tax assets:		
Non-capital losses carried forward	8,823,000	5,803,000
Intangible assets	135,000	73,000
Promissory notes	<u>-</u>	(37,000)
Share issuance costs	194,000	264,000
Property and equipment	-	3,000
Total gross deferred income tax assets	9,152,000	6,106,000
Unrecognized deferred tax assets	(9,152,000)	(6,106,000)
Net deferred income tax assets	-	-

At December 31, 2022, the Company had, for Canadian tax purposes, non-capital losses aggregating approximately \$32,259,000. These losses are available to reduce taxable income earned by the ACI and ACI Canada in future years and expire between 2035 and 2042. Additionally, at December 31, 2022, the Company had, for United States of America tax purposes, non-capital losses aggregating approximately \$539,000. These losses are available to reduce taxable income earned by the ACI USA in future years and expire in 2042.

ALPHA COGNITION INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2022

NOTE 18 – SUBSEQUENT EVENTS

On January 16, 2023, the Company repriced 4,655,000 stock options with exercise prices ranging from CAD\$0.64 to CAD\$1.05. The new options have an exercise price of \$0.28 per share and vest in monthly installments over either an 8 month, 18 month or 24-month term.

On February 8, 2023, the Company commenced a brokered private placement financing whereby the Company may issue up to 26,666,667 units at a price of CAD\$0.255 per unit for gross proceeds of up to CAD\$6,800,000 ("February 2022 PP"). Each unit consists of a common share and a share purchase warrant with each share purchase warrant entitling the holder to purchase an additional common share at a price of CAD\$0.39 per common share for a period of five years. In connection with the brokered private placement, the Company is to incur share issuance costs of commissions up to 7% of gross proceeds and issuance of warrants equal up to 5% of units issued in offering.

On February 16, 2023, the Company closed the first tranche of the February 2022 PP by issuing 16,795,221 units of the Company at a price of CAD\$0.255 per unit, for gross proceeds of CAD\$4,282,781. The Company also announced as of February 16, 2023 it has also entered into subscription agreements towards a second tranche closing for an additional 6.48 million units or CAD\$1.65 million under the Offering. The second tranche is expected to close early March 2023.

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 2024. The amended agreement is effective March 1, 2023 and requires monthly interest only payments until maturity. In addition, the amendment now incorporates both Alpha Cognition Inc. and Alpha Cognition Canada Inc. under the Memogain Technology Agreement and added clarity to certain terms and definitions under the license agreement.

SCHEDULE "B"

ANNUAL MD&A

(See attached)



Management's Discussion and Analysis For the year ended December 31, 2022

(Expressed in United States Dollars)

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") of Alpha Cognition Inc. ("ACI" or the "Company") provides analysis of the Company's financial results for the year ended December 31, 2022. The following information should be read in conjunction with the accompanying audited financial statements and accompanying notes for the years ended December 31, 2022 and 2021, ("Annual Financial Statements") which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). The Board of Directors of the Company have approved the information and disclosures contained in this MD&A. All figures are in United States dollars ("USD") unless otherwise noted. Additional information relating to the Company is available on SEDAR at www.sedar.com.

FORWARD-LOOKING STATEMENTS

The Company's Annual Financial Statements and this accompanying MD&A contain statements that constitute "forward-looking statements" within the meaning of National Instrument 51-102. Continuous Disclosure Obligations of the Canadian Securities Administrators.

It is important to note that, unless otherwise indicated, forward-looking statements in this MD&A describe the Company's expectations as March 8, 2023.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. The information set forth in this MD&A contains statements concerning future results, future performance, intentions, objectives, plans and expectations that are, or may be deemed to be, "forward-looking statements". These statements concerning possible or assumed future results of operations of the Company are preceded by, followed by or include the words "believes", "expects", "anticipates", "estimates", "intends", "plans", "forecasts", or similar expressions. Forward-looking statements are not guarantees of future performance. These forward-looking statements are based on current expectations that involve certain risks, uncertainties and assumptions. Assumptions relating to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate. These factors should be considered carefully, and readers should not place undue reliance on forward-looking statements. The Company has no intention and undertakes no obligation to update or revise any forward-looking statements, whether written or oral that may be made by or on the Company's behalf, except as may be required by applicable law.

All of the Company's public disclosure filings may be accessed via www.sedar.com and readers are urged to review these materials.

COMPANY DESCRIPTION

ACI is the parent company of Alpha Cognition Canada Inc. ("ACI Canada") which is the parent company of Alpha Cognition USA Inc. ("ACI USA"). The Company is a clinical stage, biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's disease ("AD") and Amyotrophic Lateral Sclerosis ("ALS"), for which there are limited treatment options.

ALPHA-1062, is a patented new chemical entity being developed as a next generation acetylcholinesterase inhibitor for the treatment of Alzheimer's disease, with expected minimal gastrointestinal side effects. ALPHA-1062'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. ALPHA-1062 is in development in combination with memantine to treat moderate to severe Alzheimer's dementia and as an intranasal formulation for traumatic brain injury.

ALPHA-0602 (Progranulin) is expressed in several cell types in the central nervous system and in peripheral tissues, promotes cell survival, regulates certain inflammatory processes, and plays 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. 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 with potentially lower toxicity, and greater therapeutic effect.

On March 18, 2021, the Company announced the successful closing of a business combination with ACI Canada (the "Transaction"). Pursuant to the Transaction, ACI Canada was acquired by and became a wholly-owned subsidiary of ACI. As part of the Transaction, on March 18, 2021, the Company changed its name to Alpha Cognition Inc. and ACI Canada changed its name to Alpha Cognition Canada Inc. The common shares of the Company are currently listed on TSX Venture Exchange ("TSX-V") under the ticker symbol "ACOG" and on the Over-The-Counter ("OTC") under the trading symbol "ACOGF".

Upon closing of the Transaction, the shareholders of ACI Canada owned 97.23% of the shares of the Company, and as a result, the transaction is considered a reverse acquisition of the Company by ACI Canada. All previous common shares, share options, and warrants were exchanged at a ratio of one share of ACI Canada for one of ACI. For accounting purposes, ACI Canada is considered the acquirer of the Company accordingly, the consolidated financial statements are in the name of Alpha Cognition Inc.; however, they are a continuation of the financial statements of ACI Canada (Refer to Arrangement Agreement section).

Going Concern and Additional Capital Required

The Company has not generated revenues from its operations to date and as at December 31, 2022, had a deficit of \$49,986,851 (2021 - \$38,033,903) which has been primarily financed by equity. The Company had \$2,083,696 in Cash and \$4,056,844 in current liabilities as of December 31, 2022. The Company's continuing operations, as intended, are highly dependent upon its ability to obtain additional funding and generate cash flows. Management is of the opinion that it does not have sufficient working capital to meet the Company's liabilities and commitments as outlined and planned in the following discussion. Management recognizes it will need to raise addition financing, in addition to the private placement financing the Company closed on February 16, 2023 and another expected to close early March 2023, to cover upcoming planned development 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, 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, 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.

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 New Drug Application ("NDA") filing and development of ALPHA-1062 in AD. The Company has reduced headcount and other operating costs related to the ALPHA-1062 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.

On November 28, 2022, the Company announced that it had withdrawn the marketed public offering of units previously announced on November 17, 2022. The withdrawal resulted from an assessment by the Company's management that current market conditions were not conducive for an offering on terms that would be in the best interests of the Company's stockholders. As a result of such withdrawal, no securities will be sold pursuant to the offering.

On February 16, 2023 the Company announced the first closing of its planned CAD\$6.8 million Private Placement, where the offering included existing stockholders and new investors. Pursuant to the private placement, the Company issued 16,795,221 units at a price of CAD\$0.255 per Unit (US\$0.19), with each unit comprising a common share and a share purchase warrant. Each warrant entitles the holder to purchase one additional common share of the Issuer at a price of CAD\$0.39 (US\$0.29) per share for a period of five years. The private placement was subject to the satisfaction of customary closing conditions, including stock exchange approval. The Company expects to use the net proceeds from the Private Placement, together with its existing cash, cash equivalents and investments, for the advancement of the Company's clinical development programs, complete and file a New Drug Application for ALPHA-1062, and for working capital and other general corporate purposes. The Company also announced as of February 16, 2023 it has also entered into subscription agreements towards a second tranche closing for an additional 6.48 million units or CAD\$1.65 million under the Offering. The second tranche is expected to close early March 2023

In March 2023, the Company entered into an amendment of the Promissory Note and License Agreement with the Neurodyn Life Sciences Inc. 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 7 of the accompanying audited financial statements).

ALPHA-1062

ALPHA-1062 is a patented new chemical entity. When absorbed through mucosal tissue or ingested it is enzymatically converted to an active moiety that has previously been approved by the U.S. FDA and 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 experience gastrointestinal side effects which can limit its effectiveness. ALPHA-1062, a prodrug of galantamine, however, may have reduced gastrointestinal side effects which could allow a faster dosing up-titration and may facilitate achieving therapeutic dosing levels faster. Drugs that convert from an inert form to an active substance in-situ are referred to as "prodrugs". At the time the Company licensed the ALPHA-1062 technology, only an intranasal formulation had been developed, subsequently oral dosage formulations have been developed.

The Company's ALPHA-1062 development plan has two primary goals:

- Clinicalt: Demonstrate to the satisfaction of regulatory bodies that ALPHA-1062 formulations have a significantly reduced side effect profile and differentiated mechanism of action ("MOA") from existing acetylcholinesterase inhibitor (AChEI) treatments, with the exception of galantamine's MOA.
- Regulatory: Demonstrate that an NDA pathway called a 505(b)(2) is available for approval in the United States, allowing commercialization, that relies on the establishment of a scientific bridge to the findings of safety and efficacy of the FDA approved Razadyne utilizing a bioavailability and bioequivalence pivotal study instead of the traditional efficacy trials.

ALPHA-1062 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 related party through a common director, and subsequently, on completion of the ALPHA-1062 License Agreement, by the Company. The Phase I human studies included a single ascending dose study ("SAD Study") followed by a multiple ascending dose ("MAD Study") 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).

Pivotal Trial: The Company successfully completed three studies in Q2/Q3 2022. The studies were designed to demonstrate pharmacokinetic equivalence compared to the reference listed drug galantamine hydrobromide IR and ER, which are a standard of care treatment for patients with mild to moderate AD. Topline results confirmed in bioequivalence studies that ALPHA-1062 achieved bioequivalent area-under-the-curve (fed and fasted) and peak exposures (fed) relative to galantamine hydrobromide IR and galantamine hydrobromide ER.

There were minimal adverse events (<3%) reported for ALPHA-1062 during these studies. With these positive pivotal study results, the Company plans to file an NDA for ALPHA-1062 in mild to moderate Alzheimer's disease during June-July 2023, with possible FDA approval for the U.S. market by Q2 2024.

The following table summarizes the results of the ALPHA-1062 Pivotal Study BABE Study vs. Immediate Release (completed in June 2022) and an additional BABE Study vs. Extended Release (completed in August 2022).

BABE Study vs. Immediate Release

PK Parameter	ALPHA-1062 Delayed Release 5mg (n=36)	Gal HBr Immediate Release 4mg (n=36)	% to Reference Drug 80-125%	Sufficient Data for NDA Filing
AUC0-inf (μg × h/mL) Fasted State	306.8	321.5	95%	✓
Cmax (ng/mL) Fasted State	30.7	40.5	76%	✓
AUC0-inf (μg × h/mL) Fed State	286.7	329.9	87%	✓
Cmax (ng/mL) Fed State	27.6	30.2	91%	✓

BABE 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%	Sufficient Data for NDA Filing
AUCO-24 (μg × h/mL) Steady State	527.5	492.1	107%	✓
Cmax (ng/mL) Steady State	41.7	32.8	127%	✓

- Data confirms ALPHA-1062 AUC is bioequivalent to galantamine hydrobromide IR and ER
- · Cmax for ALPHA-1062 is bracketed between IR and ER (lower than IR, higher than ER) providing necessary data for NDA filing (scientific bridge)
- Minimal Adverse Events reported in these trials of healthy volunteers
- Allows NDA filing based on 505(b)(2) requirements

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

COPPRIGHT 2021 ALPHA COGNITION, INC.

1. Alpha Cognition: Sublingual and Enteric Coated Tablet equivalent to 8 mg RAZADYNE Data on file

2. DA Guidance Intro://www.fda.cov/files/druss/published/files/publis

BABE Study vs. Immediate Release:

The primary objective of both the fed and fasted studies was to evaluate the relative bioavailability of a singledose of ALPHA-1062 (or galantamine benzoate) 5mg delayed release tablet compared to galantamine hydrobromide tablet 4mg immediate release - the reference drug. 36 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 tablet. The primary pharmacokinetic outcomes were AUC or area under the curve, and Cmax, 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 Cmax represents the highest peak exposure to galantamine.

Bioequivalence of ALPHA-1062 to galantamine hydrobromide was 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 was 95% (306.8) in the fasted study and 87% (286.7) in the fed study.

The average Cmax ratio to reference drug for ALPHA-1062 was 76% (30.7) in the fasted study and 91% (27.6) in the fed study both Cmax results being higher than the published Cmax data for galantamine hydrobromide 8 mg extended release capsule. Bioequivalence of ALPHA-1062 has been demonstrated based on overall drug exposure in both the fed and fasted states, and the Cmax with ALPHA-1062's delayed release 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 was established on Cmax compared to galantamine hydrobromide in the fed state. When the Cmax of a proposed drug product falls

between the reported Cmax of two formulations of an approved reference product (immediate and extended release), this allows for an effective scientific bridge to both formulations of the reference standard galantamine hydrobromide.

Single-dose administration of ALPHA-1062 was well tolerated with no adverse events reported.

BABE Study vs. Extended Release

During August 2022, the company announced positive 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 5 mg ALPHA-1062 delayed release tablets and 8 mg galantamine hydrobromide extended release (ER) capsules, when dosed to steady state. Bioequivalence was established based on total drug exposure (AUC) and the Cmax was expectedly higher than that of the extended release reference. These data, coupled with the positive pivotal data released in June, establish bioequivalence to both formulations of galantamine hydrobromide and strengthen the NDA application for ALPHA-1062 in mild-to-moderate AD, planned for June/July 2023. The Company is preparing to file the NDA with the FDA.

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 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.

Topline results confirmed that in healthy adult volunteers treated to steady state, ALPHA-1062 was bioequivalent to galantamine hydrobromide ER. In the pre-specified primary analysis, ALPHA-1062 achieved area-under-the-curve and peak exposures (Cmax) of approximately 107% and 127%, respectively, compared to those generated by galantamine hydrobromide ER. As expected, Cmax results for ALPHA-1062 is bracketed between galantamine hydrobromide IR and ER (lower than IR, higher than ER) providing a robust and enhanced data set for the NDA filing. These data further describe the delayed release profile of ALPHA-1062 and strengthen the NDA data set by characterizing the therapeutic and acceptable exposures compared to both the immediate release and extended release products.

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. As a result of the agency's feedback, the company now plans to file its NDA for ALPHA-1062 in mild-to-moderate Alzheimer's disease during June-July 2023, allowing the company to include additional CMC stability data in the NDA filing. The company's projected approval date for ALPHA-1062 is Q2 2024.

RESOLVE Tolerability Study: Following NDA approval for ALPHA-1062 in mild to moderate AD the Company plans to initiate an Alzheimer's disease tolerability and dosing trial with ALPHA-1062. This trial is called the RESOLVE Study which could potentially support prescribing information changes and could allow patients to achieve an efficacious dose more quickly than with current treatments. While not required for ALPHA-1062's NDA approval, RESOLVE data would be utilized to enhance the commercialization of ALPHA-1062. Significant trial preparation has already been completed. Processes and, data management support has been established, and a number of potential sites have been identified, evaluated, qualified and readied for activation. Institutional Review Board ("IRB") approval has been received and the final study protocol has been submitted to the IND. The Company expects to initiate the RESOLVE trail in Q4 2024, following NDA approval of ALPHA-1062 and securing additional funding.

Mild Traumatic Brain Injury (mTBI): The Company has also completed a pre-clinical study of ALPHA-1062 in mTBI. The Company is encouraged by the preclinical data and is planning to request a meeting with the FDA in Q3 2023 to discuss IND submission and further clinical development plans. Pending FDA feedback, the Company is targeting the IND submission for Alpha-1062 Intranasal of mTBI in Q4 2023.

In December 2021, the Company announced functional data from the ALPHA-1062 Traumatic Brain Injury (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-1062 treated group was statistically indistinguishable from that of the uninjured cohort.

In a rodent model of TBI, ALPHA-1062 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-1062 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.

In February 2022 the Company announced histology data from their intranasal ALPHA-1062 Traumatic Brain Injury (TBI) program. ALPHA-1062 treatment was neuroprotective, preserving hippocampal structure, reducing cell loss and promoting neurogenesis compared to no treatment. These histological results, confirm the functional preservation/recovery data, and taken together, strongly support the further development of ALPHA-1062 for the treatment of TBI.

Compared to vehicle, ALPHA-1062 treatment:

- Demonstrated statistically significant reduction in lesion size measured at 35 days after injury.
- Preserved greater hippocampal structure. The hippocampus plays a critical role in learning, memory formation, and spatial coding and damage to hippocampus can lead to memory disorders like AD, amnesia, and depression.
- Demonstrated statistically, significant reduction in neuronal cell loss. The number of neurons in the ALPHA-1062 treated animals were equivalent to those in the uninjured cohort of animals at the end of treatment.
- Statistically significantly enhanced neurogenesis as evidence by an increase in the number of neuron
 precursor cells and new neurons in the dentate gyrus, which plays a critical role in learning, information
 processing, and mood regulation.

ALPHA – 1062 Commercialization Strategy

During the second half of 2021 the Company started, in parallel with the Company's regulatory activities, taking steps to develop a commercialization team to ensure a successful launch in the US. The Company has completed sufficient planning to indicate that ALPHA-1062 could be launched using a best-in-class specialty sales force that will focus on Neurology and Long Term Care (LTC) physicians in the U.S. Neurologists that specialize in Alzheimer's treatment make pharmacologic decisions for Alzheimer's patients in a clinical setting. Long term care 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 US from these two specialties is large, representing 63 percent of the over 11 million prescriptions filled in pharmacies each year. The AChEI class include Aricept, Exelon, Exelon Patch, Razadyne, Adlarity, and generic versions of each brand. 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 four 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 ALPHA-1062 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. Success will be further enabled by deploying a highly targeted and efficient multichannel marketing campaign, by motivating caregivers to request ALPHA-1062, and securing product coverage with U.S. payors. Market research indicates that payors are likely to cover ALPHA-1062 if the product is competitively priced. Additionally, Alpha Cognition intends to seek strategic partnerships to expand promotional efforts and expand physician promotional coverage. As ALPHA-1062 nears FDA regulatory approval, the Company will seek distribution partners for major territories, identified as Europe, LATAM (Mexico, Central and South America), and Asia. Additionally, the Company intends to seek approval for potential additional indications and product line extensions.

ALPHA-0602

The ALPHA-0602 product candidate originated almost a decade ago when researchers at McGill University in Montreal discovered that a protein called Progranulin seemed to show activity for several neurological disorders. Progranulin is a large protein that was found to be present in virtually all living animals and appears to be used by the body for multiple tasks. Upon further investigation, scientists discovered that the large molecule was made of smaller polypeptides or subunits, referred to as Granulin Epithelin Modules ("GEMs").

ALS is a progressive neurodegenerative disease that affects nerve cells in the brain and spinal cord that carry messages from the brain to the muscles (Source: Laird et al. (2010), Chitramuthu et al. (2017)) A safe and effective treatment for ALS remains an unmet medical need. The few treatment options that currently exist for ALS patients, have shown limited effectiveness. ALPHA-0602 is being developed for the treatment of ALS and has been granted Orphan Designation by the U.S. FDA.

During the second quarter of 2022 the company received Rare Pediatric Designation for ALPHA-0602 for treatment of spinal muscular atrophy. This designation allows for priority review.

ALPHA-0602, ALPHA-0702 and ALPHA-0802 Pre-Clinical Development

ALPHA-0602 has been investigated in preclinical studies designed to stimulate the overproduction of progranulin in validated animal models of neurological disorders, specifically ALS. Initial work with animal models of ALS has been completed indicating that Progranulin may be effective in modifying the disease process. Additional in-vitro and in-vivo investigations to validate the effectiveness of Progranulin and the potential of the GEMs are ongoing.

In March 2022 the Company announced positive preclinical data from its ALPHA-0602 ALS gene therapy program. These data underscore the robust preclinical evidence supporting Alpha Cognition's gene therapy approach to treating ALS and highlight the Company's strategy to validate these data in planned clinical trials.

Highlights of the positive proof of concept pre-clinical results demonstrated with ALPHA-0602 in vitro in motor neurons and in vivo in models of ALS, include:

- ALPHA-0602 demonstrated abundant PGRN expression in motor neurons, suggesting a neurotrophic role for PGRN. ALPHA-0602 further increased PGRN levels and decreased motor neuron cell death in in vitro models.
- Using an in vivo model of ALS to further assess the neurotrophic effects of PGRN, ALPHA-0602
 reversed the motor neuron toxicity resulting from both decreased levels of TDP-43 and FUS, and the
 expression of ALS related toxic forms of these proteins.
- In an ALS transgenic mouse model caused by a toxic form of TDP-43, ALPHA-0602 administered via adeno-associated virus, resulted in successful viral transduction of central nervous system cells and substantially increased cerebrospinal fluid (CSF) levels of PGRN.
- ALPHA-0602 treated TDP-43 transgenic mice persistently gained weight throughout the 10-week study, in contrast to untreated transgenic animals who failed to gain weight. Continued weight gain in the face of a significant and sustained toxic insult, is suggestive of a therapeutic benefit of ALPHA-0602 expression.

In June 2022, the Company announced the discovery of two GEM combinations, ALPHA-0702 and ALPHA-0802, and positive preclinical data from each candidate therapy. ALPHA-0702 and ALPHA-0802 are Granulin Epithelin Motifs, or GEMs, derived from full length progranulin (PGRN) 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 have demonstrated robust results in a recent preclinical study, leading the Company to believe in the future potential of this platform to develop therapeutics to treat a wide array of diseases. These data underscore robust preclinical evidence supporting Alpha Cognition's approach to treating neurodegenerative disease and highlight the Company's strategy to validate these data in additional pre-clinical studies. The company has paused further development with GEM's and ALPHA-0602 in order to focus all resources toward ALPH A-1062 clinical and regulatory development.

Highlights of the positive proof of concept pre-clinical results demonstrated with ALPHA-0702, ALPHA-0802, and ALPHA-0602 include:

- ALPHA-0702 and ALPHA-0802 maintained prolonged cell survival and neuronal morphology, with a
 potency equivalent to, or approaching full length progranulin.
- ALPHA-0702 and ALPHA-0802 reduced both mutant and wild type TDP-43 toxicity, with a potency
 equivalent to, or approaching full length progranulin.
- ALPHA-0602, and both ALPHA-0702 and ALPHA-0802 enhanced Cathepsin D maturation suggestive
 of improved lysosomal function. These effects were seen in induced pluripotent stem cells, derived
 from patients harboring toxic TDP-43 mutations, that were terminally differentiated into motor neurons.
 Both therapeutic candidates have the potential to be as effective as full-length progranulin in promoting
 Cathepsin D maturation, where under conditions of neuronal stress (FTD models) progranulin has
 been shown to be inappropriately processed.
- Future studies will seek to confirm reduced neuroinflammation and toxicity associated with ALPHA compounds.

ALPHA-0602 Regulatory Development

The in-vitro and preclinical program to select the lead biological drug candidates was completed in Q2 2022, with final confirmatory activity completed in Q3 2022. The Company will look meet with community experts in the development of a toxicology program and an appropriate in vivo disease model to provide proof of efficacy. Following this the Company intends to seek FDA guidance regarding, relevant pre-clinical safety studies to be initiated in animal models consistent with FDA requirements to support an Investigational New Drug Application. The lead drug candidate would follow a conventional Biologics License Application ("BLA") approval process requiring Phase I – III clinical trials to support the use of progranulin for use in treating ALS.

In February 2020, ALPHA-0602 was granted Orphan Drug Designation by the FDA for the use of ALPHA-0602 in the treatment of ALS. The Orphan Drug Designation has several significant benefits including:

- (1) tax credits of 50% off the clinical drug testing cost awarded upon approval;
- (2) eligibility for market exclusivity for seven years post approval; and
- (3) waiver of NDA and biologics license application fees, which could amount to up to US\$3,200,000.

The company has received Rare pediatric designation for ALPHA-0602 for treatment of spinal muscular atrophy. This voucher could be either redeemed by the sponsor of the rare pediatric disease designated product to expedite the review of subsequent NDA or BLA or sold to another sponsor for use in the same manner.

Current Year Summary

In January 2022, the Company issued 21,008 Common shares for the exercise of 21,008 Common shares options at a price of CAD\$0.714 per share for total proceeds of \$11,851 (CAD\$15,000).

In February 2022, the Company granted 230,000 share options to certain employees of the Company with an exercise price of CAD\$1.05 per share. The options will be subject to the following vesting terms: 25% will vest on February 14, 2023 and the remaining 75% will vest in equal monthly instalments until February 14, 2025.

In February 2022, the Company issued 350,000 Common shares for the exercise of 350,000 ACI Canada legacy performance options at a price of \$0.01 per share for total proceeds of \$3,500.

In March 2022, the Company issued 45,511 Common shares for the exercise of 45,511 Common shares options at a price of CAD\$0.714 per share for total proceeds of \$25,570 (CAD\$32,495).

In April 2022, the Company appointed Don Kalkofen as the new Chief Financial Officer ("CFO"), replacing Jeremy Wright.

In April 2022, the Company granted 450,000 share options to the new CFO of the Company with an exercise price of CAD\$0.93 per share for a period of ten years from date of grant. The options will be subject to the

following vesting terms: 25% will vest in equal monthly instalments until April 11, 2023 and the remaining 75% will vest in equal monthly instalments until April 11, 2025.

In April 2022, Michael McFadden, the CEO of the Company, was appointed to the board of directors

In May 2022, the Company granted 90,000 share options with an exercise price of CAD\$0.64 per share. The options will be subject to the following vesting terms: 25% will vest on date of grant and the remaining 75% will vest in equal monthly instalments over a 24 month period.

During the year ended December 31, 2022, 895,007 stock options were forfeited, of which \$161,750 was reallocated from reserves to deficit, \$5,532 was reallocated from reserves to stock-based compensation under general and administrative, and \$112,017 was reallocated from reserves to stock based compensation under research & development.

Subsequent Events

On January 16, 2023, the Company repriced 4,655,000 stock options with exercise prices ranging from CAD\$0.64 to CAD\$1.05. The new options have an exercise price of \$0.28 per share and vest in monthly installments over either an 8 month, 18 month or 24 month term.

On February 8, 2023, the Company commenced a brokered private placement financing whereby the Company may issue up to 26,666,667 units at a price of CAD\$0.255 per unit for gross proceeds of up to CAD\$6,800,000 ("February 2022 PP"). Each unit consists of a common share and a share purchase warrant with each share purchase warrant entitling the holder to purchase an additional common share at a price of CAD\$0.39 per common share for a period of five years. In connection with the brokered private placement, the Company is to incur share issuance costs of commissions up to 7% of gross proceeds and issuance of warrants equal up to 5% of units issued in offering.

On February 16, 2023, the Company closed the first tranche of the February 2022 PP by issuing 16,795,221 units of the Company at a price of CAD\$0.255 per unit, for gross proceeds of CAD\$4,282,781. The Company also announced as of February 16, 2023 it has also entered into subscription agreements towards a second tranche closing for an additional 6.48 million units or CAD\$1.65 million under the Offering. The second tranche is expected to close early March 2023.

On March 6, 2023, the Company and NLS agree 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 2024. The amended agreement is effective March 1, 2023 and requires monthly 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.

ARRANGEMENT AGREEMENT

On October 27, 2020, ACI Canada entered into an Arrangement Agreement with ACI whereby ACI would acquire 100% of the issued and outstanding shares of ACI Canada by issuing to the shareholders of ACI Canada one common share of ACI ("CPC Share") for every one common share of ACI Canada shareholder (the "Transaction"). Certain US resident ACI Canada shareholders agreed to receive a restricted voting share (a "Restricted Voting Share") in place of a CPC Share which is equivalent to a CPC Share except that it will not be counted in a shareholder vote for the election of directors. In addition, holders of Class C Preferred shares of ACI Canada received one Class B Preferred Share of ACI for each Class C Preferred share of ACI Canada held by such shareholder. The outstanding options and warrants of ACI Canada became convertible into options and warrants of ACI.

On March 18, 2021, the Transaction completed resulting in ACI acquiring 100% of the shares of ACI Canada and ACI Canada's shareholders receiving 42,615,495 post-consolidated common shares, 7,000,000 restricted voting shares, 7,916,380 preferred shares, 11,819,169 warrants, and 10,069,365 share options of ACI. The

ACI shareholders retained 1,640,507 common shares on completion of the transaction and the former ACI share option holders were granted 108,543 share options.

The transaction constituted a reverse acquisition of ACI and has been accounted for as a reverse acquisition transaction in accordance with the guidance provided under IFRS 2, *Share-based Payment* and IFRS 3, *Business Combinations*. As ACI did not qualify as a business according to the definition in IFRS 3, *Business Combination*, this reverse acquisition does not constitute a business combination; rather the transaction was accounted for as an asset acquisition by the issuance of shares of the Company, for the net assets of ACI and its public listing. Accordingly, the transaction has been accounted for at the fair value of the equity instruments granted by the shareholders of ACI Canada to the shareholders and option holders of ACI. The sum of the fair value of the consideration paid (based on the fair value of the ACI shares just prior to the reverse acquisition) less the ACI net assets acquired, has been recognized as a listing expense in profit or loss for the year ended December 31, 2021.

For accounting purposes, ACI Canada was treated as the accounting parent company (legal subsidiary) and ACI has been treated as the accounting subsidiary (legal parent) in these condensed interim consolidated financial statements. As ACI Canada was deemed to be the acquirer for accounting purposes, its assets, liabilities and operations since incorporation are included in the consolidated financial statements at their historical carrying value. The results of operations of ACI are included in the consolidated financial statements from the date of the reverse acquisition of March 18, 2021.

CRITICAL JUDGEMENTS AND ESTIMATES

The preparation of the condensed interim consolidated financial statements in conformity with IFRS requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported revenues and expenses during the period. Although management uses historical experience and its best knowledge of the amount, events or actions to form the basis for judgments and estimates, actual results may differ from these estimates. Significant estimates and judgements made by management in the preparation of these consolidated financial statements are outlined below.

Uncertainty of COVID-19 Global Pandemics

The Company is subject to risks and uncertainties as a result of the ongoing COVID-19 pandemic. The Company is continuing to closely monitor the impact of the COVID-19 pandemic on its business and has taken and continues to take proactive efforts to protect the health and safety of its patients, clinical research staff and employees, and to maintain business continuity. The extent of the impact of the COVID-19 pandemic on the Company's activities remains uncertain and difficult to predict, as the response to the pandemic is ongoing and information continues to evolve. Capital markets and economies worldwide have been negatively impacted by the COVID-19 pandemic and may be further impacted in the future. Such economic disruption could have a material adverse effect on the Company's business. Policymakers around the globe have responded with fiscal policy actions to support the healthcare industry and economy as a whole. The magnitude and overall effectiveness of these actions remains uncertain.

The severity of the impact of the COVID-19 pandemic on the Company's activities will depend on a number of factors, including, but not limited to, the duration and severity of the pandemic, including the severity of any additional periods of increases or spikes in the number of cases in the areas the Company its suppliers and its manufacturers operate and areas where the Company's clinical trial sites are located; the development and spread of COVID-19 variants, the timing, extent, effectiveness and durability of COVID-19 vaccine programs or other treatments; and new or continuing travel and other restrictions and public health measures, such as social distancing, business closures or disruptions. Accordingly, the extent and severity of the impact on the Company's existing and planned clinical trials, manufacturing, collaboration activities and operations is uncertain and cannot be fully predicted. The Company may experience delays in its existing and planned clinical trials due to the worldwide impacts of the pandemic. The Company's future results of operations and liquidity could be adversely impacted by delays in existing and planned clinical trials, continued difficulty in recruiting patients for these clinical trials, delays in manufacturing and collaboration activities, supply chain disruptions, the ongoing impact on its operating activities and employees, and the ongoing impact of any initiatives or programs that the Company may undertake to address financial and operational challenges. As

of the date of issuance of these consolidated financial statements, the extent to which the COVID-19 pandemic may materially impact the Company's future financial condition, liquidity or results of operations remains uncertain

Functional currency

Management is required to assess the functional currency of each entity of the Company. In concluding on the functional currencies of the parent and its subsidiaries, management considered the currency that mainly influences the sale prices of goods and services and the cost of providing goods and services in each jurisdiction in which the Company operates. When no single currency was clearly dominant the Company also considered secondary indicators including the currency in which funds from financing activities are denominated and the currency in which funds are retained. As at December 31, 2022, the functional currency of the Company is Canadian dollar ("CAD") and its subsidiaries is the USD.

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.

Going concern

The assessment of the Company's ability to continue as a going concern involves management judgement about the Company's resources and future prospects.

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, 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

The Company records intangible assets acquired at their fair value. Determining fair value requires management to use estimates that could be material. Following initial recognition, the Company carries the value of intangible assets at cost less accumulated amortization and any accumulated impairment losses. 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.

Share-based payment transactions and valuation of derivative liability

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.

Valuation of bonus rights

The Company uses the Black-Scholes Option Pricing Model to determine the fair value of the bonus rights. This model requires the input of subjective assumptions including expected share price volatility, interest rate, and forfeiture rate. Additionally, the Company applies a probability of the likelihood of certain thresholds being met. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity reserves.

SELECTED ANNUAL INFORMATION

The following financial data is derived from the Company's audited consolidated financial statements for the years ended December 31, 2022, 2021 and 2020.

	·	Year ended	December 31,
	2022	2021	2020
	\$	\$	\$
Operating expenses	(13,638,504)	(12,096,888)	(6,475,551)
Other income (expenses)	1,523,806	(7,448,128)	691,344
Net loss	(12,114,698)	(19,545,016)	(5,784,207)
Currency translation adjustment	16,806	(101,534)	-
Comprehensive loss	(12,097,892)	(19,646,550)	(5,784,207)
Basic and diluted loss per common share	(0.18)	(0.37)	(0.13)
Working capital (deficiency)	(1,724,103)	10,367,955	4,122,873
Total assets	2,950,951	12,880,368	8,436,205
Total long-term liabilities	205,989	2,048,127	4,842,839

RESULTS OF OPERATIONS – Year Ended December 31, 2022

During the year ended December 31, 2022, the Company's primary focus was on the continued development of ALPHA-1062 and ALPHA-0602.

For the year ended December 31, 2022, operating expenses increased by \$1,541,616 from \$12,096,888 in the year ended December 31, 2021 to \$13,638,504 in the year ended December 31, 2022 primarily as a result of:

Operating Expense	Increase / Decrease in Expenses	Explanation for Change
Accretion expenses	Decrease of \$358,911	Decreased due to conversion of convertible promissory notes in 2021 Q1.
Investor relations	Decrease of \$184,601	Decreased due to reduction of investor relation services during 2022.
Management fees and salaries	Increase of \$656,563	Increased due to the hiring of a new management team starting in 2021 Q2, including the current period includes increases for employee related costs including benefits and accruals for discretionary bonuses.
Research and development	Increase of \$843,502	Increased due to continued advancement in the development of ALPHA-1062 and ALPHA-0602.
Share-based compensation	Increase of \$171,160	Increased due to additional share options with graded vesting being granted during 2021 and 2022.
Subcontractors	Increase of \$243,316	Increased due to additional subcontractors being hired during 2022.

The following also occurred during the year ended December 31, 2022 as compared to the year ended December 31, 2021:

- the Company recorded an increase of \$344,271 in foreign exchange loss due to the changes in the foreign exchange rate between the USD and CAD; and
- the Company recorded an increase of \$7,880,156 in the gain on derivative liability on the revaluation of the derivative liability relating to the warrants with an exercise price in USD.

SUMMARY OF QUARTERLY RESULTS FOR THE LAST CONSECUTIVE EIGHT QUARTERS

The following table presents the unaudited summarized financial information for the last eight quarters:

	Q4 2022	Q3 2022	Q2 2022	Q1 2022
	\$	\$	\$	\$
Operating expenses	(3,420,717)	(2,857,472)	(4,417,993)	(2,942,322)
Other income (expenses)	(696,114)	782,268	1,414,160	28,998
Income (loss) for the period	(4,116,831)	(2,075,204)	(3,003,833)	(2,913,324)
Currency translation adjustment	873,874	(680,619)	(376,526)	200,007
Comprehensive income (loss) for the period	(3,242,957)	(2,755,823)	(3,380,359)	(2,713,247)
Loss per share	(0.05)	(0.04)	(0.05)	(0.04)
Weighted average shares	68,023,450	68,023,450	68,023,450	67,815,580

	Q4 2021	Q3 2021	Q2 2021	Q1 2021
	\$	\$	\$	\$
Operating expenses	(4,253,019)	(3,119,960)	(2,267,844)	(2,456,065)
Other income (expenses)	1,103,331	(1,169,093)	2,386,517	(9,768,883)
Income (loss) for the period	(3,149,688)	(4,289,053)	118,673	(12,224,948)
Currency translation adjustment	(46,738)	(60,508)	5,712	-
Comprehensive income (loss) for the period	(3,221,255)	(4,349,561)	124,385	(12,224,948)
Loss per share	(0.05)	(80.0)	(0.00)	(0.28)
Weighted average shares	65,016,609	51,843,927	51,843,927	44,372,787

The variations in net loss from quarter to quarter are a result of the extent of the amount of administrative expenses needed, the amount of activity the Company is incurring on the research and development of ALPHA-1062 and ALPHA-0602, and the amount of net change in the derivative liability.

The following one-time events also occurred:

- Q2 2022 included a gain on the revaluation of the derivative liability of \$1,266,779;
- Q4 2021 included a loss on the revaluation of derivative liability of \$1,106,143;
- Q3 2021 included a loss on the revaluation of derivative liability of \$1,179,404;
- Q2 2021 included a gain on the revaluation of derivative liability of \$2,363,196;
- Q1 2021 included share-based compensation in research and development of \$498,351, listing expense of \$1,404,200 from the arrangement agreement, and the recognition of the derivative liability of \$7,810,547 for the warrants with an exercise price in USD; and

RESULTS OF OPERATIONS – Three Months Ended December 31, 2022

During the three months ended December 31, 2022, the Company's primary focus was on the continued development of ALPHA-1062.

For the three months ended December 31, 2022, operating expenses decreased by \$832,302 from \$4,253,019 in the three months ended December 31, 2021 to \$3,420,717 in the three months ended December 31, 2022 primarily as a result of:

Operating Expense	Increase / Decrease in Expenses	Explanation for Change
Management fees and salaries	Increase of \$134,09	Increased in part due to the hiring of new management team members and employee related costs such benefits and accruals for discretionary bonuses.
Professional fees	Decrease of \$203,656	Decreased due to reduction in legal and accounting fees relating to decrease in corporate activity.
Research and development	Decrease of \$234,513	Decreased due to the Company reducing overall research and development costs primarily related to of ALPHA-1062.
Share-based compensation	Decrease of \$395,536	Decreased due to fewer stock options being granted in the current period compared to comparative period and fewer stock options subject to graded vesting conditions being outstanding in the current period.

The following also occurred during the three months ended December 31, 2022 as compared to the three months ended December 31, 2021:

- the Company recorded an increase of \$858,336 in foreign exchange loss due to the changes in the foreign exchange rate between the USD and CAD; and
- the Company recorded a decrease of \$941,185 in the gain on derivative liability on the revaluation of the derivative liability relating to the warrants with an exercise price in USD.

LIQUIDITY AND CAPITAL RESOURCES

The Company has not generated revenues from its operations to date and as at December 31, 2022, had a deficit of \$49,986,851 (2021 - \$38,033,903) which has been primarily financed by equity. The Company had \$2,083,696 in cash and \$4,056,844 in current liabilities as of December 31, 2022. The Company's continuing operations, as intended, are highly dependent upon its ability to obtain additional funding and generate cash flows. Management is of the opinion that it does not have sufficient working capital to meet the Company's liabilities and commitments as outlined and planned in the following discussion. Management recognizes it will need to raise addition financing, in addition to the private placement financing the Company closed on February 16, 2023 and another expected to close early March 2023, to cover upcoming planned development 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, 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, 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.

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 New Drug Application ("NDA") filing and development of ALPHA-1062 in AD. The Company has reduced headcount and other operating costs related to the ALPHA-1062 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.

On November 28, 2022, the Company announced that it had withdrawn the marketed public offering of units previously announced on November 17, 2022. The withdrawal resulted from an assessment by the Company's management that current market conditions were not conducive for an offering on terms that would be in the best interests of the Company's stockholders. As a result of such withdrawal, no securities will be sold pursuant to the offering.

On February 8, 2023, the Company commenced a brokered private placement financing whereby the Company may issue up to 26,666,667 units at a price of CAD\$0.255 per unit for gross proceeds of up to CAD\$6,800,000 ("February 2022 PP"). Each unit consists of a common share and a share purchase warrant with each share purchase warrant entitling the holder to purchase an additional common share at a price of CAD\$0.39 per common share for a period of five years. In connection with the brokered private placement, the Company is to incur share issuance costs of commissions up to 7% of gross proceeds and issuance of warrants equal up to 5% of units issued in offering.

On February 16, 2023, the Company closed the first tranche of the February 2022 PP by issuing 16,795,221 units of the Company at a price of CAD\$0.255 per unit, for gross proceeds of CAD\$4,282,781. The Company also announced as of February 16, 2023 it has also entered into subscription agreements towards a second tranche closing for an additional 6.48 million units or CAD\$1.65 million under the Offering. The second tranche is expected to close early March 2023.

On March 6, 2023, the Company entered into an amendment of the Promissory Note and License Agreement with the Neurodyn Life Sciences Inc. 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 7 of the accompanying audited financial statements).

The table below sets forth a summary of cash flow activity and should be read in conjunction with the Company's cash flow statements included in the Interim Financial Statements:

	Year ended December 31,	
	2022	2021
	\$	\$
Cash flows used in operating activities	(9,241,650)	(9,879,338)
Cash flows (used in) provided by investing activities	(4,876)	459,375
Cash flows provided by financing activities	24,785	14,878,245
Effect of foreign exchange on cash	3,644	(82,839)
Increase (decrease) in cash during the year	(9,218,097)	5,375,443
Cash, beginning of year	11,301,793	5,926,350
Cash, end of year	2,083,696	11,301,793

The cash flows used in operating activities decreased by \$637,688 to \$9,241,650 for the year ended December 31, 2022 from \$9,879,338 for the comparative period. The decrease in cash flows from operating activities represents the effect on cash flows from net losses adjusted for items not affecting cash, principally: accrued interest expenses, accretion expense, amortization and depreciation, share-based compensation, and changes in the value of derivatives, in addition to net changes in non-cash balances relating to operations.

Cash used in investing activities for the year ended decreased by \$464,251 compared to the comparative period including the receipt of \$523,041 in cash from the closing of the Arrangement and due to minimal investing activities being incurred during the year ended December 31, 2022

Cash provided by financing activities for the year ended December 31, 2022 decreased by \$14,853,460 compared to the comparative period. During the year ended December 31, 2021, financing activities included raising \$13,651,183 from the issuance of units, net of share issue costs of \$1,195,463, and \$2,440,000 from the exercise of warrants.

OFF BALANCE SHEET ARRANGEMENTS

The Company did not have any off-balance sheet arrangements as at December 31, 2022 or the date of this report.

COMMITMENTS

1) 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 €10,000,000, the cumulative total may be increased to €15,000,000 subject to certain provisions, which is to be paid 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.

On January 1, 2016, the Company assumed NLS's obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consisted of cumulative total payments to Galantos Consulting of €2,000,000, the cumulative total may be increased to €3,000,000 subject to certain provisions, which is to be paid as follows:

- 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.

2) 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-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 in excess of \$2,000,000.

The total amount payable to NLS under this agreement shall not exceed \$2,000,000.

CONTINGENCIES

The Company did not have any contingencies as at December 31, 2022 or the date of this report.

TRANSACTIONS WITH RELATED PARTIES

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, the 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 Company amended the agreement to decrease the monthly fees to \$9,000 and include a provision that if a change of control or significant financing is initiated prior to December 31, 2022, CMI will receive a one-time payment equal to number of months worked subsequent to September 1, 2022 multiplied by \$9,000.

In September 2018, the Company signed a management agreement with 9177 – 586 Quebec Inc. ("9177 Quebec"), a company controlled by Denis Kay, the 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 and to include a provision that if a change of control or significant financing is initiated prior to December 31, 2022, 9177 Quebec will receive a one-time payment equal to number of months worked subsequent to August 15, 2022 multiplied by \$7,500.

In September 2018, the Company signed a management agreement with Clearway Global, LLC ("Clearway Global"), a company controlled by Fred Sancilio, the former President and a director of the Company, which requires monthly payments of \$10,000 per month for an effective term of two years. In June 2019, the Company amended the agreement to increase the monthly fees to \$20,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$480,000 less any fees previously paid under the agreement between June 1, 2019 and the date of termination or (ii) \$60,000. In February 2021, the Company amended the agreement to increase the monthly fees to \$24,166 that will terminate December 31, 2022. On December 22, 2021, Fred Sancilio resigned as the President and director of the Company. The management agreement was replaced with a consulting agreement with no longer a provision for a termination payment.

In August 2020, the Company signed a management agreement with Seatrend Strategy Group, ("Seatrend"), a company controlled by Jeremy Wright, the former CFO of the Company, which requires 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 is 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, the 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 tweleve 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 terminate 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 tweleve months from date of change of control event.

In April 2022, Mr. McFadden was granted the ability to earn up to 8,195,740 bonus rights of which 1,639,148 bonus rights had been earned at December 31, 2022.

In May 2021, the Company hired Lauren D'Angelo, the Chief Commercial Officer of the Company, requiring an annual base compensation of \$350,000. Included in the agreement is a provision for termination payment due to a change of control, the COO 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 May 2022, Ms. D'Angelo was granted the ability to earn up to 1,065,446 bonus rights of which 737,616 bonus rights had been earned at December 31, 2022.

In November 2021, the Company signed an employment agreement with Cedric O'Gorman, the Chief Medical Officer 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 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, 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.

As at December 31, 2022, \$619,361 (2021 - \$182,086) is owing to directors and officers of the Company have been included in accounts payable and accrued liabilities. These balances are in relation to fees and management compensation.

As at December 31, 2022, the Company owed NLS \$1,211,463 for an outstanding promissory note.

During the year ended December 31, 2022, the Company entered into the following transactions with related parties:

- a) Incurred management fees of \$220,508 (2021 \$215,803) and share-based compensation of \$nil (2021 \$162,563) to CMI. During the year ended December 31, 2021, CMI converted the First Note debenture into 21,712 shares of the Company for the principal and interest portion. CMI also converted its Second Note debenture into 16,625 units of the Company with each unit consisting of one common share and one-half warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023. As at December 31, 2022, \$54,000 (2021 \$19,064) was included in accounts payable and accrued liabilities owing to CMI.
- b) Incurred management fees of \$140,409 (2021 \$127,601) to Seatrend. As at December 31, 2022, \$nil (2021 \$73) was included in accounts payable and accrued liabilities owing to Seatrend.

- c) Incurred management fees included in research and development of \$180,000 (2021 \$207,450) and share-based compensation included in research and development of \$25,108 (2021 \$112,768) to 9177 Quebec. During the year ended December 31, 2021, 9177 Quebec converted its First Note debenture into 10,856 shares of the Company for the principal and interest portion. 9177 Quebec also converted its Second Note debenture into 8,312 units of the Company with each unit consisting of one common share and one-half warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023. As at December 31, 2022, \$41,250 (2021 \$27,450) was included in accounts payable and accrued liabilities owing to 9177 Quebec.
- d) Incurred management fees included in research and development of \$nil (2021 \$273,333) and share-based compensation included in research and development of \$nil (2021 \$417,395) to Clearway Global. During the year ended December 31, 2021, Clearway Global converted its First Note debenture into 21,712 shares of the Company for the principal and interest portion. Clearway Global also converted its Second Note debenture into 16,625 units of the Company with each unit consisting of one common share and one-half warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023.
- e) As of December 31, 2022, \$nil (2021 \$2,000) was included in accounts payable and accrued liabilities owing to Olera LLC, a company controlled by Fred Sancilio.
- f) Incurred share-based compensation of \$123,148 (2021 \$100,821) to Len Mertz, a director of the Company. During the year ended December 31, 2021, Mr. Mertz, Mertz Holdings and Mertz Trust, entities controlled by Len Mertz, converted their First Note debentures into 562,518 shares of the Company for the principal and interest portion. Additionally, their Second Note debentures were converted into 430,428 units of the Company with each unit consisting of one common share and one share purchase warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023.
- g) Incurred share-based compensation of \$105,462 (2021 \$80,656) to John Havens, a director of the Company. During the nine months ended December 31, 2021, Mr. Havens converted his First Note debenture into 492,392 shares of the Company for the principal and interest portion. Additionally, Mr. Havens converted his Second Note debenture into 376,838 units of the Company with each unit consisting of one common share and one share purchase warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023.
- h) Incurred share-based compensation of \$93,671 (2021 \$67,214) to Philip Mertz, a director of the Company. During the year ended December 31, 2021, Mr. Mertz converted his First Note debenture into 164,365 shares of the Company for the principal and interest portion. Additionally, Mr. Mertz converted his Second Note debenture into 125,854 units of the Company with each unit consisting of one common share and one share purchase warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023.
- i) Incurred share-based compensation of \$93,671 (2021 \$67,214) to Rob Bakshi, a director of the Company. During the year ended December 31, 2021, Vincorp Holdings, a company controlled by Mr. Bakshi, converted its First Note debenture into 10,856 shares of the Company for the principal and interest portion. Additionally, Vicorp Holdings converted its Second Note debenture into 8,312 units of the Company with each unit consisting of one common share and one share purchase warrant with each warrant entitling the holder to acquire one common share of the Company for CAD\$2.10 up to March 18, 2023.
- j) Incurred legal fees of \$nil (2021 \$3,642) and administrative fees of \$9,555 (2021 \$36,028), included in other general and administrative expenses, to Cawkell Brodie LLP, a law firm where Mr. Cawkell is a managing partner.
- k) Incurred other research and development expenses of \$10,500 (2021 \$18,000) and interest expense of \$24,230 (2021 \$24,229) to NLS, a company related by common director. As at December 31,

- 2022, \$11,001 (2021 \$2,771) was included in accounts payable and accrued liabilities owing to NLS and \$1,211,463 was owed for a promissory note.
- l) Incurred management fees and salaries of \$499,860 (2021 \$413,222) and share-based compensation of \$595,442 (2021 \$315,197) to Michael McFadden. As at December 31, 2022, \$218,846 (2021 \$nil) was included in accounts payable and accrued liabilities and \$5,819 (2021 \$nil) was included in other long-term liabilities to Mr. McFadden.
- m) Incurred management salaries included in research in development of \$359,712 (2021 \$301,677) and share-based compensation included in research and development of \$236,574 (2021 \$94,559) to Lauren D'Angelo, the Company's Chief Commercial Officer. As at December 31, 2022, \$150,151 (2021 \$64,320) was included in accounts payable and accrued liabilities and \$2,476 (2021 \$nil) was included in other long-term liabilities owing to Ms. D'Angelo.
- n) Incurred management salaries included in research and development of \$400,000 (2021 \$52,804) and share-based compensation included in research and development of \$172,377 (2021 \$nil) to Cedric O'Gorman, the Company's Chief Medical Officer. As at December 31, 2022, \$nil (2021 \$16,667) was included in accounts payable and accrued liabilities owing to Mr. O'Gorman.
- o) Incurred management fees and salaries of \$305,594 (2021 \$nil) and share-based compensation of \$97,058 (2021 \$nil) to Don Kalkofen. As at December 31, 2022, \$155,114 (2021 \$nil) was included in accounts payable and accrued liabilities owing to Mr. Kalkofen.

Summary of key management personnel compensation:

	For the year ended December 31,	
	2022	2021
	\$	\$
Other general and administrative	9,555	40,028
Management fees and salaries	1,166,371	822,228
Professional fees	-	3,642
Research and development - management fees and salaries	939,712	957,764
Share-based compensation	1,576,235	1,485,601
	3,691,873	3,309,263

These expenditures were measured by amounts agreed upon by the transacting parties.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 Unobservable inputs that are supported by little or no market activity, therefore requiring
 an entity to develop its own assumptions about the assumption that market participants would use
 in pricing.

The Company's financial instruments consist of cash, other current assets, accounts payable, other long-term liabilities, derivative liability, and promissory note. The fair values of other current assets, accounts payable, and promissory note approximates 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 long-term liabilities and derivative liability is measured at fair value on a recurring basis using level 3 inputs. The continuity and valuation techniques that are used to determine the fair value of the other long-term liabilities and derivative liability are described in Note 8 and 9 of the Audited Annual Financial Statements.

The Company is exposed to a variety of financial risks by virtue of its activities including currency, credit, interest rate, and liquidity risk.

a) 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 at December 31, 2022, the Company had net monetary assets of approximately \$690,000 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 \$51,000. 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.

b) Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

The Company's cash is held in a large Canadian financial institution and a United States of America based financial institution. The Company maintains certain cash deposits with Schedule I financial institutions, which from time to time may exceed federally insured limits. The Company has not experienced any significant credit losses and believes it is not exposed to any significant credit risk. The Company's tax recoverable is due from the Government of Canada; therefore, the credit risk exposure is low. The Company's maximum credit risk is equal to the carrying value of cash and other current assets at December 31, 2022 and 2021.

c) 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 at December 31, 2022, the promissory note bears interest of 2% per annum 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.

d) Liquidity risk

The Company's ability to continue as a going concern is dependent on management's ability to raise required funding through future equity issuances and through short-term borrowing. 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. As at December 31, 2022, the Company had a working capital deficiency of \$1,724,103.

Contractual undiscounted cash flow requirements for financial liabilities as at December 31, 2022 are as follows:

	≤1 Year	>1-3 Years	Total
	\$	\$	\$
Accounts payable	2,845,381	-	2,845,381
Promissory note	1,211,463	-	1,211,463
	4,056,844	-	4,056,844

OTHER RISKS AND UNCERTAINTIES

The business and operations of the Company are subject to numerous risks, many of which are beyond the Company's control. The Company considers the risks set out below to be some of the most significant to potential investors in the Company, but not all of the risks are associated with an investment in securities of the Company. If any of these risks materialize into actual events or circumstances or other possible additional risks and uncertainties of which the Company is currently unaware or which it considers to be material in relation to the Company's business actually occur, the Company's assets, liabilities, financial condition, results of operations (including future results of operations), business and business prospects, are likely to be materially and adversely affected. In such circumstances, the price of the Company's securities could decline and investors may lose all or part of their investment. For a complete list of the Company's Risk Factors, please refer to our "Annual Information Form" filed on Sedar.com on November 15, 2022.

Financing risks

Our operations have required substantial amounts of capital since inception, and we expect our expenses to increase significantly in the foreseeable future. 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 ongoing clinical trials of our product candidates, initiate future clinical trials of our product candidates, seek marketing approval for ALPHA-1062 for mild-to-moderate Alzheimer's disease, prepare for commercialization activities 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.

As of December 31, 2022, we had \$2.1 million in cash and cash equivalents and have not generated positive cash flows from operations. We will need to raise additional capital. Additional capital 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 Canada, 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.

History of operating losses and negative cash flow from operating activities

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 operating losses will continue as significant costs will be incurred to further the clinical development of ALPHA-1062 and development of the PGRN Technology. Until any approval from the FDA and other regulatory authorities for the sale of ALPHA-1062, the Company's working capital requirements are dependent on the Company's ability to raise capital by future issuances of common shares, debt instruments or other securities convertible into common shares or through potential partnership or strategic financing opportunities, if any become available at terms that are acceptable to the Company.

Our business is heavily dependent on the successful development, regulatory approval and commercialization of ALPHA-1062 and any future product candidates that we may develop or acquire.

The success of our business, including our ability to finance our company and generate revenue in the future, will primarily depend on the successful development, regulatory approval and commercialization of our product candidates and, in particular, the advancement of ALPHA-1062, currently our only clinical-stage product candidate We cannot be certain that our product candidates will receive regulatory approval or be successfully commercialized even if we receive regulatory approval. The clinical and commercial success of ALPHA-1062 and any future product candidates that we may develop or acquire will depend on a number of factors, including the following:

- 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;
- 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; and
- 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;

These factors, many of which are beyond our control, could cause us to experience significant delays or an inability to obtain 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.

Research and development risk

The Company's organic growth and long-term success is dependent in part on its ability to successfully develop products and it will likely incur significant research and development expenditures to do so. The Company cannot be certain that any investment in research and development will yield technically feasible or commercially viable products. Furthermore, its ability to discover and develop products will depend on its ability to:

- retain key scientists as employees or partners;
- develop products internally and assist its partners with development;
- successfully complete laboratory testing and clinical trials on humans;
- obtain and maintain necessary intellectual property rights to the Company's products;
- obtain and maintain necessary U.S. and other regulatory approvals for its products;
- collaborate with third parties to assist in the development of its products; and
- enter into arrangements with third parties to co-develop, license, and commercialize its products.

The Company may not be successful in developing its drug products. Failure to introduce and advance current and new products could materially and adversely affect the Company's operations and financial condition.

Clinical development risks

The Company must demonstrate the safety and efficacy of their products through extensive clinical testing. The Company's drug research and development programs are various stages of development including early stage of development. Numerous unforeseen events during, or as a result of, the testing process could delay or prevent required FDA and regulatory approvals and thus future commercialization of any products the Company develops, including the following:

 the results of clinical studies may be inconclusive, may demonstrate potentially unsafe drug characteristics, or may not be indicative of results that will be obtained in later clinical trials;

- the safety and efficacy results attained in the clinical studies may not be indicative of results that are obtained in later clinical trials:
- after reviewing clinical study results, the Company or its partners or collaborators may abandon projects that were previously thought to be promising.

Clinical studies are very expensive, can run into unexpected difficulties and the outcomes are uncertain. The final data collected from studies the Company conducts may not be sufficient to support the further clinical development of ultimately regulatory approval of such product(s). Clinical studies of the Company's products may not be completed on schedule or on budget, with available capital resources. The Company's failure to complete any of its clinical studies on schedule or on budget, or its failure to adequately demonstrate the safety and efficacy of any of the products it develops, could delay or prevent regulatory approval of such products, which could adversely affect the Company's business, financial condition, and results of operations.

Even if our current or future product candidates obtain regulatory approval, they 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.

Even if one or more of our product candidates receive FDA or other regulatory approvals, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. 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 our 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 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;
- physician and patient willingness to adopt a new therapy over other available therapies to treat approved indications;
- 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; and
- limitations or warnings contained in the FDA-approved labeling for our products.

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 if we receive regulatory approval to market any of our 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 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, if approved, 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.

Our success depends on our ability to obtain and maintain patent protection for our technology and product candidates including our lead product candidate, 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.

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. 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.

If we fail to attract and retain senior management and key scientific personnel, our business may be materially and adversely affected.

We are highly dependent upon members of our senior management, particularly our Chief Executive Officer, 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 planned clinical trials or the commercialization of our product candidates or any future product candidates. 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 hire additional personnel as we expand our clinical development and if we initiate commercial activities. 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.

Global pandemics

The extent to which the ongoing COVID-19 pandemic will continue to impact our business is uncertain and cannot be predicted. The pandemic's impact on our business will depend on a variety of factors, including the timing, extent, effectiveness and durability of vaccine programs or other treatments, new or continuing travel and other restrictions and public health measures, such as social distancing, business closures or disruptions, and the development and spread of COVID-19 variants. As the COVID19 pandemic evolves, we could experience additional disruptions or increased expenses that may adversely impact our business, including delays in receiving the supplies, materials and services needed to conduct clinical trials and preclinical

research, and availability of resources by third party service providers and regulators.

If we sell our Common Shares in future financings, shareholders 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, we believe that any net proceeds from future financings, together with our existing cash, cash equivalents and marketable securities, will be insufficient for us to fund our operating and capital expenditures beyond the date that is months after the date of this AIF, we may from time to time issue additional Common Shares. These issuances may be at a discount from the current trading price of our Common Shares. As a result, our shareholders would experience immediate dilution upon the purchase of any Common Shares 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 or Common Shares. If we issue Common Shares or securities convertible into Common Shares, our shareholders will experience additional dilution and, as a result, our stock price may decline.

ACCOUNTING PRONOUNCEMENTS NOT YET ADOPTED

A number of amendments to standards and interpretations applicable to the Company that are not yet effective for the year ended December 31, 2022 and have not been applied in preparing the Annual Audited Financial Statements nor does the Company expect these amendments to have a significant effect on its Annual Audited Financial Statements.

DISCLOSURE OF CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

The CFO, together with other members of management, have designed the Company's disclosure controls and procedures in order to provide reasonable assurance that material information relating to the Company and its consolidated subsidiaries would be known to them, and by others, within those entities.

Management has also designed internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with IFRS. Management has assessed the effectiveness of the Company's internal control over financial reporting as of the year ended December 31, 2022.

While the officers of the Company have designed the Company's disclosure controls and procedures and internal controls over financial reporting, they expect that these controls and procedures may not prevent all errors and fraud. A control system, no matter how well conceived or operated, can only provide reasonable, not absolute assurance that the objectives of the control system are met.

DISCLOSURE DATA FOR OUTSTANDING COMMON SHARES, OPTIONS, AND WARRANTS

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 shares without par value ("Class B preferred shares")

Below is a summary of the common shares, stock options, and share purchase warrants issued and outstanding as at December 31, 2022 and the date of this report:

	December 31, 2022	Date of this Report
Common shares	61,023,450	77,818,671
Restricted shares	7,000,000	7,000,000
Class B preferred shares	7,916,380	7,916,380
Common share options	5,506,071	5,506,071
ACI Canada legacy performance options	9,521,057	9,521,057
Warrants	15,981,290	32,776,511

Common share options

The Company has issued incentive options to certain directors, officers, and consultants of the Company. As of the date of this report, the following share options are outstanding and exercisable:

Options Outstanding	Options Exercisable	Exercise Price	Expiry Date
200,000	200,000	1.55 (CAD\$2.10)	March 29, 2023
31,513	31,513	0.53 (CAD\$0.714)	September 21, 2023
39,154	39,154	0.40	June 1, 2029
39,154	39,154	0.40	July 22, 2030
2,600,000	288,889	0.21 (CAD\$0.28)	August 3, 2031
131,250	131,250	0.80	August 16, 2031
400,000	100,000	0.83 (CAD\$1.12)	December 20, 2031
940,000	235,000	0.21 (CAD\$0.28)	December 20, 2031
215,000	17,917-	0.21 (CAD\$0.28)	February 14, 2032
450,000	37,500	0.21 (CAD\$0.28)	April 11, 2032
10,000	-	0.47(CAD\$0.64)	May 31, 2032
450,000	48,611	0.21(CAD\$0.28)	May 31, 2032
5,506,071	1,168,988		

ACI Canada legacy performance options

The Company has issued incentive options to certain directors, officers, and consultants of the Company. As of the date of this report, the following share options are outstanding and exercisable:

Options Outstanding	Options Exercisable	Exercise Price	Expiry Date
		\$	
900,000	900,000	0.001	February 1, 2026
691,057	691,057	0.01	December 31, 2027
4,400,000	3,960,000	0.01	September 1, 2028
3,530,000	3,180,000	0.01	June 1, 2029
9,521,057	8,731,057		

Warrants

A summary of the share purchase warrants outstanding as at the date of this report is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
	\$	
2,486,647	1.55 (CAD\$2.10)	March 18, 2023
130,733	1.18 (CAD\$1.60)	March 18, 2023
40,000	0.40	July 5, 2023
9,602,500	1.29 (CAD\$1.75)	October 1, 2023
659,627	1.11 (CAD\$1.50)	October 1, 2023
3,061,783	0.40	August 30, 2024
16,795,221	0.29 (CAD\$0.39)	February 16, 2028
32,776,511		

OTHER MD&A REQUIREMENTS

Additional information relating to the Company may be found on or in:

- SEDAR at www.sedar.com; and
- the Company's audited consolidated financial statements for the years ended December 31, 2022 and 2021.

This MD&A was approved by the Board of Directors of Alpha Cognition Inc. effective March 8, 2023.

SCHEDULE "C"

AUDIT COMMITTEE CHARTER

1. Purposes and Responsibilities

The Audit Committee (the "Committee") shall assist the Board in fulfilling its responsibility for oversight of the Company's financial accounting and reporting, the system of internal controls established by management, and the adequacy of internal and independent auditing relative to these activities.

2. Authority to Retain Experts

The Committee shall have the authority to retain outside counsel or other experts as necessary to assist the Committee in fulfilling its responsibilities. The Company will provide adequate funding, as determined by the Committee, to pay such outside counsel or other experts and cover all other costs of the Committee in fulfilling its responsibilities hereunder.

3. Reporting

The Audit Committee shall report to the Board.

4. Appointment and Composition

The Committee and its Chair shall be appointed by the Board. The Chair shall be a member of the Committee.

The Committee shall consist of at least three directors, a majority of whom must not be executive officers, employees or control persons of the Company or of an affiliate of the Company. If the Company lists its common shares on the Nasdaq Stock Market, then the Committee shall consist of at least three directors, all of whom are independent (as that term is used in National Instrument 52-110, Rule 10A-3 of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"), the rules and regulations of the United States Securities and Exchange Commission and the listing rules of the Nasdaq Stock Market), that is, who are independent of management and are free from any interest and any business or other relationship which could, or might reasonably be perceived to, materially interfere with their ability to act with a view to the best interests of the Company, other than interests and relationships arising from shareholding.

Each of the members of the Committee shall have a working familiarity with basic finance and accounting practices, and shall have experience with reviewing and approving public company financial statements, either as part of management or as a member of a public company's audit committee. Each member of the members of the Committee must be able to read and understand fundamental financial statements, including the Company's balance sheet, income statement and cash flow statement.

At least one member of the Committee shall have accounting or related financial management expertise sufficient to be considered a "financial expert" under Item 407(d)(5) of Regulation S-K under the Exchange Act and "financially sophisticated" under the listing standards of the Nasdaq Stock Market.

5. Duties

- a) The Committee shall:
- b) Provide for an open avenue of communications between the independent auditors, management and the Board and, at least once annually, meet with the independent auditors independently of management.
- c) Review the qualifications and evaluate the performance of the independent auditors and be directly responsible for the compensation, retention and oversight of the independent auditors. The

- independent auditors shall be ultimately accountable to the Board and the Committee, as representatives of the shareholders.
- d) Inquire as to the independence of the external auditors and obtain, at least annually, a formal written statement delineating all relationships between the independent auditors and the Company as contemplated by Independence Standards Board Standard No. 1 Independence Discussions with Audit Committees and under any applicable rules of the Public Company Accounting Oversight Board and discuss with the auditors any relationships that may impact the auditor's independence.
- e) Review and approve the independent auditors' annual engagement letter.
- f) Review with the independent auditors (1) the proposed scope of their examination with emphasis on accounting and financial areas where the Committee, the independent auditors or management believe special attention should be directed, (2) the results of their audit, including their letter of recommendations for management (3) their evaluation of the adequacy of the Company's system of internal controls, (4) significant areas of disagreement, if any, with management (5) cooperation received from management in the conduct of the audit and (6) significant accounting, reporting, regulatory or industry developments affecting the Company.
- g) Discuss with management and the independent auditors any issues regarding significant business risks or exposures and assess the steps management has taken to minimize such risk.
- h) Review with management and the independent auditors the Company's unaudited quarterly financial statements and the Company's audited annual financial statements and make a recommendation to the Board as to approval thereof.
- i) In reviewing the quarterly and annual financial statements, include a review of estimates, reserves, accruals, write downs, judgmental areas, audit adjustments, difficulties encountered in performing any audit, and such other review as may be appropriate.
- j) Review and satisfy itself on behalf of the Board with respect to the Company's internal control over financial reporting and information systems.
- k) Review and pre-approve any non-audit services to be provided by the external auditors' firm and consider the impact on the independence of the auditors; between scheduled meetings, the Chair is authorized to approve all audit related services and non-audit services provided by the external auditors for individual engagements with estimated fees of \$25,000 and under; and shall report all such approvals to the Committee at its next scheduled meeting.
- 1) Review and approve all related-party transactions of the Company.
- m) Review, at least annually, and more frequently if necessary, the Company's policies for risk assessment and risk management (the identification, monitoring, and mitigation of risks).
- n) Inquire of management and the independent auditor about significant business, political, financial and control risks or exposure to such risk.
- o) Request the external auditor's opinion of management's assessment of significant risks facing the Company and how effectively they are being managed or controlled.
- p) Assess the effectiveness of the over-all process for identifying principal business risks and report thereon to the Board.

q) Perform such other functions as assigned by law, the Company's bylaws or as the Board deems necessary and appropriate.

6. Committee Meetings and Board Reporting

Meetings will be held as required, but not less than quarterly. Minutes will be recorded and reports of committee meetings will be presented at the next regularly scheduled Board meeting.

7. Committee Charter Review and Approval

This Audit Committee Charter shall be reviewed, reassessed, and approved by the Board annually.

8. Whistleblower Policy

The Committee shall establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and for the confidential, anonymous submission by the Company's employees of concerns regarding questionable accounting or auditing matters, or other matters of concern, related to the policies of the Company as set out in the attached Exhibit A.

Exhibit "A" To the Audit Committee Charter

Procedures for the Submission of Complaints or Concerns Regarding Accounting, Internal Accounting Controls, Auditing Matters

The Audit Committee of the Board of Directors of **ALPHA COGNITION INC.** (the "Company") has established procedures for: (a) the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and (b) the submission by employees of the Company and others, on a confidential and anonymous basis, of concerns regarding questionable accounting or auditing matters.

In accordance with National Instrument 52-110, the Audit Committee has adopted the following procedures:

- 1. The Company shall promptly forward to the Audit Committee any complaints that it has received regarding financial statement disclosures, accounting, internal accounting controls or auditing matters.
- 2. Any employee of the Company may submit, on a confidential, anonymous basis if the employee so desires, any concerns (the "concern") regarding financial statement disclosures, accounting, internal accounting controls or auditing matters, or other matters of concern, related to the policies of the Company. All such concerns shall be set forth in writing and forwarded in a sealed envelope to the Chairman of the Audit Committee, in care of the Company's Chairman at:

ALPHA COGNITION INC. #301 – 1228 Hamilton Street Vancouver, BC V6B 6L2

Attention: Chairman of the Audit Committee

Email: info@alphacognition.com

If an employee would like to discuss the concern with a member of the Audit Committee, the employee should indicate this in the submission and include a telephone number at which he or she might be contacted if the Audit Committee deems it appropriate.

- 3. Following the receipt of any concern submitted hereunder (the "submission"), the Audit Committee will investigate each matter so reported and take such steps, actions or institute such procedures as the Audit Committee deems appropriate.
- 4. The Audit Committee may enlist employees of the Company and/or outside legal, accounting, or other advisors, as appropriate, to conduct any investigation of the submission and such other outside advisors shall use reasonable efforts to protect the confidentiality and anonymity of the complainant.
- 5. The Board of Directors stands behind this policy and guarantees that no retaliation of any kind will be taken or permitted to be taken against employees with respect to any submission made in good faith.
- 6. The Audit Committee shall retain the submission and the documentation related thereto as part of the records of the Audit Committee.

AUDIT COMMITTEE ALPHA COGNITION INC.

CERTIFICATE OF ALPHA COGNITION INC.

Pursuant to a resolution duly passed by its Board, Alpha Cognition Inc., hereby applies for the listing of the above mentioned securities on the CSE.

The foregoing contains full, true and plain disclosure of all material information relating to Alpha Cognition Inc. It contains no untrue statement of a material fact and does not omit to state a material fact that is required to be stated or that is necessary to prevent a statement that is made from being false or misleading in light of the circumstances in which it was made.

Dated on this 28th day of April, 2023.

"Michael McFadden"

MICHAEL McFADDEN
CEO and Director

"Ken Cawkell"

"Don Kalkofen"

DON KALKOFEN
CFO

"Len Mertz"

KEN CAWKELL LEN MERTZ
Director Director