A copy of this preliminary prospectus has been filed with the securities regulatory authorities in each of the provinces and territories of Canada, other than Québec, but has not yet become final for the purpose of the sale of securities. Information contained in this preliminary prospectus may not be complete and may have to be amended. The securities may not be sold until a receipt for the final prospectus is obtained from the securities regulatory authorities.

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise. This preliminary prospectus constitutes a public offering of these securities only in those jurisdictions where they may be legally offered for sale and only by persons permitted to sell such securities.

Alpha Cognition Inc. has filed a Registration Statement on Form S-1 with the U.S. Securities and Exchange Commission, under the United States Securities Act of 1933, as amended, with respect to these securities.

#### PRELIMINARY PROSPECTUS

New Issue June 13, 2024



# ALPHA COGNITION INC.

#### US\$♦

Up to ♦ Common Shares
Up to ♦ Pre-Funded Warrants to Purchase ♦ Common Shares
Up to ♦ Warrants to Purchase ♦ Common Shares
Up to ♦ Common Share underlying such Pre-Funded Warrants
Up to ♦ Common Shares underlying such Warrants

This preliminary prospectus (the "Canadian Prospectus") of Alpha Cognition Inc. (the "Company", "Alpha", "we" or "our"), qualifies the distribution (the "Offering") of up to ♦ common shares, no par value (the "Common Shares") together with warrants to purchase up to ♦ common shares (the "Warrants") pursuant to this Canadian Prospectus at an assumed combined offering price of \$♦ per Share and accompanying Warrant (the "Offering Price"). Each Warrant is exercisable to purchase one common share (each, a "Warrant Share") at an assumed exercise price of \$♦ (which represents 135% of the assumed Offering Price per Common Share and accompanying Warrant), will be exercisable upon issuance and will expire five years from the Closing Date (as defined below), subject to the Company's option to call the Warrants for redemption, in whole or in part, at a price of \$0.0001 per Warrant, upon not less than 30 days' prior written notice to the holder of the redemption, if, and only if, the reported closing price of the Common Shares equals or exceeds 150% of the exercise price of the Warrants for any 15 consecutive trading days commencing on the date upon which the Warrants are issued and ending three trading days before the Company sends the notice of redemption. The Common Shares and/or Pre-funded Warrants (as defined below) and accompanying Warrants will be issued separately and will be immediately separable upon issuance but will be purchased together in this Offering. This Canadian Prospectus also qualifies the distribution of the Warrant Shares issuable upon exercise of the Warrants. In connection with the Offering, the Company will complete a reverse stock split with a stock split ratio of 1-for-20 (the "Reverse Stock Split"). References in this Canadian Prospectus to securities of the Company and pricing thereof, including the Common Shares being offered pursuant the Offering and the Offering Price, are presented assuming completion of the Reverse Stock Split.

In addition, the Canadian Prospectus also qualifies the distribution to certain purchasers whose purchase of Common Shares in this Offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares immediately following the consummation of this Offering, the opportunity to purchase, if any such purchaser so chooses, up to ♦ pre-funded warrants ("Pre-Funded Warrants") to purchase up to ♦ Common Shares, in lieu of Common Shares that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of the Company's outstanding common shares. Each Pre-Funded Warrant will be exercisable for one Common Share (each, a "Pre-Funded Warrant Share"). The exercise price of each Pre-Funded Warrant will be US\$0.0001 per Pre-Funded Warrant Share. The Pre-Funded Warrants will be immediately exercisable and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. The combined offering price per Pre-Funded Warrant and accompanying Warrant is equal to \$♠, which is equal to the combined offering price per common share and accompanying warrants less \$0.0001. For each Pre-Funded Warrant we sell, the number of Common Shares we are offering will be decreased on a one-for-one basis. This Canadian Prospectus also qualifies the distribution the Pre-Funded Warrant Shares issuable upon exercise of any Pre-Funded Warrants sold in this Offering.

See "Description of the Securities Being Distributed" and "Plan of Distribution" herein for additional information on the securities being qualified by this Canadian Prospectus.

# Unless otherwise specified, all monetary amounts in this Canadian Prospectus, including the Offering Price listed above, are in U.S. dollars.

We are offering the Common Shares and/or Pre-Funded Warrants and accompanying Warrants for sale concurrently in Canada under the terms of this Canadian Prospectus and in the United States under the terms of a registration statement on Form S-1 (the "Registration Statement") filed with the U.S. Securities and Exchange Commission (the "SEC") under the United States Securities Act of 1933, as amended. The Registration Statement contains a form of U.S. preliminary prospectus (the "U.S. Prospectus"), a copy of which is attached to, forms part of and is incorporated into, this Canadian Prospectus.

The Common Shares, Pre-Funded Warrants and accompanying Warrants (collectively, the "Securities") are being offered in Canada by A.G.P. Canada Investments ULC ("A.G.P Canada") and Ventum Financial Corp. (together with A.G.P. Canada, the "Canadian Underwriters") and in the United States by A.G.P./Alliance Global Partners ("A.G.P.", and together with A.G.P. Canada, the "Representatives") and Brookline Capital Markets, a division of Acadia Securities, LLC (together with A.G.P., the "U.S. Underwriters" and together with the Canadian Underwriters, the "Underwriters"). The U.S. Underwriters will not be distributing the Securities in Canada. The Securities will be issued in accordance with the terms of the underwriting agreement dated ♠, 2024 among the Company and the Representatives, as representatives of the Underwriters (the "Underwriting Agreement"). The Offering Price was determined following arm's length negotiations between the Company and the Underwriters.

We have applied to list our Common Shares on the Nasdaq Capital Market ("Nasdaq") under the trading symbol "ACOG". Our Common Shares are currently listed and posted for trading on the Canadian Securities Exchange (the "CSE") under the symbol "ACOG" and quoted for trading on the OTCQB® Venture Market by OTC Markets Group (the "OTC") under the symbol "ACOGF". On June 13, 2024, the last trading day prior to the filing of this Canadian Prospectus, the closing price of the Common Shares on the CSE was C\$16.00 and on the OTC was \$11.20. There is no established public trading market for the Warrants or Pre-Funded Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Warrants or Pre-Funded Warrants on any national securities exchange. Without an active trading market, the liquidity of the Warrants or Pre-Funded Warrants will be limited.

We have applied to list the Common Shares, Warrant Shares and the Pre-Funded Warrant Shares on the CSE. Listing is subject to the Company fulfilling all listing requirements of the CSE.

Although not yet effective, on June 10, 2024, the Company's board of directors (the "Board") approved the Reverse Stock Split. We anticipate the Reverse Stock Split will be effective on, or just before, the date our Common Shares are listed on the Nasdaq. The Reverse Stock Split is intended to allow us to meet the minimum share price requirement of the Nasdaq. Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our Common Shares, share data, per share data and related information depict the Reverse Stock Split as if it was effective and as if it had occurred at the beginning of the earliest period presented.

Securities of the Company other than the Common Shares are not and will not be listed on any securities exchange. There is currently no market through which the securities of the Company, other than the Common Shares, may be sold. This may affect the pricing of the securities of the Company, other than the Common Shares, in the secondary market, the transparency and availability of trading prices, the liquidity of these securities and the extent of issuer regulation. See "RISK FACTORS" in the U.S. Prospectus.

There is no assurance that Nasdaq will approve our listing application, and any such listing of our Common Shares will be conditional upon Alpha fulfilling all of the listing requirements and conditions of Nasdaq. Investing in our Common Shares involves a high degree of risk. See "RISK FACTORS" in the U.S. Prospectus.

# Price: US\$♦ per Common Share and accompanying Warrant<sup>(1)</sup>

	Price to the Public	Cash Commission <sup>(2)</sup>	Net Proceeds to the Company <sup>(3)</sup>
Per Common Share and accompanying	\$♦	\$◆	<b>\$</b> ♦
Warrant	<b>\$</b>	\$♦	<b>\$</b>

# **Notes:**

- (1) Purchaser of Pre-Funded Warrants will receive a Pre-Funded Warrant in place of a Common Share, which will result in the Offering Price and net proceeds per Common Share to the Company being reduced by \$0.0001 to \$♠ and \$♠, respectively.
- (2) Pursuant to the Underwriting Agreement, the Underwriters will receive a cash commission equal to 7% of the gross proceeds of the Offering (including any gross proceeds of the Over-Allotment Option) (the "Cash Commission"). In addition, on the Closing Date (as defined below), the Company will issue Underwriters' Warrants (as defined below) to the Underwriters. See "UNDERWRITING" in the U.S. Prospectus for a description of compensation payable to the Underwriters and other fees payable in connection with this Offering.
- (3) Assumes no exercise of the Over-Allotment Option. After deducting the Cash Commission, but before deducting expenses of the Offering which are estimated to be \$♦ and will be paid from the proceeds of the Offering. See "Plan of Distribution".
- (4) The Company has granted to the Representatives of the Underwriters an option (the "Over-Allotment Option"), exercisable in whole or in part in the sole discretion of the Representatives at any time and from time to time until the date which is 45 days following the Closing Date (as defined below), to purchase up to an additional ◆ common shares ("Additional Shares") and/or Pre-Funded Warrants ("Pre-Funded Warrants") and ◆ accompanying Warrants ("Additional Warrants", collectively with Additional Shares

and/or Pre-Funded Warrants, the "Additional Securities") from us to cover over-allotments, if any, at the Offering Price (\$♦ per Common Share, \$♦ per Pre-Funded Warrant and \$♦ per Warrant), less the underwriting discounts and commissions. If the Underwriters exercise the Over-Allotment Option in full, the total underwriting discounts and commissions payable by us will be \$♠, and the total proceeds to us, before expenses, will be \$♠. The Representatives can exercise this option in whole or in part at any time and from time to time within 45 days after the date of this Canadian Prospectus. This Canadian Prospectus also qualifies the grant of the Over-Allotment Option and the distribution of the Additional Securities upon exercise of the Over-Allotment Option. Any purchaser who acquires Additional Securities forming part of the over-allotment position of the Underwriters pursuant to the Over-Allotment Option acquires such securities under this Canadian Prospectus, regardless of whether the over-allocation position is ultimately filled through the exercise of the Over-Allotment Option or secondary market purchases. See "Plan of Distribution".

Unless the context otherwise requires, when used in this Canadian Prospectus, all references to the "Offering" include the exercise of the Over-Allotment Option, all references to "Common Shares" include the Additional Common Shares, all references to "Warrants" include the Additional Warrants, all references to "Warrant Shares" include the Common Shares issuable upon exercise of the Additional Warrants, all references to "Pre-Funded Warrants" include the Additional Pre-Funded Warrants, and all references to "Pre-Funded Warrant Shares" include the common shares issuable upon exercise of the Additional Pre-Funded Warrants.

The Company has agreed to issue to the Underwriters upon closing of the Offering, warrants to purchase such number of Common Shares equal to 5% of the Common Shares and Pre-Funded Warrant Shares sold under the Offering (the "Underwriters' Warrants"). The Underwriters' Warrants will be exercisable beginning six months from the effective date of the Registration Statement registered under the Registration Statement of which this Canadian Prospectus is a part and will expire five years following the commencement of sales of the Common Shares. The exercise price of the Underwriters' Warrants will be ♠, being 130% of the Offering Price. See "UNDERWRITING" of the U.S. Prospectus for a description of compensation payable to the Underwriters and other fees payable in connection with this Offering. See also "Plan of Distribution".

Subscriptions for the Securities will be received subject to rejection or allotment in whole or in part and the right is reserved to close the subscription books at any time without notice. Closing is expected to take place on or about ♠, 2024 or such other date as may be agreed between the Company and the Underwriters (the "Closing Date"). See "Plan of Distribution".

At the closing of the Offering, the Company will arrange for an instant deposit of the Common Shares under the book-based system of registration to be registered to CDS Clearing and Depository Services Inc. ("CDS") and deposited with CDS on the Closing Date. Except as otherwise set forth in this Canadian Prospectus, each purchaser of Common Shares will receive only a customer confirmation from the registered dealer who is a CDS participant (a "CDS Participant") from or through whom Common Shares are purchased. Physical certificates will be used for the Warrants and Pre-Funded Warrants and physical certificates or Direct Registration Statements evidencing Common Shares will not be issued except in limited circumstances.

This Canadian Prospectus also qualifies the distribution of the Common Shares issuable upon exercise of the Underwriters' Warrants. The following table sets forth the number of Additional Securities issuable under the Over-Allotment Option and the Underwriters' Warrants issuable to the Underwriters in connection with the Offering:

Underwriters' Position	Maximum Number of Available Securities	Exercise Period	Exercise Price or Acquisition Price
Over-Allotment Option	<ul> <li>♦ Additional Shares</li> <li>♦ Additional Pre- Funded Warrants</li> <li>♦ Additional Warrants</li> </ul>	Up to 45 days from the Closing Date	\$♦ per Additional Share \$♦ per Additional Pre- Funded Warrant \$♦ per Additional Warrant
Underwriters' Warrants	Up to ♦ Common Shares <sup>(1)</sup>	Exercisable commencing six months after the effective date of the Registration Statement filed in the United States related to the Offering, and exercisable within five years following the commencement of sales of the Common Shares	\$♠ per Common Share underlying each Underwriters' Warrant

#### **Notes:**

(1) Assuming the exercise in full of the Over-Allotment Option.

The Canadian Underwriters, as principal, conditionally offers the Securities, subject to prior sale, if, as and when issued by us and accepted by the Underwriters in accordance with the conditions contained in the Underwriting Agreement referred to under "UNDERWRITING" in the U.S. Prospectus, and subject to the approval of certain legal matters for the Company by Dorsey & Whitney LLP, with respect to U.S. law, and Morton Law LLP, with respect to Canadian law, and for the Underwriters by Pryor Cashman LLP, with respect to U.S. law, and Tingle Merrett LLP, with respect to Canadian law.

The Offering is subject to the terms of the Underwriting Agreement which provides for the obligations of the Underwriters to pay for and accept delivery of the full number of Units offered by this Canadian Prospectus, subject to prior sale. However, the Underwriters are not required to take or pay for the Additional Securities covered by the Over-Allotment Option.

Certain directors and officers of the Company reside outside of Canada. These persons have appointed the following agents for service of process:

Name of Person or Company	Name and Address of Agent
Michael McFadden	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Lauren D'Angelo	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Len Mertz	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
John Havens	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Phillip Mertz	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Don Kalkofen	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8

Purchasers are advised that it may not be possible for investors to enforce judgments obtained in Canada against any person or company that is incorporated, continued or otherwise organized under the laws of a foreign jurisdiction or who resides outside of Canada, even if the party has appointed an agent for service of process.

The Company's head office is located at c/o 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8, and its registered office is located at 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8.

# **TABLE OF CONTENTS**

USE OF PROCEEDS	2
DESCRIPTION OF THE SECURITIES BEING DISTRIBUTED	5
CONSOLIDATED CAPITALIZATION	5
PRIOR SALES	7
TRADING PRICE AND VOLUME	8
PRINCIPAL SECURITYHOLDERS	8
INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS	8
AUDIT COMMITTEES AND CORPORATE GOVERNANCE	8
PLAN OF DISTRIBUTION	11
INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	13
AUDITOR, TRANSFER AGENT AND REGISTRAR	13
MATERIAL CONTRACTS	13
EXPERTS	14
ELIGIBILITY FOR INVESTMENT	14
CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS	15
MARKETING MATERIALS	19
CONTINUOUS DISCLOSURE	19
NOTICE TO INVESTORS REGARDING U.S. GAAP	19
STATUTORY RIGHTS OF WITHDRAWAL AND RESCISSION	20
U.S. PROSPECTUS	
CERTIFICATE OF THE COMPANY	22
CERTIFICATE OF THE CANADIAN UNDERWRITERS	23

#### **USE OF PROCEEDS**

The estimated net proceeds received by the Company from the Offering (assuming no exercise of the Over-Allotment Option) will be approximately  $\P$  (determined after deducting the Cash Commission of  $\P$  and estimated expenses of the Offering of  $\P$ ). See "*Plan of Distribution*".

The Company intends to use the net proceeds of the Offering as set forth in the U.S. Prospectus under "USE OF PROCEEDS", as summarized in the following table:

Principal Uses	Approximate Use of Net Proceeds of Offering
Fund Support of non-drug application filing with the FDA <sup>(1)</sup>	\$◆
Commercialization and launch of Alpha-1061 in Alzheimer's disease	\$♦
Research and Development of pipeline products	\$♦
Chemistry, Manufacturing and Controls activities	\$♦
General corporate and working capital purposes <sup>(1)</sup>	\$♦
TOTAL	\$♦

#### Notes:

- (1) FDA refers to the U.S. Food and Drug Administration
- (2) Funds set aside for working capital may be allocated to corporate expenses, business development, potential future acquisitions, working capital, general administrative expenses and other purposes.

If the Over-Allotment Option is exercised in full, the estimated net proceeds received by the Company from the Offering will be \$♦ (determined after deducting the Cash Commission of \$♦ and estimated expenses of the Offering of \$♦). The Company expects to use any proceeds received from the exercise of the Over-Allotment Option for further research and development, commercialization preparations, and general corporate and working capital purposes.

# **Business Objectives and Milestones**

The Company's principal business objectives are described in the U.S. Prospectus under "PROSPECTUS SUMMARY - OUR STRATEGY", which are summarized below.

- Obtain FDA approval for its New Drug Application ("NDA") for ALPHA-1062 in mild-to-moderate Alzheimer's disease. The Company has been granted a Prescription Drug User Fee Act ("PDUFA") date of July 27, 2024, which is a drug approval date in the U.S. However, there is no assurance or guarantee of receiving this approval at this date or at all.
- Continue to advance its development and commercialization activities for ALPHA-1062 in mild-to-moderate Alzheimer's disease, including the commercial manufacturing for ALPHA-1062.
- Pursue the out-licensing of its traumatic brain injury ("TBI") indication to Alpha Seven Therapeutics, Inc. ("Alpha Seven"), where the TBI indication can be further developed through a complete Investigational New Drug ("IND") application submission following the completion of an additional toxicity study and formulation work. The NDA has been granted a PDUFA goal date of July 27, 2024. However, there is no assurance or guarantee of receiving this approval at this date or at all. Alpha Seven is a newly formed private entity which will develop ALPHA-1062IN for applications in TBI.

The Company expects to accomplish the following business objectives and milestones using the net proceeds of the Offering (prior to the exercise of the Over-Allotment Option):

<b>Business Objective</b>	Milestone that must occur for Business Objective to be Accomplished	Anticipated Timing to achieve Business Objective	Estimated Cost <sup>(1)</sup>
Obtain FDA approval for its NDA for ALPHA-1062 in mild-to-moderate Alzheimer's disease	The Company will need to respond to regulatory questions and inquiries from FDA in a satisfactory manner and negotiate the commercial label and approval of the product with FDA, which is anticipated in Q3 2024. If approved, ALPHA-1062 would be the second oral therapy available for Alzheimer's patients in the past decade. The approval would represent a next generation oral treatment for disease that address the cognitive symptoms of Alzheimer's disease.	Q3 2024	\$707,000
Continue to advance its development and commercialization activities for ALPHA-1062 in mild-to-moderate Alzheimer's disease, including the commercial manufacturing for ALPHA-1062	The Company plans to continue its development activities and commercialization preparations around ALPHA-1062. Chemistry, Manufacturing and Control ("CMC") activities may involve continuing to refine and define manufacturing practices and product specifications to be followed and met to ensure product safety and consistency between batches. This will include further CMC activities specifically to target commercial batches. The Company will also refine its commercialization marketing plan which includes the long term care ("LTC") target market, prioritization of LTC customers, commercialization positioning, marketing messages, and operational plans.	2Q 2024- Q2 2025	\$9,355,000

Business Objective	Milestone that must occur for Business Objective to be Accomplished	Anticipated Timing to achieve Business Objective	Estimated Cost <sup>(1)</sup>
Pursue the out-licensing of its TBI indication to Alpha Seven, where the TBI indication can be further developed through a complete IND application submission following the completion of an additional toxicity study and formulation work	The Company plans to complete the out-license of the TBI asset into Alpha Seven where Alpha Seven plans to raise the additional capital to advance the TBI program. The Company expects to include the following in the TBI out-license agreement with the Alpha Seven:  • intellectual property specific to TBI, implementation of a data sharing agreement, and supply and comprehensive manufacturing agreements for technology advancements in the product.  The Company also intends to utilize its existing management and new consultants experienced in TBI research and development to staff Alpha Seven. Data will be shared from pre-clinical, clinical, and manufacturing work to Alpha Seven to help the company advance the asset.	Q3-Q4 2024	\$20,000

# Note:

(1) Excluding working capital and general corporate purposes.

While the Company believes that it has the skills and resources necessary to accomplish these business objectives, there is no guarantee that the Company will be able to do so within the timeframes indicated above, or at all. New or revised directives of various levels of the Canadian and U.S. government and public health authorities in such jurisdictions, the status of labour or equipment availability and the ability to staff facilities, are all factors that could have an adverse impact on the Company's plans.

The Company does not currently have sufficient funds to accomplish these business objectives, and achieving all or a significant part of these business objectives is contingent on the Company completing the Offering or otherwise raising additional funds. The Company intends to spend the funds available to it from the Offering as stated above. However, there may be circumstances where, for sound business reasons, a reallocation of the net proceeds may be necessary. The actual amount that the Company spends in connection with each of the intended uses of proceeds will depend on a number of factors, including those referred to under "RISK FACTORS" in the U.S. Prospectus.

# DESCRIPTION OF THE SECURITIES BEING DISTRIBUTED

The Offering consists of up to ♦ Common Shares and/or Pre-Funded Warrants and up to ♦ accompanying Warrants (including exercise of the Over-Allotment Option). The Common Shares and accompanying Warrants will be issued at the Offering Price, and in the case of the Pre-Funded Warrants the allocation will be \$0.0001 and the purchase price will be the Offering Price less \$0.0001. Pursuant to the Offering, the Company has agreed to issue Underwriters' Warrants to the Underwriters.

#### **Common Shares, Pre-Funded Warrant Shares and Warrant Shares**

The Common Shares, the Pre-Funded Warrant Shares and the Warrant Shares issued pursuant to the Offering will have all of the characteristics, rights and restrictions of our Common Shares. See "DESCRIPTION OF CAPITAL STOCK – COMMON SHARES" in the U.S. Prospectus for a description of the material attributes and characteristics of the Common Shares.

#### Warrants

Each Warrant or Pre-Funded Warrant will be transferable and will entitle the holder thereof to acquire one Warrant Share or Pre-Funded Warrant Share at an exercise price of \$♠ per Warrant Share or \$♠ per Pre-Funded Warrant Share, respectively. The Warrants shall expire on the date that is five years following the Closing Date. The Pre-Funded Warrants may be exercised at any time until all of the Pre-Funded Warrants are exercised in full.

#### **Underwriters' Warrants**

The Company has agreed to issue Underwriters' Warrants, the distribution of which are qualified by this Canadian Prospectus.

The Underwriters' Warrants will entitle the Underwriters to purchase Common Shares equal to 5% of the number of Common Shares and Pre-Funded Warrant Shares sold in the Offering (including any Additional Shares and/or common share underlying Additional Pre-Funded Warrants issued upon the exercise of the Over-Allotment Option). The Underwriters' Warrants will have an exercise price equal to \$♠ on the Registration Statement and will expire five years following the commencement of sales of the Common Shares.

The Common Shares issuable upon exercise of the Underwriters' Warrants are identical to those offered by this Canadian Prospectus to investors. See "DESCRIPTION OF CAPITAL STOCK – COMMON SHARES" in the U.S. Prospectus for a description of the material attributes and characteristics of the Common Shares.

#### CONSOLIDATED CAPITALIZATION

Other than as described under the heading "*Prior Sales*" below, there have been no material changes to the Company's share capitalization since March 31, 2024, being the date of the Company's most recently filed interim consolidated financial statements, which are attached to the U.S. Prospectus (the "Interim Financial Statements").

The following table sets forth the capitalization of the Company as at March 31, 2024, as at the dates indicated and adjusted to give effect to the completion of the Offering. The table should be read in conjunction with the Interim Financial Statements and accompanying interim management's discussion and analysis.

Although not yet effective, on June 10, 2024, our Board of Directors approved the Reverse Stock Split with a stock split ratio of 1-for-20. We anticipate affecting the Reverse Stock Split immediately prior to the listing of our Common Shares on the Nasdaq and such Reverse Stock Split being effective on, or just before, the date our Common Shares are listed on the Nasdaq. The Reverse Stock Split is intended to allow us to meet the minimum share price requirement of the Nasdaq.

Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our Common Shares, share data, per share data and related information depict the Reverse Stock Split as if it was effective and as if it had occurred at the beginning of the earliest period presented. The Reverse Stock Split, when effective, will adjust, among other things, the number of Common Shares issuable upon exercise of outstanding options and warrants and the exercise price of such options and warrants. No fractional Common Shares will be issued in connection with the Reverse Stock Split, and any fractional shares resulting from the Reverse Stock Split will be rounded to the nearest whole share.

	As at March 31, 2024 before giving effect to the Offering <sup>(1)</sup>	As at March 31, 2024 after giving effect to the Offering <sup>(2)(3)(4)</sup>		
Common Shares	7,496,277	<b>•</b>		
Class A Restricted Shares	Nil	Nil		
Class B Preferred Series A	395,819	395,819		
Shares				
Performance Options	$320,053^{(5)}$	<b>♦</b>		
Warrants	3,086,644 <sup>(6)</sup>	<b>♦</b>		
Options	$1,019,968^{(7)}$	<b>♦</b>		
NT 4				

#### **Notes:**

- (1) Amounts have been adjusted to give effect to the Reverse Stock Split as if it was effective as at the date of this Canadian Prospectus.
- (2) Takes into account adjustments referred to in Notes (4), (6), and (7) below.
- (3) Assuming no exercise of the Over-Allotment Option. See "Plan of Distribution".
- (4) In the event the Over-Allotment Option is exercised in full a further ♦ Additional Common Shares and/or Pre-Funded Warrants and/or ♦ Additional Warrants, and ♦ additional Underwriters' Warrants will be issued.
- (5) Performance Options are exercisable at a price of \$0.20 per share subject to certain performance based vesting requirements being met and continued involvement with the Company and expire between February 1, 2026 and May 31, 2029.
- (6) Warrants are exercisable to acquire Common Shares at prices ranging from \$5.66 to \$8.00 per share and expire between August 30, 2024 and March 15, 2028.
- (7) Stock options are exercisable to acquire Common Shares at prices ranging from \$3.20 to \$8.00 per share and expire between June 1, 2029 and June 8, 2033.

# **PRIOR SALES**

During the 12 months preceding the date of this Canadian Prospectus, the Company issued the following Common Shares and securities convertible or exchangeable for Common Shares. All securities and pricing information in the table have been adjusted to give effect to the Reverse Stock Split as if it was effective as at each date of issue or grant.

Date of issue or grant	Type of Securities	Number of Securities	Issue or Exercise Price of Security	Description of Transaction
January 19, 2024	Common Shares	848,288	\$4.40	Private placement
January 19, 2024	Warrants	$900,155^{(1)}$	\$6.20	Private placement
December 22, 2023	Common Shares	457,077	\$4.40	Private placement
December 22, 2023	Warrants	493,215(2)	\$6.20	Private placement
November 8, 2023	Common Shares	229,545	\$4.40	Private placement
November 8, 2023	Warrants	$126,250^{(3)}$	\$6.20	Private placement
October 16, 2023	Common Shares	79,842	\$4.40	Private placement
October 16, 2023	Warrants	43,830 <sup>(4)</sup>	\$6.20	Private placement
August 31, 2023	Common Shares	305,703	\$4.40	Private placement
August 31, 2023	Warrants	166,491 <sup>(5)</sup>	\$6.20	Private placement
June 8, 2023	Options	792,928 <sup>(6)</sup>	C\$4.40	Incentive Stock Options

#### **Notes:**

- (1) These warrants expire on January 19, 2027.
- (2) These warrants expire on December 22, 2026.
- (3) These warrants expire on November 8, 2026.
- (4) These warrants expire on October 16, 2026.
- (5) These warrants expire on August 31, 2026.
- (6) Each stock option is exercisable into one Common Share at a price of C\$4.40 per share until June 8, 2033. 12.5% of these stock options vested immediately upon grant with the balance of the stock options vesting monthly over the following 32 months, with first full vesting June 30, 2023 and final vesting January 30, 2026. On December 19, 2023, 12,555 stock options were exercised with 4,305 stock options being net settled, resulting in the issuance of 8,250 Common Shares pursuant to the exercise. On February 5, 2024, 4,017 stock options were net settled for the exercise of 9,6250 stock options, governed by the 10% rolling stock option plan.

# TRADING PRICE AND VOLUME

The Common Shares currently trade on the CSE under the symbol "ACOG" and on the OTC under the symbol "ACOGF". On April 27, 2023, the Company announced that it received conditional approval to list its Common Shares and its listed warrants on the CSE. In connection with the CSE listing, the Company voluntarily delisted its Common Shares and listed warrants from the TSX Venture Exchange (the "TSXV") and the listing on the CSE begun on May 1, 2023. Prior to May 1, 2023, the Common Shares were traded on the TSXV under the symbol "ACOG". The following table shows the high and low trading prices and total trading volume of the Common Shares on the CSE on a monthly basis for the 12 months prior to this Canadian Prospectus, as adjusted to give effect to the Reverse Stock Split as if it was effective for each monthly period:

Month	High	Low	Volume
	(C\$)	(C\$)	
May 2024	16.40	12.80	40,512
April 2024	15.20	12.00	37,669
March 2024	18.20	14.20	10,759
February 2024	16.40	12.20	13,244
January 2024	19.80	13.20	20,864
December 2023	19.80	6.00	24,077
November 2023	7.80	4.60	5,136
October 2023	9.20	6.00	9,335
September 2023	8.80	6.80	12,330
August 2023	9.60	6.40	50,153
July 2023	8.80	4.80	34,907
June 2023	5.80	3.80	15,057

#### PRINCIPAL SECURITYHOLDERS

To the knowledge of the directors and officers of the Company, as of the date of this Canadian Prospectus, the Company does not have any persons who beneficially own, or exercise control or direction over, directly or indirectly, Common Shares carrying more than 10% of the votes attached to Common Shares. See "*Principal Stockholders*" in the U.S. Prospectus for a list of persons who beneficially own, or exercise control or direction over, directly or indirectly, Common Shares carrying more than 5% of the votes attached to Common Shares.

#### INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS

None of the directors, executive officers, employees of the Company or associates or affiliates of such persons, or any of its subsidiaries, is, as at the date of this Canadian Prospectus, or has been at any time during the most recently completed financial year, indebted to the Company or any of its subsidiaries.

#### AUDIT COMMITTEES AND CORPORATE GOVERNANCE

For a description of the Company's Board and committees of the Board, see "MANAGEMENT" in the U.S. Prospectus. The following disclosure is provided in this Canadian Prospectus to supplement the matters described under the section entitled "MANAGEMENT" in the U.S. Prospectus.

#### **Audit Committee Information**

Pursuant to the provisions of the *Business Corporations Act* (British Columbia) and NI 52-110 *Audit Committees* of the Canadian Securities Administrators ("NI 52-110"), the Company is required to have an audit committee (the "Audit Committee") and to disclose certain information concerning the constitution of its Audit Committee and its relationship with the Company's independent auditor. The general function of the Audit Committee is to review the overall audit plan and the Company's system of internal controls, to review the results of the external audit, and to resolve any potential dispute with the Company's auditor.

Prior to the completion of this Offering, we will be an SEC issuer within the meaning of National Instrument 52-107 – *Acceptable Accounting Principles and Auditing Standards* ("NI 52-107") and will be required to comply with the listing rules of the Nasdaq with respect to our Audit Committee, including its composition and other requirements. The Board has determined that the Audit Committee also satisfies the independence and financial literacy requirements of NI 52-110.

# Composition of the Audit Committee

The Company's current Audit Committee consists of Len Mertz (independent), Rajeev 'Rob' Bakshi (independent) and John Havens (independent).

NI 52-110 provides that a member of an audit committee is "independent" if the member has no direct or indirect material relationship with the Company, that could, in the view of the Board, reasonably interfere with the exercise of the member's independent judgment.

NI 52-110 provides that an individual is "financially literate" if he or she has 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 reasonably be expected to be raised by the Company's financial statements. All of the members of the Audit Committee are "financially literate" as that term is defined in NI 52-110. The Audit Committee members' education and experience that is relevant to the performance of each of their responsibilities as an audit committee member is set out in the U.S Prospectus under the section entitled see "MANAGEMENT – Audit Committee – Relevant Education and Experience."

# Reliance on Certain Exemptions

Since the effective date of NI 52-110, the Company has not relied on the exemptions contained in sections 2.4 (De Minimis Non-Audit Services), subsection 6.1.1(4) (Circumstance Affecting the Business or Operations of the Venture Issuer), subsection 6.1.1(5) (Events Outside Control of Member), subsection 6.1.1(6) (Death, Incapacity or Resignation), or under Part 8 (Exemption) of NI 52-110.

# Pre-Approval Policies and Procedures

The Audit Committee has not adopted any specific policies and procedures for the engagement of non-audit services.

# External Auditor Service Fees

The aggregate fees billed to the Company for the last two (2) fiscal years noted below by Manning Elliott LLP, the Company's auditor, are as follows:

Financial Year Ending	Audit Fees(1)	Audit Related Fees <sup>(2)</sup>	Tax Fees(3)	All Other Fees <sup>(4)</sup>
December 31, 2023	\$175,000	\$92,500	Nil	Nil
December 31, 2022	\$110,000	\$124,975	Nil	Nil

#### **Notes:**

- (1) "Audit Fees" include fees necessary to perform the annual audit and quarterly reviews of the Company's financial statements. Audit Fees include fees for review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit Fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits.
- (2) "Audit-Related Fees" include services that are traditionally performed by the auditor. These audit-related services include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation. Above Audit Related Fees primarily related to review and audit of Financial Statements prepared under Generally Accepted Accounting Principles and fees related to reviewing financials included in drafted US SEC filings.
- (3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.
- (4) "All Other Fees" include all other non-audit services.

# **Exemption**

The Company is relying on the exemption provided by section 6.1 of NI 52-110 which provides that the Company, as a venture issuer, is not required to comply with Part 3 (*Composition of the Audit Committee*) and Part 5 (*Reporting Obligations*) of NI 52-110.

#### **Board of Directors**

#### **Board Mandate**

The Board is responsible for managing or supervising the management of our business and affairs. This includes appointing our Chief Executive Officer, advising management on strategic issues, approving our business and other plans and monitoring our performance against those plans and against our operating and capital budgets. In addition, we expect that the Board will also receive and consider recommendations from our various committees with respect to matters such as the following:

- the compensation of our directors;
- criteria for board and committee membership;
- persons to be nominated for election as directors and to each of the Board's committees; and
- matters relating to our code of business conduct and ethics and corporate governance guidelines.

The Board does not have a written mandate.

# 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 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 Company's governance and nominating committee (the "Governance and Nominating Committee") is comprised of two directors of the Company, John Havens (Chair) and Len Mertz, and is also 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 Nominating Committee Charter;
- Audit Committee Charter; and
- Compensation Committee Charter.

Copies of the Code of Business Conduct and Ethics, Governance and Nomination Committee Charter, Audit Committee Charter, Disclosure Policy and Compensation Committee Charter are available on the Company's website.

#### **Board Committees**

The Company has no other committees, other than the Audit Committee, the Compensation Committee and the Governance and Nominating Committee. Being a venture issuer with limited administration resources, the Board works closely with management, and each other, and as a consequence are in a position to assess the performance of the Board, its committees and individual directors on an ongoing basis.

#### **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.

#### PLAN OF DISTRIBUTION

The following discussion supplements the discussion in the U.S. Prospectus under "UNDERWRITING".

The Securities will be offered in each of the provinces and territories of Canada, except Québec, and subject to applicable law and the Underwriting Agreement, certain jurisdictions outside of Canada, not including the United States. Pursuant to the Underwriting Agreement, the Company has agreed to issue and sell, and

the Underwriters have agreed to purchase, as principal, on the Closing Date, a total of up to ♦ Common Shares and/or Pre-Funded Warrants and up to ♦ accompanying Warrants at the Offering Price of \$♦ per Common Share or Pre-Funded Warrant and Warrant , payable in cash to the Company against delivery, subject to the terms and conditions of the Underwriting Agreement.

The Offering Price and certain other terms of the Offering have been determined by arm's length negotiations between the Company and the Underwriters.

Pursuant to the Underwriting Agreement, the Company has granted to the Representatives of the Underwriters the Over-Allotment Option exercisable in whole or in part in the sole discretion of the Underwriters at any time and from time to time until the date which is 45 days following the Closing Date, to purchase up to an additional ♦ Common Shares and/or Pre-Funded Warrants and/or ♦ accompanying Warrants, at a price equal to the Offering Price, solely to cover over-allotments, if any, and for market stabilization purposes. The Over-Allotment Option may be exercised to purchase: (a) up to ♦ Additional Common Shares at the Offering Price per Additional Shares, (b) up to ♦ Additional Pre-Funded Warrants at \$♦ per Additional Pre-Funded Warrant; (c) up to ♦ Additional Warrants at \$♦ per Additional Warrant; or (d) any combination of Additional Shares, Additional Pre-Funded Warrants and/or Additional Warrants, provided that the number of Additional Shares and/or the number of Additional Pre-Funded Warrants does not exceed ♦, and the number of Additional Warrants does not exceed ♦ (assuming completion of the Offering in full). This Canadian Prospectus also qualifies the grant of the Over-Allotment Option and the distribution of the Additional Securities upon exercise of the Over-Allotment Option. Any purchaser who acquires Additional Securities forming part of the over-allotment position of the Underwriters pursuant to the Over-Allotment Option acquires such securities under this Canadian Prospectus, regardless of whether the over-allotment position is ultimately filled through the exercise of the Over-Allotment Option or secondary market purchases.

See "UNDERWRITING – DISCOUNTS, COMMISSIONS AND EXPENSES" in the U.S. Prospectus for a description of compensation payable to the Underwriters and other fees and expenses payable in connection with this Offering.

The Company intends to complete the necessary filings with the CSE for the listing of the Common Shares, Pre-Funded Warrant Shares and the Warrant Shares issued pursuant to the Offering on the CSE. In addition, the Company is applying to list all of its Common Shares on Nasdaq under the trading symbol "ACOG". Listing will be subject CSE and Nasdaq approval and the Company fulfilling all listing requirements of both the CSE and Nasdaq.

The Offering is expected to close on or about  $\blacklozenge$ , 2024, or such other date as may be agreed upon between the Company and the Underwriters.

The Summary of the terms of the Underwriting Agreement herein and in the U.S. Prospectus under "UNDERWRITING" does not purport to be complete, and is qualified in its entirety by reference to the provisions of the Underwriting Agreement, a copy of which has been filed with the securities commissions in Canada and is available on SEDAR+ at www.sedarplus.com.

Pursuant to the policies of certain Canadian securities regulators, the Underwriters may not, throughout the period of distribution under this Canadian Prospectus, bid for or purchase Common Shares. The foregoing restriction is subject to certain exceptions, including: (a) a bid or purchase permitted under the bylaws and rules of applicable regulatory authorities and stock exchanges, including the Universal Market Integrity Rules for Canadian Marketplaces administered by the Canadian Investment Regulatory Organization, relating to market stabilization and passive market-making activities; (b) a bid or purchase made for and on behalf of a customer where the order was not solicited during the period of distribution; (c) a bid or purchase

to cover a short position entered into prior to the distribution; and (d) transactions in compliance with U.S. federal securities laws. Any such trades are permitted only on the condition that the bid or purchase is not engaged in for the purpose of creating actual or apparent active trading in or raising the price of the Common Shares.

#### INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as may be described in this Canadian Prospectus, there are no material interests, direct or indirect, of any of our directors or executive officers, any shareholder that beneficially owns, or controls or directs (directly or indirectly), more than 10% of any class or series of our outstanding voting securities, or any associate or affiliate of any of the foregoing persons, in any transaction within the three years before the date hereof that has materially affected or is reasonably expected to materially affect us or any of our subsidiaries.

# AUDITOR, TRANSFER AGENT AND REGISTRAR

The Company's auditors are Manning Elliott LLP, Chartered Accountants ("Manning Elliott") located at 1030 W. Georgia Street, Suite 1700, Vancouver, BC, V6E 2Y3. Manning Elliott is independent with respect to the Company within the meaning of the Code of Professional Conduct of the Chartered Professional Accountants of British Columbia.

The Company's transfer agent and registrar for the Common Shares is Computershare Investor Services Inc. at its principal offices at 3rd Floor, 510 Burrard Street, Vancouver, British Columbia, V6C 3B9.

#### MATERIAL CONTRACTS

The following are our only material contracts that will be in effect on the closing of this Offering, other than certain agreements entered into in the ordinary course of business:

- 1. ALPHA-1062 Agreement dated March 23, 2015, as amended effective April 1, 2015.
- 2. ALPHA-1062 Royalty Agreement dated January 1, 2016.
- 3. ALPHA-0602 Agreement dated January 1, 2020, as amended November 4, 2020.
- 4. ALPHA-0602 Royalty Agreement dated November 3, 2020.
- 5. A Second Amended License Agreement dated March 1, 2023, between the Company and Neurodyn Life Sciences Inc. for the exclusive world-wide license ALPHA 1062 technology.
- 6. Consulting Agreement between the Company and Spartan Capital Securities, LLC dated May 17, 2023
- 7. Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated May 17, 2023.
- 8. Amendment No. 1 to the Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated December 4, 2023.

- 9. A Third Amended License Agreement effective dated April 1, 2024, between the Company and Neurodyn Life Sciences Inc. for the exclusive world-wide license ALPHA 1062 technology.
- 10. Agreement and Waiver to the Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated June 10, 2024.

Copies of the foregoing documents are available on SEDAR+ at www.sedarplus.com.

#### **EXPERTS**

Certain legal matters in connection with the Offering will be passed upon on behalf of the Company by Morton Law LLP, as to Canadian legal matters, Dorsey & Whitney LLP, as to U.S. legal matters, and Legacy Tax + Trust Lawyers, with respect to matters of tax law. Certain legal matters in connection with the Offering will be passed upon on behalf of the Underwriters by Tingle Merrett LLP, as to Canadian legal matters, and Pryor Cashman LLP, as to U.S. legal matters.

As of the date of this Canadian Prospectus, the partners and associates of Morton Law LLP, Dorsey & Whitney LLP, Tingle Merrett LLP, and Pryor Cashman LLP, beneficially own, directly or indirectly, in the aggregate less than 1% of the issued and outstanding Common Shares, and the directors and shareholders of Legacy Tax + Trust Lawyers, each as a group, beneficially own, directly or indirectly, less than 1% of the outstanding Common Shares.

#### **ELIGIBILITY FOR INVESTMENT**

In the opinion of Legacy Tax + Trust Lawyers, our Canadian counsel, based on the current provisions of the *Income Tax Act* (Canada) and the regulations thereunder (the "**Tax Act**"), the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares, if issued on the date of this Offering, would be "qualified investments" under the Tax Act at a particular time for a trust governed by a registered retirement savings plan ("**RRSP**"), a registered retirement income fund ("**RRIF**"), a registered education savings plan ("**RESP**"), a registered disability savings plan ("**RDSP**"), a first home savings account ("**FHSA**"), a tax-free savings account ("**TFSA**") (each, a "**Defined Plan**") or a deferred profit sharing plan (a "**DPSP**"), provided that at such time:

- (a) in the case of the Common Shares, the Pre-Funded Warrant Shares and Warrant Shares, such shares are listed on a "designated stock exchange" as defined in the Tax Act (which currently includes the CSE) or the Company otherwise qualifies as a "public corporation" other than a "mortgage investment corporation" (each as defined in the Tax Act); and
- (b) in the case of the Pre-Funded Warrants and Warrants, (i) the such warrants are listed on a "designated stock exchange" as defined in the Tax Act (which currently includes the CSE), or (ii) the Pre-Funded Warrant Shares and Warrant Shares are qualified investments as described in (a) above and neither the Company, nor any person with whom the Company does not deal at arm's length for the purposes of the Tax Act, is an annuitant, a beneficiary, an employer or a subscriber under, or a holder of, the particular Defined Plan or DPSP.

Notwithstanding that the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares may be qualified investments for a trust governed by a Defined Plan, the annuitant under an RRSP or RRIF, the holder of an RDSP, a TFSA or a FHSA or a subscriber of an RESP, as applicable, will be subject to a penalty tax if such Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares are "prohibited investments" (as defined in the Tax Act) for the relevant Defined Plan. The Common Shares, Pre-Funded Warrants, Pre-Funded Warrants and

Warrant Shares will generally not be a "prohibited investment" provided that the annuitant under the RRSP or RRIF, the holder of the RDSP, TFSA or FHSA or subscriber of the RESP, as applicable, deals at arm's length with the Company for purposes of the Tax Act and does not have a "significant interest" (as defined in the Tax Act) in the Company. Prospective purchasers who intend to hold the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares in a Defined Plan should consult their own tax advisors regarding whether the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares will be a prohibited investment in their particular circumstances.

# CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

In the opinion of Legacy Tax + Trust Lawyers, our Canadian counsel, the following is a general summary, as of the date hereof, of the principal Canadian federal income tax considerations under the Tax Act generally applicable to a holder who acquires, as beneficial owner, Common Shares, Pre-Funded Warrants and Warrants comprising the Securities pursuant to this Offering. This summary applies only to a holder who, for the purposes of the Tax Act and at all relevant times: (i) is or is deemed to be, a resident of Canada, (ii) deals at arm's length with the Company and the Underwriters and is not affiliated with the Company or the Underwriters, and (iii) acquires and holds the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares as capital property (a "Resident Holder").

Generally, the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares will be considered to be capital property to a Resident Holder unless they are held in the course of carrying on a business or were acquired in one or more transactions considered to be an adventure or concern in the nature of trade. A Resident Holder whose Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares might not otherwise qualify as capital property may, in certain circumstances, be entitled to make the irrevocable election provided by subsection 39(4) of the Tax Act to have its Common Shares, Pre-Funded Warrant Shares and Warrant Shares and every other "Canadian security" (as defined in the Tax Act) owned by such Resident Holder in the taxation year of the election and in all subsequent taxation years deemed to be capital property. Such Resident Holders should consult their own tax advisors as to whether an election under subsection 39(4) of the Tax Act is available and/or advisable in their particular circumstances.

This summary is not applicable to a Resident Holder: (i) that is a "financial institution" within the meaning of the Tax Act (including for the purposes of the mark-to-market rules in the Tax Act); (ii) that is a "specified financial institution" within the meaning of the Tax Act; (iii) that reports its "Canadian tax results" within the meaning of the Tax Act in a currency other than Canadian currency; (iv) an interest in which is, or for whom the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares would be, a "tax shelter investment" within the meaning of the Tax Act; (v) that enters into or has entered into, with respect to the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares, a "derivative forward agreement" or "synthetic disposition arrangement" as those terms are defined in the Tax Act; (vi) that is exempt from tax under Part I of the Tax Act; or (vii) that receives dividends on the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares under or as part of a "dividend rental arrangement" as defined in the Tax Act. Such Resident Holders should consult their own tax advisors.

Additional considerations, not discussed herein, may be applicable to a Resident Holder that is a corporation resident in Canada, and is or becomes (or does not deal at arm's length, for purposes of the Tax Act, with a corporation resident in Canada that is or becomes), as part of a transaction or event or series of transactions or events that includes the acquisition of the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares, controlled by a non-resident person, or group of non-resident persons not dealing with each other at arm's length, for purposes of the "foreign affiliate dumping" rules in section 212.3 of the Tax Act. Such Resident Holders should consult their tax advisors with respect to the consequences of acquiring the Units.

This summary does not address the deductibility of interest by a Resident Holder who has borrowed money or otherwise incurred debt in connection with the acquisition of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares.

This summary is based upon: (i) the current provisions of the Tax Act in force as of the date hereof; (ii) all specific proposals (the "Tax Proposals") to amend the Tax Act that have been publicly announced by, or on behalf of, the Minister of Finance (Canada) prior to the date hereof; and (iii) counsel's understanding of the current published administrative policies and assessing practices of the Canada Revenue Agency (the "CRA") made publicly available in writing prior to the date hereof. This summary assumes that all such Tax Proposals will be enacted in the form currently proposed but no assurance can be given that they will be enacted in the form proposed or at all. This summary does not otherwise take into account or anticipate any changes in law, administrative policy or assessing practice, whether by legislative, regulatory, administrative, governmental or judicial interpretation, decision or action, nor does it take into account the tax laws of any province or territory of Canada or of any jurisdiction outside of Canada, which may differ from the Canadian federal income tax considerations described herein.

Generally, for purposes of the Tax Act, all amounts relating to the acquisition, holding or disposition of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares must be expressed in Canadian currency. Amounts denominated in another currency must be converted into Canadian currency using the applicable rate of exchange (pursuant to the Tax Act) quoted by the Bank of Canada on the date such amounts arose, or such other rate of exchange as is acceptable to the CRA. The amount of dividends required to be included in the income of, and capital gains or capital losses realized by, a Resident Holder may be affected by fluctuations in the Canadian / U.S. dollar exchange rate.

This summary is not exhaustive of all possible Canadian federal income tax considerations of purchasing, holding or disposing of the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares. Moreover, this summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any particular Resident Holder and no representation with respect to the income tax consequences to any particular Resident Holder is made. Accordingly, Resident Holders are urged to consult their own tax advisors about the specific tax consequences to them of acquiring, holding and disposing of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares in their particular circumstances.

# Allocation of Offering Price

Resident Holders will be required to allocate the Offering Price between the Common Share and/or Pre-Funded Warrant and accompanying Warrant on a reasonable basis in order to determine their respective costs for the purposes of the Tax Act. The Company intends to allocate \$♠ of the Offering Price to each Common Share and \$♠ of the Offering Price to each Warrant, provided in the case of the Pre-Funded Warrants the allocation will be \$0.0001 and the purchase price will be the Offering Price less \$0.0001 . As of the date of this Canadian Prospectus, the Company believes that such allocation is reasonable, but such

allocation will not be binding on the CRA or a Resident Holder, and counsel express no opinion with respect to such allocation. The adjusted cost base to a Resident Holder of a Common Share will be determined by averaging the cost of such Common Share with the adjusted cost base of all other Common Shares of the Company held by the Resident Holder as capital property immediately before such acquisition.

# Exercise of Warrants

The exercise of a Warrant to acquire a Warrant Share will not constitute a disposition of property for the purposes of the Tax Act and, consequently, no gain or loss will be realized by a Resident Holder on the exercise of a Warrant to acquire a Warrant Share. When a Warrant is exercised, the Resident Holder's cost of the Warrant Share acquired thereby will be equal to the aggregate of the Resident Holder's adjusted cost base of such Warrant and the exercise price paid for the Warrant Share. The Resident Holder's adjusted cost base of the Warrant Share so acquired will be determined by averaging the cost of the Warrant Share with the adjusted cost base to the Resident Holder of all other Common Shares of the Company held by the Resident Holder as capital property immediately before such acquisition.

# **Expiry of Warrants**

The expiry of an unexercised Warrant generally will result in a capital loss to the Resident Holder equal to the adjusted cost base of the Warrant to the Resident Holder immediately before its expiry. See discussion below under the subheading "Taxation of Capital Gains and Capital Losses".

# Taxation of Dividends Received by Resident Holders

A Resident Holder will be required to include in computing its income for a taxation year any taxable dividend received or deemed to be received on a Common Share or Pre-Funded Warrant Share or Warrant Share. In the case of a Resident Holder that is an individual (other than certain trusts), such dividend will be subject to the gross-up and dividend tax credit rules normally applicable under the Tax Act to taxable dividends received from taxable Canadian corporations. Taxable dividends that are designated by the Company as "eligible dividends" will be subject to an enhanced gross-up and tax credit regime in accordance with the rules in the Tax Act. There may be limitations on the ability of the Company to designate dividends as eligible dividends. In the case of a Resident Holder that is a corporation, the amount of any such taxable dividend that is included in its income for a taxation year will generally be deductible in computing its taxable income for that taxation year. In certain circumstances, subsection 55(2) of the Tax Act will treat a taxable dividend received by a Resident Holder that is a corporation as proceeds of a disposition or a capital gain. Resident Holders that are corporations should consult their own tax advisors having regard to their own circumstances.

A Resident Holder that is a "private corporation" (as defined in the Tax Act) or a "subject corporation" (as defined for the purposes of Part IV of the Tax Act), may be liable to pay an additional tax (refundable in certain circumstances) under Part IV of the Tax Act on dividends received or deemed to be received on the Shares to the extent such dividends are deductible in computing taxable income for the year.

# Disposition of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares

A Resident Holder who disposes of or is deemed for the purposes of the Tax Act to have disposed of a Common Share or Pre-Funded Warrant Share or Warrant Share (other than to the Company unless purchased by the Company in the open market in the manner in which shares are normally purchased by any member of the public in the open market) or a Warrant or a Pre-Funded Warrant (other than on the expiry or exercise thereof), will realize a capital gain (or incur a capital loss) equal to the amount by which

the proceeds of disposition in respect of the Common Share, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrant Share or Warrant exceed (or are exceeded by) the aggregate of: (i) the adjusted cost base to the Resident Holder of such Common Share, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrant Share or Warrant immediately before the disposition; and (ii) any reasonable expenses incurred for the purpose of making the disposition. The adjusted cost base to a Resident Holder of a Common Share or Pre-Funded Warrant or Warrant acquired pursuant to the Offering or a Warrant Share acquired pursuant to the exercise of a Warrant or a Pre-Funded Warrant Share acquired pursuant to the exercise of a Pre-Funded Warrant will be calculated as set out under the subheadings "Allocation of Offering Price" and "Exercise of Warrants" above. The tax treatment of capital gains and capital losses is discussed in greater detail below under the subheading "Taxation of Capital Gains and Capital Losses".

# Taxation of Capital Gains and Capital Losses

Generally, one-half of any capital gain (a "taxable capital gain") realized by a Resident Holder must be included in the Resident Holder's income for the taxation year in which the disposition (or deemed disposition) occurs. Subject to and in accordance with the provisions of the Tax Act, one-half of any capital loss incurred by a Resident Holder (an "allowable capital loss") must generally be deducted from taxable capital gains realized by the Resident Holder in the taxation year in which the disposition (or deemed disposition) occurs. Allowable capital losses in excess of taxable capital gains for the taxation year of disposition (or deemed disposition) generally may be carried back and deducted in the three preceding taxation years or carried forward and deducted in any subsequent taxation year against net taxable capital gains realized in such years, to the extent and under the circumstances provided in the Tax Act.

Pursuant to Tax Proposals announced in the Federal Budget on April 16, 2024 (the "Budget 2024 Tax Proposals"), subject to certain transitional rules, the portion of a capital gain included in the taxable capital gain will be increased from one-half to two-thirds in respect of (i) dispositions realized by a Resident Holder that is an individual (excluding a trust) on or after June 25, 2024, for the portion of capital gains realized in the year (or, in the case of the 2024 taxation year, the portion of the year beginning on June 25, 2024) that exceed \$250,000 (net of current-year capital losses, capital losses of other years applied to reduce current-year capital gains and capital gains subject to certain statutory exemptions and incentives), and (ii) dispositions realized by a Resident Holder that is a corporation or trust on or after June 25, 2024. Under the Budget 2024 Tax Proposals, two-thirds of capital losses (including capital losses realized prior to June 25, 2024) will be deductible against capital gains included in income at the two-thirds inclusion rate such that a capital loss will offset an equivalent capital gain regardless of the inclusion rate. On July 10, 2024, draft legislation was released containing proposed comprehensive rules as part of a Notice of Ways and Means Motion to introduce An Act to amend the Income Tax Act and the Income Tax Regulations. Resident Holders are advised to consult their personal tax advisors with regard to the Budget 2024 Tax Proposals and draft legislation.

The amount of any capital loss realized on the disposition or deemed disposition of Common Shares or Pre-Funded Warrant Share or Warrant Shares by a Resident Holder that is a corporation may, in certain circumstances, be reduced by the amount of dividends (including deemed dividends) which have been previously received (or deemed to be received) by it on such shares or shares substituted for such shares to the extent and under the circumstances specified by the Tax Act. Similar rules may apply where a Resident Holder that is a corporation is a member of a partnership or beneficiary of a trust that owns such shares or that itself is a member of a partnership or a beneficiary of a trust that owns such shares. Resident Holders to whom these rules may be relevant should consult their own tax advisors.

A Resident Holder that is throughout its taxation year a "Canadian-controlled private corporation" (as defined in the Tax Act) may be liable to pay an additional refundable tax on its "aggregate investment income", which includes an amount in respect of taxable capital gains. Tax Proposals contained in Bill C-59 tabled in Parliament on November 30, 2023 would, if enacted, extend this additional tax and refund mechanism in respect of "aggregate investment income" to a Resident Holder that is or is deemed to be a "substantive CCPC" (as defined in the Tax Proposals) at any time in the relevant taxation year. Resident Holders are advised to consult their own tax advisors.

Capital gains realized (or deemed to be realized) by a Resident Holder who is an individual (other than certain trusts) may give rise to alternative minimum tax under the Tax Act. Resident Holders should consult their own advisors with respect to the application of alternative minimum tax.

# **MARKETING MATERIALS**

Any template version of any other marketing materials filed with the securities commission or similar regulatory authority in each of the provinces and territories of Canada, other than Québec, in connection with this Offering after the date hereof, but prior to the termination of the distribution of the Units under this Canadian Prospectus (including any amendments to, or an amended version of, any template version of any marketing materials), is deemed to be incorporated by reference herein. Any template version of any marketing materials used in connection with this Offering is not part of this Canadian Prospectus to the extent that the contents of the template version of the marketing materials have been modified or superseded by a statement contained in this Canadian Prospectus.

#### CONTINUOUS DISCLOSURE

We recently became subject to the reporting requirements of the United States Securities and Exchange Commission under Section 15(d) of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"), and we will be filing annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K in order to satisfy our periodic disclosure requirements under the Exchange Act. We intend to comply with applicable Canadian continuous disclosure requirements under National Instrument 51-102 *Continuous Disclosure Obligations* and other applicable Canadian securities laws, including any provisions available to an SEC Issuer within the meaning of such instrument and other applicable Canadian securities laws, which may result in us filing our annual reports on Form 10-K and quarterly reports on Form 10-Q in Canada to satisfy our Canadian continuous disclosure requirements.

# NOTICE TO INVESTORS REGARDING U.S. GAAP

We prepare our financial information in accordance with U.S. generally accepted accounting principles, which differ in certain material respects from Canadian generally accepted accounting principles applicable to publicly accountable enterprises (which are International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"). As we are an SEC issuer (as such term is defined in NI 52-107), we are not required to provide, and have not provided, a reconciliation of our financial statements to IFRS.

# STATUTORY RIGHTS OF WITHDRAWAL AND RESCISSION

Securities legislation in certain of the provinces and territories of Canada provides purchasers with the right to withdraw from an agreement to purchase securities. This right may be exercised within two business days after receipt or deemed receipt of this Canadian Prospectus and any amendment. The securities legislation further provides a purchaser with remedies for rescission or, in some jurisdictions, revisions of the price or damages if the prospectus and any amendment contains a misrepresentation or is not delivered to the purchaser, provided that the remedies for rescission, revisions of the price or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for the particulars of these rights or consult with a legal adviser.

# U.S. PROSPECTUS

(See Attached)

#### **Table of Contents**

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

**Preliminary Prospectus** 

Subject to completion, June 13, 2024



Up to 1,334,821 Common Shares

Up to 1,334,821 Pre-Funded Warrants to Purchase 1,334,821 Common Shares
Up to 1,334,821 Warrants to Purchase 1,334,821 Common Shares
Up to 1,334,821 Common Shares underlying such Pre-Funded Warrants
Up to 1,334,821 Common Shares underlying such Warrants

This is a firm commitment offering of up to 1,334,821 of our common shares, no par value (the "common shares") together with warrants to purchase up to 1,334,821 of our common shares (the "warrants") pursuant to this prospectus at an assumed combined offering price of \$11.20 per Share and accompanying warrant (which represents the Reverse Stock Split (as defined below) adjusted closing price of our common shares as quoted on the OTCQB® Venture Market by OTC Markets Group (the "OTCQB") on June 13, 2024). Each warrant is exercisable to purchase one common share (each, a "warrant share") at an assumed exercise price of \$15.12 (which represents 135% of the assumed offering price per common share and accompanying warrant), will be exercisable upon issuance and will expire five years from the date of issuance, subject to our option call the warrants for redemption, in whole or in part, at a price of \$0.0001 per warrant, upon not less than 30 days' prior written notice of the redemption, if, and only if, the reported last sale price of the common shares equals or exceeds 150% of the exercise price of the warrants for any 15 consecutive trading days commencing on the date upon which the warrants are issued and ending three trading days before we send the notice of redemption. The common shares and warrants will be issued and sold to purchasers in the ratio of one-to-one. The common shares and warrants will be issued separately and will be immediately separable upon issuance but will be purchased together in this offering. This prospectus also relates to the offering of the warrant shares issuable upon exercise of the warrants.

We are also offering to certain purchasers whose purchase of common shares in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares immediately following the consummation of this offering, the opportunity to purchase, if any such purchaser so chooses, up to 1,334,821 pre-funded warrants (the "pre-funded warrants") to purchase up to 1,334,821 common shares, in lieu of common shares that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares. Each pre-funded warrant will be exercisable for one common share (each, a "pre-funded warrant share"). The exercise price of each pre-funded warrant will be US\$0.0001 per pre-funded warrant share. The pre-funded warrants will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. The combined offering price per pre-funded warrant and accompanying warrant is equal to \$11.1999, which is equal to the combined offering price per common share and accompanying warrants less \$0.0001. For each pre-funded warrant we sell, the number of common shares we are offering will be decreased on a

one-for-one basis. This prospectus also relates to the common shares issuable upon exercise of the pre-funded warrants sold in this offering.

We have applied to list our common shares on the Nasdaq Capital Market under the trading symbol "ACOG". Our common shares are currently traded on the Canadian Securities Exchange (the "CSE") under the symbol "ACOG" and quoted for trading on the OTCQB in under the symbol "ACOGF". If our application to the Nasdaq Capital Market is not approved or we otherwise determine that we will not be able to secure the listing of the common shares on the NASDAQ Capital Market, we will not complete the offering. There is no established public trading market for the warrants or pre-funded warrants, and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the warrants or pre-funded warrants on any national securities exchange. Without an active trading market, the liquidity of the warrants or pre-funded warrants will be limited.

On June 13, 2024, the last reported sale price of our common shares on the CSE was C\$0.80 and the last quoted price of our common shares on OTCQB was \$0.56.

Although not yet effective, on June 10, 2024, our Board of Directors approved a reverse stock split with a stock split ratio of 1-for-20 ("Reverse Stock Split"). We anticipate affecting the Reverse Stock Split immediately prior to the uplisting of our common shares on the Nasdaq Capital Market and such Reverse Stock Split being effective on, or just before, the date our common shares are uplisted to the Nasdaq Capital Market. The reverse stock split is intended to allow us to meet the minimum share price requirement of the Nasdaq Capital Market.

#### **Table of Contents**

Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our common shares, pre-funded warrants, warrants, share data, per share data and related information depict the Reverse Stock Split as if it was effective and as if it had occurred at the beginning of the earliest period presented. The Reverse Stock Split, when effective, will combine each twenty shares of our outstanding common shares into one common share, without any change in the par value per share, and the Reverse Stock Split correspondingly will adjust, among other things, the number of common shares issuable upon exercise of outstanding options and warrants and the exercise price of such options and warrants and shares issuable upon conversion of preferred stock and other convertible securities with the par value of the preferred stock being adjusted to reflect the effect of the Reverse Stock Split. No fractional shares will be issued in connection with the Reverse Stock Split, and any fractional shares resulting from the Reverse Stock Split will be rounded to the nearest whole share.

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

	Per Common Share and accompanying Warrant	Per Pre-Funded Warrant and accompanying Warrant	Total
Public offering price	\$	\$	\$
Underwriting discounts and commissions <sup>(1)</sup>	\$	\$	\$
Proceeds, before expenses, to us <sup>(2)</sup>	\$	\$	\$

<sup>(1)</sup> See "Underwriting" beginning on page 156 for a description of compensation payable to the underwriters and other fees payable in connection with this offering.

We have granted to the representative of the underwriters an option to purchase up to an additional 200,223 common shares and/or pre-funded warrants and/or an additional 200,223 warrants from us to cover over-allotments, if any, at the public offering price (based on the assumed combined offering price, \$11.19 per common share, \$11.1899 per pre-funded warrant and \$0.01 per warrant), less the underwriting discounts and commissions. If the representative exercises this option in full, the total underwriting discounts and commissions payable by us will be \$\\$, and the

<sup>(2)</sup> The amount of the offering proceeds in this table does not give effect to any exercise of the warrants or pre-funded warrants being issued in this offering.

total proceeds to us, before expenses, will be \$ . The representative can exercise this option in whole or in part at any time and from time to time within 45 days after the date of this prospectus.

We have agreed to issue to the representative at the closing of the offering, warrants to purchase a number of common shares equal to five percent (5%) of the common shares issued in the offering (the "underwriters warrants"). See "Underwriting." This prospectus also relates to the common shares issuable upon exercise of the underwriters warrants.

Investing in our common shares, pre-funded warrants, and warrants involves a high degree of risk. See "Risk Factors" beginning on page 20 to read about factors you should consider before buying our common shares, pre-funded warrants and warrant.

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

The underwriters expects to deliver the common shares, pre-funded warrants, and warrants to purchasers on or about , 2024.

Sole Book-Running Manager

# A.G.P.

Co-Manager

# **Brookline Capital Markets**

a division of Arcadia Securities, LLC

Prospectus dated , 2024

# **Table of Contents**

#### **TABLE OF CONTENTS**

	Page
ABOUT THIS PROSPECTUS	ii
PROSPECTUS SUMMARY	1
THE OFFERING	16
SUMMARY CONSOLIDATED FINANCIAL DATA	19
RISK FACTORS	20
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	74
CURRENCY PRESENTATION	77
MARKET AND INDUSTRY DATA	77
<u>TRADEMARKS</u>	77
MARKET PRICE INFORMATION AND DIVIDEND POLICY	78
<u>USE OF PROCEEDS</u>	79
<u>BUSINESS</u>	84
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	109
DESCRIPTION OF PROPERTIES	127

<u>MANAGEMENT</u>	128
EXECUTIVE COMPENSATION	137
PRINCIPAL STOCKHOLDERS	142
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	144
DESCRIPTION OF CAPITAL STOCK AND SECURITIES BEING ISSUED	145
<u>UNDERWRITING</u>	156
MATERIAL CANADIAN FEDERAL INCOME TAX CONSIDERATIONS	164
CERTAIN MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS	165
<u>LEGAL MATTERS</u>	176
<u>EXPERTS</u>	176
WHERE YOU CAN FIND MORE INFORMATION	176
INDEX TO FINANCIAL STATEMENTS	F-1
;	

# **Table of Contents**

#### ABOUT THIS PROSPECTUS

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

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

Through and including , 2024 (25 days after the date of this prospectus), all dealers that effect transactions in our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

ii

#### **Table of Contents**

#### PROSPECTUS SUMMARY

This summary highlights information regarding our business and the offering contained elsewhere in this prospectus and does not contain all of the information that may be important to you in making an investment decision. You should

read this entire prospectus carefully, including the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

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

#### **Our Business**

The Company is a pre-commercial, biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's disease ("Alzheimer's disease" or "AD"), for which there are limited or no treatment options. The Company is focused on the development of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's disease following the recent New Drug Application (the "NDA") submission and acceptance by FDA. The company is now focused on FDA review of the NDA, approval, and subsequent 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 pre-clinical development programs: ALPHA-1062 in combination with memantine for the treatment of moderate-to-severe Alzheimer's disease, ALPHA-1062 sublingual formulation, ALPHA-1062 intranasal ("ALPHA-1062IN") formulation for the treatment of cognitive impairment with mild traumatic brain injury (mTBI; otherwise known as concussion) and ALPHA-0602, ALPHA-0702 & ALPHA-0802, also referred to as 'Progranulin' and 'Progranulin GEM's', for the treatment of neurodegenerative diseases including amyotrophic lateral sclerosis, otherwise known as ALS or Lou Gehrig's disease and spinal muscular atrophy (SMA).

ALPHA-1062, is a patented new innovative product 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 pre-clinical development in combination with memantine to treat moderate to severe Alzheimer's disease, in pre-clinical development with sublingual formulation for patients suffering from dysphagia, and is intended to be out-licensed for pre-clinical development to study an intranasal formulation for cognitive impairment with mTBI.

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

#### Future TBI Out-License

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

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

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

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

The establishment and funding of Alpha Seven as described above is at the proposal stage only. There is no guarantee that the Company will be successful launching Alpha Seven as a separately funded entity as described above or at all. There is no guarantee that Alpha Seven will be successful in advancing the ALPHA-1062 for use in TBI or mTBI.

#### **Our Markets and Opportunities**

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

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

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

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

2

#### **Table of Contents**

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

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

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

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

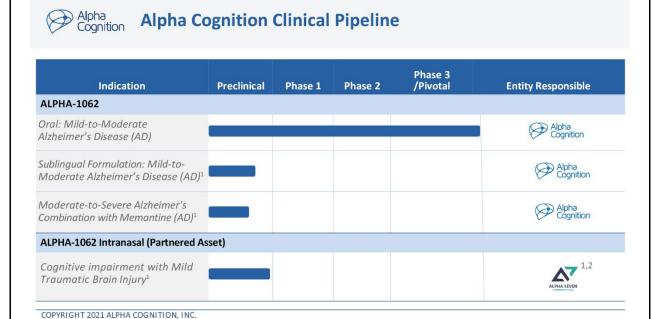
# Traumatic Brain Injury (TBI) Market

According to secondary market research conducted by and for the Company, including a report prepared by a third-party paid for by the Company dated June 2020, we believe that TBI is a highly prevalent, and increasingly common condition, with nearly 3 million diagnosed events occurring in the United States alone in 2019 with an estimated 91% of such events being mTBI. Based on hospitalizations and emergency room visits data reported by the Brain Injury Association of America, we estimate that 79% of these diagnosed annual events are adults. Residual Traumatic Brain Injury symptoms may impact patient Quality of Life, social relationships, and ability to work. Approximately 50% of mTBI patients have persistent cognitive dysfunction<sup>1</sup>, representing an estimated, based on events data above, 1.5M cases per year. Cognitive impairment includes symptoms such as short-term memory loss, trouble concentrating, difficulty multi-tasking, lack of focus, and slowed brain processing. We plan for ALPHA-1062 Intranasal to be studied in adult patients (18+ years) who are suffering from the cognitive symptoms associated with mild traumatic brain injury, with an addressable market of 1.1 million patients per year (3M diagnosed per year, 91% mild, 50% with cognitive impairment, 79% adults). We estimate that a treatment to manage cognitive impairment with mTBI would have a \$13.5B market size (1.1M cases per yr X assuming a \$12.5K per treatment course) in the U.S. Due to high unmet need, no approved treatment, and disability associated with the disorder, there is a significant need for an approved treatment expressed by governments, payers, and physicians.

# **Table of Contents**

# **Our Products and Approaches to Treatment**

The following table highlights our preclinical and clinical programs.



1 Contingent on sufficient capital to be raised.

2 Alpha Seven was incorporated in Delaware in June 2023. The out-license of ALPHA-1062IN for mTBI and TBI technology to Alpha Seven has not yet occurred and development is contingent on such out-licensing being finalized and Alpha Seven raising sufficient financing to progress the technology.

#### Alzheimer's Disease Mild-to-Moderate Stage: ALPHA-1062 prodrug, delayed release oral tablet

The Section 505(b)(2) regulatory approval pathway is a provision in the U.S. Federal Food, Drug, and Cosmetic Act. It allows a company to seek FDA approval for a drug product that contains previously approved active ingredients, but with new formulations, dosages, routes of administration, or indications. This pathway enables companies to rely on existing data, such as safety and efficacy information from studies on the previously approved drug, along with additional data to support the changes. It can offer a more streamlined and potentially faster route to market compared to traditional new drug clinical study process. However, there is no assurance that FDA approval will be obtained on a streamlined basis, if at all.

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

absorption into the bloodstream (bioavailability) and its subsequent distribution, metabolism, and excretion (pharmacokinetics). In contrast, traditional efficacy trials focus on demonstrating the clinical effectiveness and safety of a drug in treating a specific disease or condition.

The Company has filed an NDA using the 505(b)(2) pathway for approval. The Company has met with the FDA to discuss the regulatory requirements for a 505(b)(2) application, and has conducted its bioavailability and bioequivalence pivotal studies in direct alignment with the FDA feedback, as well as the FDA guidance document for 505(b)(2) approvals. The NDA will undergo a review by the FDA and may or may not be approved on an abbreviated timeframe, if at all.

4

#### **Table of Contents**

ALPHA-1062 is a patented new innovative product and 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 better patient outcomes. Drugs that convert from an inert form to an active substance insitu are referred to as "prodrugs". Since ALPHA-1062's active moiety is galantamine, and because the Company is pursuing a 505(b)(2) pathway, the Company plans to leverage Galantamine's efficacy data in promotion. 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 believes ALPHA-1062 works in two different ways within the brain, by (1) raising the concentration of an essential chemical that transmits signals between nerve cells called acetylcholine, and (2) increasing the sensitivity of another chemical, called nicotinic acetylcholine receptors (nAChRs), which also enhances acetylcholine, regulates inflammation, defends against the loss of amyloid and strengthens other transmitters within the brain. The Company believes this results in enhancement and improvement of:

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

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 sublingual formulation will be developed as an alternative formulation for patients who suffer from dysphagia (inability to swallow). A number of Alzheimer's patients are estimated to suffer from dysphagia and utilize alternative liquid or patch formulations for medicine administration. A systematic review (dement Neuropsychol. 2022 Jul-Sep; 16(3): 261-269) estimated dysphagia prevalence of greater than 80% of moderate to severe patients with Alzheimer's. The sublingual formulation would allow for a dissolvable tablet that could provide medicine to these patients in an alternative method of administration. The Company completed an in vitro study to evaluate absorption

of the technology with a sublingual tablet formulation. The study demonstrated that the tablet enabled active drug release in 30 seconds. An open label, single-dose, bioavailability study was conducted to determine the plasma levels of ALPHA-1062 in healthy, adults under fasting conditions. An 11mg sublingual tablet was administered to 10 subjects to measure active bioavailability, tolerability, and safety. Study results demonstrated 90% bioavailability and a formulation that was well tolerated. No safety signals were observed in the study. The formulation is in early development phases and further development will be contingent upon additional capital resources through financing and alignment with Food and Drug Administration (FDA) regarding this development program, no specific development plans have been determined at this time.

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

Should the Company receive approval for ALPHA-1062 for mild-to-moderate Alzheimer's Disease, we plan to progress the development of ALPHA-1062 + memantine. The product combination is currently in pre-clinical development phase and will require formulation work and potentially a preclinical study before submitting an IND to FDA. The Company plans to initiate the streamlined 505(b)2 regulatory path for approval, but will need additional FDA feedback on the required development steps for the combination asset. The Company believes ALPHA-1062 + memantine may utilize a triple mechanism of action approach to optimize therapeutic effect. The mechanism of action works

5

# **Table of Contents**

via the dual ALPHA-1062 pathways, acetylcholinesterase inhibition and enhancing the nicotinic receptor activity and sensitivity, plus the memantine pathway via a different neurotransmitter called N-methyl-D-aspartate receptor antagonism (NMDA receptor). The Company believes ALPHA-1062 + memantine could potentially capture market share by providing education on its differentiating features and product profile to physicians who prescribe combination products, and to caregivers who care for patients already on a combination product and/or are in the later stages of Alzheimer's Disease symptom progression. The formulation is in early development stages and further development will be contingent upon the Company obtaining additional capital resources through financing and further alignment with FDA on the development program.

# Traumatic Brain Injury: ALPHA-1062 Intranasal Formulation

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

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-1062IN treated group was statistically indistinguishable from that of the uninjured cohort.

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

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

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

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

6

#### **Table of Contents**

#### **Our Strategy**

The Company's principal business objectives are to:

- Obtain FDA approval for its NDA for ALPHA-1062 in mild-to-moderate Alzheimer's disease. The Company has been granted a Prescription Drug User Fee Act (PDUFA) goal date of July 27th, 2024. The PDUFA date serves as a "best estimate" of when a decision on a New Drug Application would be forthcoming. This response may be a decision to approve the application or a Complete Response Letter (CRL). A CRL is a notice issued by the FDA indicating that an application will not be approved in its present form. Notwithstanding the goal date, the FDA could conduct a longer than expected regulatory review process, resulting in increased expected development costs or the delay or prevention of commercialization of ALPHA-1062. Even if ALPHA-1062 is ultimately approved, it may not achieve commercial success. The Company does not expect ALPHA-1062 to be commercially available immediately following approval. The Company will need to raise substantial additional capital in order to fund its operations and commercialization plans for ALPHA-1062, should the product be approved.
- Continue to advance its development and commercialization activities for ALPHA-1062 in mild-to-moderate Alzheimer's disease, including the commercial manufacturing for ALPHA-1062.
- 3) Pursue the out-licensing of its TBI indication to Alpha Seven, where the TBI indication can be further developed through a complete IND application submission following the completion of an additional toxicity study and formulation work.

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

ALPHA-1062 U.S. product approval for treatment of mild-to-moderate Alzheimer's disease — The
Company will need to respond to regulatory questions and inquiries from FDA in a satisfactory manner
and negotiate the commercial label and approval of the product with FDA, which is anticipated in Q3
2024. If approved, ALPHA-1062 would be the second oral therapy available for Alzheimer's patients in
the past decade. The approval would represent a next generation oral treatment for disease that address

the cognitive symptoms of Alzheimer's disease. Approval could provide the Company with significant new business opportunities for commercial and/or development partners.

- 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 the Long Term Care target market, prioritization of Long Term Care ("LTC") customers, commercialization positioning, marketing messages, and operational plans.
- ALPHA-1062 Intranasal for TBI out-licensing The Company plans to complete the out-license the TBI asset into Alpha Seven where Alpha Seven plans to raise the additional capital to advance the TBI program. The Company expects to include the following in the TBI out-license agreement with the Alpha Seven: intellectual property specific to TBI, implementation of a data sharing agreement, and supply and comprehensive manufacturing agreements for technology advancements in the product. The Company also intends to utilize its existing management and new consultants experienced in TBI research and development to staff Alpha Seven. Data will be shared from pre-clinical, clinical, and manufacturing work to Alpha Seven to help the Company advance the asset.

#### Our Team

The Company's executive team comprises of pharmaceutical experts with over 27 drug approvals and 33 commercial launches, specifically in the Central Nervous System and the Alzheimer's Disease space. They have a combined

7

# **Table of Contents**

track record of managing drug development programs that have received regulatory approval and been successfully commercialized. These Central Nervous System programs include but are not limited to companies such as Pharmacia, Lilly, Axsome, Genetech/Roche, Pfizer, and AstraZeneca.

Michael McFadden, Chief Executive Officer ("CEO"). Mr. McFadden has served as a Pharmaceutical and Biotechnology Executive since 2010. Most recently, he was Chief Commercial Officer (CCO) for MPower Health. Prior to that he was CCO for Urovant Sciences and SVP Sales and Marketing for Avanir Pharmaceuticals. Mr. McFadden has 30 years' experience in biotech/pharmaceutical business and has worked for companies in the start-up/early stage through commercialization. Mr. McFadden received a B.B.A. in Accounting from the University of Louisiana Monroe. Mr. McFadden provides services to the Company as an employee. See the section entitled "Executive Compensation — Employment, consulting, and management agreements — Current employment, consulting and management agreements." Mr. McFadden devotes approximately 100% of his time to the business of the Company and to Alpha Seven to effectively fulfill his duties. Mr. McFadden has served as the Company's CEO since April 2021 and as a director of the Company since March 2022. He serves on the advisory board for MPower Health and on the board of directors for the Brain Injury Association of America.

Don Kalkofen, Chief Financial Officer ("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 to a financial services and global SaaS company. Mr. Kalkofen provides services to the Company as an employee. See the section entitled "Executive Compensation — Employment, consulting, and management agreements — Current employment, consulting and management agreements". Mr. Kalkofen devotes approximately 100% of his time to the business of the Company and to Alpha Seven to effectively fulfill his duties. Mr. Kalkofen has served as the Company's CFO since April 2022.

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

For further information about our business, see the section entitled "Business".

# Implications of Being an Emerging Growth Company

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

- being permitted to present only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements;

8

# Table of Contents

- exemption from certain executive compensation disclosure provisions requiring a pay-for-performance graph and CEO pay ratio disclosure; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

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

We may use these provisions until the last day of our fiscal year following the fifth anniversary of the effectiveness of the Registration Statement on Form S-1 of which this prospectus is a part. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.235 billion or we issue more than \$1 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

To the extent that we continue to qualify as a "smaller reporting company," as such term is defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, after we cease to qualify as an emerging growth company,

certain of the exemptions available to us as an emerging growth company may continue to be available to us as a smaller reporting company, including: (i) not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes Oxley Act; (ii) scaled executive compensation disclosures; and (iii) the requirement to provide only two years of audited financial statements, instead of three years.

### Implications of Being a Smaller Reporting Company

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

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

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

#### **Recent Developments**

- On June 7, 2024 the Company announced that its resale registration statement on Form S-1 registering the resale of up to 42,676,511 common shares of the Company from time to time by the selling stockholders named therein was brought effective by the staff of the SEC.
- On May 14, 2024 the Company announced its first quarter of 2024 financial results and provided a corporate update.

9

# **Table of Contents**

- On April 3, 2024 the Company announced its fourth quarter and full year 2023 financial results and provided a business update.
- On February 12, 2024, the Company announced that it filed a new composition-of-matter patent that secures broad protection for its lead asset, ALPHA-1062, currently under review by the FDA for mild-to-moderate Alzheimer's Disease. The present composition-of-matter patent application is filed for approval with the USPTO and may be extended to pursue protection throughout the world. If approved, the patent will secure composition-of-matter protection for an oral formulation of ALPHA-1062 into 2044, adding to other patent protection that currently protects ALPHA-1062 through 2042 in US and 2041 in other

- territories around the world. The filing was based on novel and unexpected findings in the clinical trial work that the Company completed and further demonstrates the uniqueness of ALPHA-1062.
- On January 19, 2024, the Company completed its fifth and final closing of the Q2 2023 PP by issuing 848,288 units at a price of \$4.40 for total gross proceeds of \$3,732,469 ("Q2 2023 PP Tranche 5"). Each unit consists of one Common Share and one whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$6.20 per share until January 19, 2027. The gross proceeds of the offering received to date are \$8.45 million, which includes shares of the fully subscribed 30% overallotment. In connection with the closing of Q2 2023 PP Tranche 5, the Company paid cash commissions of \$342,320 and issued 51,867 agents warrants to Spartan Capital Securities, LLC ("Spartan"). Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$6.20 until January 19, 2027. The Company also paid a consulting fee of \$320,000 and issued 727,914 common shares to Spartan pursuant to a consulting agreement. The Company also paid to certain finders aggregate cash commission of \$48,858, being 6% of the gross proceeds raised under the offering from investors introduced to the Company by such finders.
- During December 2023 and January 2024, the Company obtain individual shareholders' consent and changed the exercise price from CAD to USD on the following outstanding warrants.
- On February 16, 2023, the Company issued 839,761 warrants at \$7.80 CAD per share, during December 2023, 565,888 warrants and in January 2024, 50,000 warrants had the price exchanged to USD, the new USD price per share is \$5.78.
- March 15, 2023, the Company issued 347,621 warrants at \$7.80 CAD per share, during December 2023, 22,979 warrants and in January 2024, 265,353 warrants had the priced exchanged to USD, the new USD price per share is \$5.66.
  - The Company used the exchange rate on the date of the warrant grant to determine the new USD price per share.
- On December 22, 2023, the Company announced that it has completed a fourth closing pursuant to its brokered private placement of units of the Company. Pursuant to the fourth closing, the Company issued 457,077 units of the Company at a price of \$4.40 per unit for gross proceeds of \$2,011,138. Each unit consists of a common share and a warrant, with each warrant entitling the holder to purchase an additional common share at a price of \$6.20 for a period of three years. The gross proceeds of the offering received to date are \$4.7 million. The Company is continuing the offering of units on the same terms for up to an additional \$1.8 million.
- In connection with the fourth closing, Spartan received cash compensation of \$238,515 and was issued 36,139 compensation warrants of the Company, which may be exercised on the same terms as the private placement warrants.
- On December 9, 2023, the Company announced that the FDA accepted the Company's new drug application NDA for ALPHA-1062 and has granted a PDUFA goal date of July 27, 2024. ALPHA-1062 is a proprietary, patented, delayed release oral tablet formulation in development for the treatment of mild-to-moderate Alzheimer's disease.
- The Company continued to advance its development and commercialization activities for ALPHA-1062 in mild-to-moderate Alzheimer's disease, including program development and clinical manufacturing for ALPHA-1062.

- The Company continued with items discussed at the IND meeting with the FDA on matters related to the potential IND and related preclinical activities for the research and development program for Cognitive Impairment with mTBI.
- The Company continued to pursue the out-licensing of its TBI indication of ALPHA-1062 to a newly formed company which will be seeking funding, where the TBI indication can be further developed.

# **Company Information**

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

# **Organizational Structure**

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

#### **Additional Information**

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

#### **Contact Information**

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

# **NASDAQ Listing and Reverse Stock Split**

We applied to list our common shares on the Nasdaq Capital Market. If our application to the Nasdaq Capital Market is not approved or we otherwise determine that we will not be able to secure the listing of the common shares on the NASDAQ Capital Market, we will not complete the offering.

Although not yet effective, on June 10, 2024, our Board of Directors approved a reverse stock split which a stock split ratio of 1-for-20 ("Reverse Stock Split"). We anticipate affecting the Reverse Stock Split immediately prior to the uplisting of our common shares on the Nasdaq Capital Market and such Reverse Stock Split being effective on, or just before, the date our common shares are uplisted to the Nasdaq Capital Market. The reverse stock split is intended to allow us to meet the minimum share price requirement of the Nasdaq Capital Market.

#### **Table of Contents**

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

# **Summary Risk Factors**

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

#### Risks Related to Our Financial Position

- We are a pre-commercial stage biopharmaceutical company in the late stages of development or our lead
  asset 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.
- Our ability to generate revenue and achieve profitability depends significantly on our ability to achieve several objectives relating to the FDA review of our filed NDA, continued development and commercialization of our product candidates, if approved.
- We have not completed an Alzheimer's Disease patient tolerability study for ALPHA-1062 and have no
  history of commercializing products, which may make it difficult for an investor to evaluate the success
  of our business to date and to assess our future viability.
- We will need substantial additional capital to meet our financial obligations and to pursue our business objectives. If we are unable to raise capital when needed, we could be forced to delay, reduce and/or eliminate one or more of our research and drug development programs or future commercialization efforts.
- We expect to be exposed to fluctuations in currency exchange rates, which could adversely affect our results of operations.

# Risks Related to Our Business Development

- Our business is heavily dependent on the successful development, regulatory approval and commercialization of ALPHA-1062 and any future product candidates that we may develop or acquire.
- We may not successfully expand our pipeline of product candidates. If we are not successful in identifying, developing, in-licensing, acquiring or/and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.
- We may encounter substantial delays in our preclinical studies and clinical trials or may not be able to conduct or complete our preclinical studies or clinical trials on the timelines we expect, if at all.

- Use of our therapeutic candidates could be associated with side effects, adverse events or other properties
  or safety risks, which could delay or preclude approval, cause us to suspend or discontinue clinical trials,
  abandon a therapeutic candidate, limit the commercial profile of an approved label or result in other
  significant negative consequences that could severely harm our business, prospects, operating results and
  financial condition.
- Interim "top-line" and preliminary data from studies or trials that we announce or publish from time to time may change as more data becomes available and are subject to audit and verification procedures that could result in material changes in the final data.

# Table of Contents

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

# Risks Related to Our Industry

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

# Risks Related to Commercialization and Manufacturing

- 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.
- The market opportunities for ALPHA-1062, if approved, may be smaller than we anticipate.
- We rely on third-party suppliers to manufacture our product candidates, and we intend to rely on third
  parties to produce commercial supplies of 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 are subject to certain supply chain risks inherent in manufacturing our lead product, ALPHA-1062, and future products with respect to Taiwan. Risks including periodic foreign economic downturns and political instability, which may adversely affect the Company's ability to obtain materials and conduct business in Taiwan.
- Our product candidates have never been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale. In particular, we will need to develop a larger scale manufacturing process that is more efficient and cost-effective to commercialize our potential products, which may not be successful.
- The successful commercialization of our product candidates will depend in part on the extent to which
  governmental authorities and health insurers establish adequate coverage, reimbursement levels and
  pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our product
  candidates, if approved, could limit our ability to market those drugs and decrease our ability to generate
  revenue.

#### **Table of Contents**

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

# Risks Related to Our Intellectual Property

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

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

# Risks Related to Government Regulation

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

# Risks Related to Employee Matters and Growth Management

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

14

# **Table of Contents**

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

#### Risks Related to Our Common Shares and this Offering

- Our stock price may be volatile, and you may not be able to resell common shares at or above the price you paid.
- An active, liquid and orderly market for our common shares may not develop, and you may not be able to resell your common shares at or above the public offering price.
- We are an "emerging growth company" and a "smaller reporting company" and, as a result of the reduced disclosure and governance requirements applicable to emerging growth companies and smaller reporting companies, our common stock may be less attractive to investors.
- Risks related to the Company being a "passive foreign investment company" under United States tax laws.
- Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.
- If we sell common shares in future financings, stockholders may experience immediate dilution and, as a result, our stock price may decline.

- Concentration of ownership of our voting securities, including common shares and Class B Preferred Series A Shares, among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.
- Sales of a substantial number of shares of our common shares in the public market could cause our stock price to fall.
- We have broad discretion to determine how to use the funds raised in this offering, and may use them in ways that may not enhance our operating results or the price of our common stock;
- We do not currently intend to pay dividends on our common stock, and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock;
- The Company has outstanding warrants denominated in both Canadian and U.S. Dollars. The foreign exchange risk associated with the variable of the Canadian Dollar denominated warrant and the Company's resulting U.S. Dollar denominated functional currency could result in a significant risk of loss at the date of valuing the risk and cause the Company to incur a significant non-cash derivative liability depending on the exchange rate and share price volatility, share price, risk-free interest rate, and remaining life of the Canadian Dollar denominated warrants.

# General Risk Factors

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

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

15

### **Table of Contents**

# THE OFFERING

Issuer

Alpha Cognition Inc..

**Common Shares Offered** 

Up to 1,334,821 common shares (or 1,535,045 common shares if the underwriters exercises its option to purchase additional shares in full) based on an assumed combined offering price of \$11.20 per common share and accompanying warrant (which represents the Reverse Stock Split adjusted closing price of the common shares on June 13, 2024)

**Pre-Funded Warrants Offered by Us** 

We are also offering to certain purchasers whose purchase of common shares in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares immediately following the consummation of this offering, up to 1,334,821 pre-funded warrants to purchase up to 1,334,821 common shares, in lieu of common shares that would otherwise result in any such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares. Each pre-funded warrant will be exercisely for one pre-funded warrant share. The exercise

price of each pre-funded warrant will be US\$0.0001 per pre-funded warrant share. The pre-funded warrants will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. The combined offering price per pre-funded warrant and accompanying warrant is equal to \$11.1999, which is equal to the combined offering price per common share and accompanying warrants less \$0.0001. For each pre-funded warrant we sell, the number of common shares we are offering will be decreased on a one-for-one basis. This prospectus also relates to the offering of the pre-funded warrant shares issuable upon exercise of the pre-funded warrants. For additional information, see "Description of Securities Being Issued — Pre-Funded Warrants to be Issued as Part of this Offering" on page 153 of this prospectus.

# Warrants Offered by Us

Up to 1,334,821 warrants to purchase an aggregate of up to 1,334,821 warrant shares. Each warrant will have an exercise price of \$15.12 per share, will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. At any time that the warrants outstanding, we may call the warrants for redemption, in whole or in part, at a price of \$0.0001 per warrant, upon not less than 30 days' prior written notice of the redemption, if, and only if, the reported last sale price of the common shares equals or exceeds 150% of the exercise price of the warrants for any 15 consecutive trading days commencing on the date upon which the warrants are issued and ending three trading days before we send the notice of redemption. The common shares, warrants and prefunded warrants will be issued separately and will be immediately separable upon issuance. This prospectus also relates to the offering of the warrant shares issuable upon exercise of the warrants. For additional information, see "Description of Securities Being Issued — Warrants to be Issued as Part of this Offering" on page 154 of this prospectus

# **Over-Allotment Option**

We have granted the representative of the underwriters an option to purchase up to 200,223 additional common shares and/or pre-funded warrants and/or up to 200,223 additional warrants at the public offering price (based on the combined assumed offering price, \$11.19 per common share, \$11.1899 per pre-funded warrant and \$0.01 per warrant), less underwriting discounts and commissions on the same terms as set forth in this prospectus. The representative can exercise this option in whole or in part at any time and from time to time within 45 days after the date of this prospectus.

# Common Shares Outstanding After This Offering $^{(1)(2)}$

8,851,098 common shares (approximately 177,021,969 pre-Reverse Stock Split common shares) (or 9,051,322 common shares (approximately 181,026,433 common share pre-Reverse Split) if the underwriters exercises their option to purchase additional common shares in full).

#### 16

# Table of Contents

# **Use of Proceeds**

We estimate that the net proceeds from the sale of our common shares in this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$13.40 million (\$15.47 million if the underwriters exercise their option to

purchase additional shares in full) (based on an assumed combined offering price per common share and accompanying warrant of \$11.20 which represents the Reverse Stock Split adjusted closing price of the common shares on June 13, 2024).

We currently intend to use the net proceeds we receive from this offering to fund support of our filed NDA; begin our efforts toward our commercialization and launch of ALPHA-1062 in AD; further research and development of our pipeline product candidates; continued commercial CMC activities (chemistry, manufacturing, and controls); and for working capital and general corporate purposes, which may include funding capital expenditures, acquisitions, and investments.

See "Use of Proceeds" for a complete description of the intended use of proceeds from this offering.

# **Dividend Policy**

We have paid no dividends on the common shares to date and we do not expect to pay dividends on our common shares in the foreseeable future.

- (1) Assuming the issuance of 1,334,821 common shares under this prospectus
- (2) Based on 7,516,277 common shares issued and outstanding as of June 13, 2024. Excludes:
  - 3,066,644 common shares issuable upon exercise of outstanding warrants with an average weighted exercise price of \$6.00.
  - 395,819 common shares issuable upon conversion of Class B Preferred Series A Shares;
  - 1,019,968 common shares underlying options granted under our equity plans, exercisable at an average weighted
    exercise price of \$3.48 per share; and
  - 341,053 common shares underlying performance options granted under our equity plans, exercisable at an average weighted exercise price of \$0.20 per share.

Unless otherwise indicated, all information in this prospectus reflects or assumes: (i) no exercise of the warrants or warrants issued to the underwriter; and (ii) no exercise by the underwriters of their option to purchase up to an additional 200,893 common share and/or pre-funded warrants and/or 200,223 warrants in this offering

17

### **Table of Contents**

Listed and Trading Symbol	Our common shares are currently traded on the CSE under the symbol "ACOG" and quoted for trading on the OTCQB under the symbol "ACOGF." We have applied to list our common shares on the Nasdaq Capital Market under the symbol "ACOG." The approval of our listing on the Nasdaq Capital Market is a condition of closing this offering.
Transfer Agent and Registrar	Computershare Investor Services Inc.

**Risk Factors**You should carefully read and consider the information set forth under the heading "Risk Factors" and all other information set forth in this prospectus before deciding to invest in our common shares, pre-funded warrants, and warrants.

**Tax Considerations**Please read "Material Canadian Federal Income Tax Considerations" and "Certain Material United States Federal Income Tax Considerations"

# **Underwriter's Commission**

The underwriters and other broker dealers will receive compensation for sales of the securities offered hereby at a fixed commission rate consisting of a cash fee equal to 7% of the total gross proceeds of the Offering. See "*Underwriting*" in this Prospectus.

#### **Reverse Stock Split**

Prior to the closing of this offering and/or concurrently with the closing thereof, we will affect a reverse stock split of the outstanding common shares in a ratio of 1-for-20, i.e., each twenty outstanding common shares will be combined into one common share. The reverse stock split was approved by our Board of Directors on June 10, 2024, provided that such reverse stock split is not yet effective and is not planned to become effective until just before our common shares are uplisted to the Nasdaq Capital Market. Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our common shares, share data, per share data and related information depict the reverse stock split in a ratio of 1-for-20 as if it had occurred at the beginning of the earliest period presented.

18

# **Table of Contents**

#### SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth a summary of the historical audited consolidated financial data of Alpha Cognition as at and for the fiscal years ended December 31, 2023 and 2022 and the unaudited consolidated condensed financial data as at and for the periods ended March 31, 2024 and 2023. The historical summary consolidated financial data set forth in the following tables has been derived from Alpha Cognition's consolidated financial statements included elsewhere in this prospectus. You should read this data together with Alpha Cognition's consolidated financial statements and the related notes appearing elsewhere in this prospectus and the information included under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations." Alpha Cognition's historical results are not necessarily indicative of our future results.

# **Condensed Consolidated Statements of Operations and Comprehensive Loss:**

(expressed in United States Dollars)

	Three months ended March 31,				Year ended December 31,				
		2024		2023		2023		2022	
Total operating expenses	\$	(4,411,518)	\$	(1,986,347)	\$	(9,938,094)	\$	(13,559,829)	
Net operating loss		(4,411,518)		(1,986,347)		(9,938,094)		(13,559,829)	
Total other income (expense)		(591,193)		80,514		(3,825,564)		1,486,569	
Net Loss		(5,002,711)		(1,905,833)		(13,763,658)		(12,073,260)	
Currency translation adjustment				(36,239)		(19,573)		16,806	
Comprehensive loss	\$	(5,002,711)	\$	(1,942,072)	\$	(13,783,231)	\$	(12,056,454)	
Net loss per share, basic and diluted	\$	(0.60)	\$	(0.40)	\$	(3.00)	\$	(3.60)	
Weighted average shares to compute net loss per share, basic and diluted		7,180,799		3,892,451		4,717,774		3,398,610	

# **Selected Consolidated Balance Sheet Data**

(expressed in United States Dollars)

		March 31, 2024		December 31,					
				2023		2022			
Cash and cash equivalents	\$	2,423,062	\$	1,494,573	\$	2,083,696			
Total current assets	\$	2,854,245	\$	1,918,439	\$	2,332,741			
Total assets	\$	3,476,551	\$	2,452,170	\$	2,950,951			
Current liabilities	\$	2,158,471	\$	2,615,993	\$	4,056,844			
Total long-term liabilities	\$	1,133,161	\$	4,539,872	\$	214,284			
Total stockholders' (deficiency) equity	\$	184,919	\$	(4,703,695)	\$	(1,320,177)			
Total liabilities and stockholder's (deficiency) equity	\$	3,476,551	\$	2,452,170	\$	2,950,951			
Working capital (deficiency)	\$	695,774	\$	(697,554)	\$	(1,724,103)			
Adjusted working capital (deficiency)*	\$	588,730	\$	(777,554)	\$	(1,724,103)			

<sup>\*</sup> Adjusted working capital (non-GAAP measure): Adjusted working capital is not defined under U.S. GAAP and may not be computed that same as similarly titled measures used by other companies. The Company defines adjusted working capital as working capital less restricted cash offset by adding accrued expenses relating to the R&D Grant. The Company believes that adjusted working capital is meaningful to investors as a measure of operational efficiency and short term financial health. A reconciliation of working capital to adjusted working capital follows:

			December 31,					
	March 31, 2024			2023	2022			
Working capital (deficiency)	\$	695,774	\$	(697,554)	\$	(1,724,103)		
Deduct: Restricted Cash	\$	(163,678)	\$	(90,413)	\$	_		
Add: Accrued Expenses relating to R&D Grant	\$	56,634	\$	10,413	\$			
Adjusted working capital (deficiency)*	\$	588,730	\$	(777,554)	\$	(1,724,103)		

19

# **Table of Contents**

# **RISK FACTORS**

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

#### **Risks Related to Our Financial Condition**

We are a clinical-stage/pre-commercial biopharmaceutical company in the late stages of development with no products approved for commercial sale and have incurred significant losses since our inception. We expect to incur significant losses for the foreseeable future and our costs may increase substantially in the foreseeable future.

Since our inception, we have incurred significant net losses, and we expect to continue to incur significant expenses and operating losses for the foreseeable future. Our net losses were \$5.0 million and \$1.9 million for the three months ended March 31, 2024, and 2023, respectively and \$13.8 million and \$12.1 million for the years ended December 31, 2023, and 2022, respectively. As of March 31, 2024, we had an accumulated deficit of \$66 million. 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 over the next several years. We expect that it could be several years, if ever, before we have a commercialized product. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially for the foreseeable future as we:

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

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

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

20

#### Table of Contents

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

to liquidate our assets and may receive less than the value at which those assets are carried on our financial statements, and it is likely that our investors will lose all or a part of their investment.

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

To date, we have not generated any revenue from the commercialization of our product candidates. 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. A decline in the value of our Company could also cause you to lose all or part of your investment.

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

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

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

# We will need substantial additional 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. Our revenue, if any, will be derived from sales of products that we do not expect to be commercially available for the foreseeable future, if at all. If we obtain marketing approval for ALPHA-1062 or any other product candidates that we develop or otherwise acquire, we expect to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing. We also expect an increase in our expenses associated with creating additional infrastructure to support operations as a public company.

As of December 31, 2023, we had \$1.4 million in unrestricted cash and cash equivalents and have not generated positive cash flows from operations. Based on our current business plans, we believe our existing cash and cash equivalents, and the net capital raised in January 2024 of \$3.7 million, will not be sufficient for us to fund our ongoing operating expenses, pre-NDA approval commercialization expenses, and capital expenditures requirements through at least the next 12 months, and that additional capital will need to be raised to fund our operations and commercial plans. The Company may raise additional capital prior to receiving the FDA approval of ALPHA-1062 in AD to begin pre-commercial activities, and we may additionally raise even further capital if we should receive the FDA approval of ALPHA-1062 in AD, to proceed with our full commercial launch of the product. Full commercial launch, which is subject to the FDA approval of ALPHA-1062 is expected to require substantial additional capital to continue our commercialization efforts and bring the product to market in the US. We have based these estimates on assumptions that may prove to be incorrect or require adjustment as a result of business decisions, and we could utilize our available capital resources sooner than we currently expect.

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

- the scope, progress, costs and results of our ongoing support of ALPHA-1062 and the NDA, as well as the associated costs, including any unforeseen costs we may incur as a result of additional preclinical study or clinical trials that may be required, or other delays;
- the scope, progress, costs and results of preclinical development, laboratory testing and clinical trials for any future product candidates we may decide to pursue;
- the extent to which we develop, in-license or acquire other product candidates and technologies;
- the costs and timing of process development and manufacturing scale-up activities associated with our product candidates and other programs we advance them through preclinical and clinical development;
- the number and development requirements of other product candidates that we may pursue;
- the extent to which we acquire or in-license other product candidates and technologies;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the effect of competing products that may limit market penetration of our products;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- our ability to establish collaborations to commercialize ALPHA-1062 or any of our other product candidates outside the United States;
- the timing, receipt and amount of sales of, or milestone payments related to or royalties on, our current or future product candidates, if any;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;
- the extent to which we acquire or invest in businesses, products, or technologies; and
- the additional costs we may incur as a result of operating as a public company, including our efforts to
  enhance operational systems and hire additional personnel, including enhanced internal controls over
  financial reporting.

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

The expected to need to raise additional capital since our current available funds will not be sufficient to fully fund our planned pre-commercial and commercial efforts should we receive FDA approval for ALPHA-1062 in

#### **Table of Contents**

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

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

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

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

Our clinical trials may in the future be affected by the current COVID-19 pandemic or future variants or pandemics. For example, the current COVID-19 pandemic or future variants or pandemics may impact patient enrollment in our ongoing and future clinical trials of ALPHA-1062 and future products. In particular, some sites may in the future pause enrollment to focus on, and direct resources to, the current COVID-19 pandemic or future variants or pandemics, while at other sites, patients may choose not to enroll or continue participating in the clinical trial as a result of the pandemic. In addition, patient visits to medical providers in the United States have slowed as a result of the current COVID-19 pandemic or future variants or pandemics. Further, according to the Centers for Disease Control and Prevention, people who have serious chronic medical conditions are at higher risk of getting very sick from the current COVID-19 pandemic or future variants or pandemics. As a result, potential patients in our ongoing and future clinical trials of ALPHA-1062 may choose to not enroll, not participate in follow-up clinical visits or drop out of the trial as a precaution against contracting COVID-19. Further, some patients may not be able or willing to comply with clinical trial protocols if quarantines impede patient movement or interrupts healthcare services.

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

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

In addition, we may encounter a shortage in supplies of, or in delays in shipping, our study drug or other components of the clinical trial vital for successful conduct of the trial. Further, the successful conduct of our ongoing and future clinical trials depends on retrieving laboratory, imaging and other data from patients. Any failure by the vendors with

which we work with to send us such data could impair the progress of such clinical trials. These events could delay our clinical trials, increase the cost of completing our clinical trials and negatively impact the integrity, reliability or robustness of the data from our clinical trials.

Furthermore, quarantines, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to the current COVID-19 pandemic or future variants or pandemics or other infectious diseases, could impact personnel at our study sites or third-party

23

# **Table of Contents**

manufacturing facilities upon which we rely, or the availability or cost of materials, which could disrupt the supply chain for our drug and combination therapy candidates. To the extent our suppliers and service providers are unable to comply with their obligations under our agreements with them or they are otherwise unable to deliver or are delayed in delivering goods and services to us due to the current COVID-19 pandemic or future variants or pandemics, our ability to continue meeting clinical supply demand for our product candidates or otherwise advancing development of our product candidates may become impaired.

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

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

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

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

# Risks Related to Our Business Development

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

We currently have no products approved for sale. Our lead product candidate has completed bioavailability and bioequivalence pivotal trials, but all our other products are in the pre-clinical stage. The success of our business, including our ability to finance our Company and generate revenue in the future, will primarily depend on the successful 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:

- our ability to raise any additional required capital on acceptable terms, or at all;
- our ability to complete an IND enabling studies and successfully submit INDs or comparable applications;
- initiation and timely completion of our preclinical studies and clinical trials, which may be significantly slower or cost more than we currently anticipate and will depend substantially upon the performance of third-party contractors;
- delays or difficulties in enrolling and retaining patients in our clinical trials;

24

#### **Table of Contents**

- whether we are required by the FDA, or similar foreign regulatory agencies to conduct additional clinical trials or other studies beyond those planned to support the approval and commercialization of our product candidates or any future product candidates;
- acceptance of our proposed indications and primary endpoint assessments relating to the proposed indications of our product candidates by the FDA and similar foreign regulatory authorities;
- our ability to demonstrate to the satisfaction of the FDA and similar foreign regulatory authorities the safety, efficacy and acceptable risk to benefit profile of our product candidates or any future product candidates;
- the prevalence, duration and severity of potential side effects or other safety issues experienced with our product candidates or future approved products, if any;
- achieving and maintaining, and, where applicable, ensuring that our third-party contractors achieve and
  maintain, compliance with our contractual obligations and with all regulatory requirements applicable to
  our product candidates or any future product candidates or approved products, if any;
- the ability of third parties with whom we contract to manufacture adequate clinical trial and commercial
  supplies of our product candidates or any future product candidates remain in good standing with
  regulatory agencies and develop, validate and maintain commercially viable manufacturing processes that
  are compliant with current good manufacturing practices, or cGMPs;
- the convenience of our treatment or dosing regimen;
- the timely receipt of necessary marketing approvals from the FDA and similar foreign regulatory authorities;
- acceptance by physicians, payors and patients of the benefits, safety and efficacy of our product candidates
  or any future product candidates, if approved, including relative to alternative and competing treatments;
- the willingness of physicians, operators of clinics and patients to utilize or adopt any of our product candidates or any future product candidates, if approved;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- our ability to expand our products, including ALPHA-1062 into multiple indications;
- the COVID-19 pandemic, which may result in clinical site closures, delays to patient enrollment, patients discontinuing their treatment or follow up visits or changes to trial protocols;
- our ability to successfully develop a commercial strategy and thereafter commercialize our product candidates or any future product candidates in the United States and internationally, if approved for

marketing, reimbursement, sale and distribution in such countries and territories, whether alone or in collaboration with others:

- patient demand for our product candidates, if approved, including patients' willingness to pay out-ofpocket for any approved products in the absence of coverage and/or adequate reimbursement from thirdparty payors;
- the actual market-size, ability to identify patients and the demographics of patients eligible for our product candidates, which may be different than expected;
- a continued acceptable safety profile following any marketing approval;
- our ability to compete with other therapies;
- our ability to establish and enforce intellectual property rights in and to our product candidates or any future product candidates; and
- our ability to avoid third-party patent interference, intellectual property challenges or intellectual property infringement claims.

25

# Table of Contents

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. Accordingly, we cannot provide assurances that we will be able to generate sufficient revenue through the sale of our product candidates or any future product candidates to continue our business or achieve profitability.

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

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

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

We therefore cannot provide any assurance that we will be able to successfully identify, in-license or acquire additional product candidates, advance any of these additional product candidates through the development process, successfully

commercialize any such additional product candidates, if approved, or assemble sufficient resources to identify, acquire, develop or, if approved, commercialize additional product candidates. If we are unable to successfully identify, acquire, develop and commercialize additional product candidates, our commercial opportunities may be limited.

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

Efforts by biopharmaceutical and pharmaceutical companies in treating Alzheimer's disease have seen limited success in drug development. 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, resulting in increased expected development costs or the delay or prevention of commercialization of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's disease.

# Even if we obtain regulatory approval for ALPHA-1062, our only product in clinical development will remain subject to regulatory oversight.

Even if we obtain any regulatory approval for ALPHA-1062, our lead product, it will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping and submission of safety and other post-market information. Any regulatory approvals that we receive for ALPHA-1062

26

### **Table of Contents**

may also be subject to a post-approval safety monitoring program, limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing and surveillance to monitor the quality, safety and efficacy of the product. For example, the holder of an approved NDA is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA also must submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

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

If we fail to comply with applicable regulatory requirements following approval of ALPHA-1062 or any future lead compound, a regulatory authority may take enforcement actions, such as issuing warnings, fines, or even revoking approval, which could result in delays, financial penalties, reputational damage, and potential legal liabilities for our Company.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize ALPHA-1062 and adversely affect our business, financial condition, results of operations and prospects.

The FDA's policies, and those of equivalent foreign regulatory agencies, may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of ALPHA-1062. We cannot predict

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

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

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

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

- we may experience general administrative delays in the FDA review and approval process;
- our clinical trial results may be interpreted differently by the FDA and may not be accepted by the FDA upon review;
- the population studied in the clinical trial may not be accepted by the FDA as sufficiently broad or representative to assure safety in the full population for which we seek approval;
- we may be required to conduct costly and time consuming additional preclinical studies or clinical trials;
- we may be subject to unexpected limitations on how we may promote any approved products;
- approval may be granted only for indications that are significantly more limited than those sought by us, and/or may include significant restrictions on end-to-end supply chain management and use;

2.7

# **Table of Contents**

- we may experience delays or be unable to demonstrate to the satisfaction of the FDA that the applicable product candidate is safe, pure and potent, or effective as for its intended uses; and
- we may experience delays or be unable to demonstrate to the satisfaction of the FDA that the applicable product candidate's risk-benefit ratio for its proposed indication is acceptable.

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

- the FDA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical trials;
- delays in obtaining, or failure to obtain, regulatory authorization to commence a trial;
- imposition of a temporary or permanent clinical hold by the FDA or comparable foreign regulatory authorities;
- reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- identifying, recruiting and training suitable clinical investigators;
- obtaining institutional review board, or IRB, approval at each trial site;

- new safety findings that present unreasonable risk to clinical trial participants;
- a negative finding from an inspection of our clinical trial operations or study sites;
- recruiting an adequate number of suitable patients to participate in a trial;
- having subjects complete a trial or return for post-treatment follow-up;
- clinical sites deviating from trial protocol or dropping out of a trial;
- addressing subject safety concerns that arise during the course of a trial;
- adding a sufficient number of clinical trial sites; or
- obtaining sufficient supply of product candidates for use in preclinical studies or clinical trials from thirdparty suppliers.

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

- we may receive feedback from regulatory authorities that requires us to modify the design of our clinical trials or require that we submit additional data or information before allowing a clinical trial to be initiated or continue:
- clinical studies of our product candidates may produce negative or inconclusive results, and we may
  decide, or regulators may require us, to conduct additional clinical trials or abandon drug development
  programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements, fail to maintain adequate quality controls or be unable to provide us with sufficient product supply to conduct and complete preclinical studies or clinical trials of our product candidates in a timely manner, or at all;
- we or our investigators might have to suspend or terminate clinical trials of our product candidates for various reasons, including non-compliance with regulatory requirements, a finding that our product candidates have undesirable side effects or other unexpected characteristics or a finding that the participants are being exposed to unacceptable health risks;

28

#### **Table of Contents**

- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the quality of our product candidates or other materials necessary to conduct preclinical studies or clinical trials of our product candidates may be insufficient or inadequate;
- regulators may revise the requirements for approving our product candidates or such requirements may not be as we anticipate; and
- any future collaborators may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for us.

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

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

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

We will be required to demonstrate with substantial evidence through well-controlled clinical trials that our product candidates are safe and effective for use in a diverse population before we can seek marketing approvals for their commercial sale. Success in preclinical studies and early-stage clinical trials does not mean that future clinical trials will be successful. For instance, we do not know whether ALPHA-1062 will perform in 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.

29

# Table of Contents

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

We currently do not have the ability to independently conduct clinical trials that comply with the regulatory requirements known as good laboratory practice "(GLP") requirements or good clinical practice ("GCP") requirements, respectively. The FDA and regulatory authorities in other jurisdictions require us to comply with GCP requirements for conducting, monitoring, recording and reporting the results of clinical trials, in order to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs, to conduct GLP-compliant preclinical studies and GCP-compliant clinical trials on our product candidates properly and on time. While we have agreements governing their activities,

we control only certain aspects of their activities and have limited influence over their actual performance. The third parties with whom we contract for execution of our GLP-compliant preclinical studies and our GCP-compliant clinical trials play a significant role in the conduct of these studies and the subsequent collection and analysis of data. These third parties are not our employees and, except for restrictions imposed by our contracts with such third parties, we have limited ability to control the amount or timing of resources that they devote to our programs. Although we rely on these third parties to conduct our GLP-compliant preclinical studies and GCP-compliant clinical trials, we remain responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with its investigational plan and protocol and applicable laws and regulations, and our reliance on the CROs does not relieve us of our regulatory responsibilities.

Many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting preclinical studies, clinical trials or other drug development activities that could harm our competitive position. If the third parties conducting our preclinical studies or our clinical trials do not adequately perform their contractual duties or obligations, experience significant business challenges, disruptions or failures, do not meet expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our protocols or to GLPs or GCPs, or for any other reason, we may need to enter into new arrangements with alternative third parties. This could be difficult, costly or impossible, and our preclinical studies or clinical trials may need to be extended, delayed, terminated or repeated. As a result, we may not be able to obtain regulatory approval in a timely fashion, or at all, for the applicable product candidate, our business, financial results and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

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

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

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

30

# **Table of Contents**

If any of our product candidates receives marketing approval, and we or others later identify undesirable and unforeseen side effects caused by such product, a number of potentially significant negative consequences could result, including but not limited to:

 regulatory authorities may suspend, limit or withdraw approvals of such product, or seek an injunction against its manufacture or distribution;

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

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

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

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

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our Company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure. Any information we determine not to disclose may ultimately be deemed significant by you or others with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product candidate or our business. If the top-line data that we report differ

#### 3

# Table of Contents

from final results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, product candidates may be harmed, which could significantly harm our business, financial condition, results of operations and prospects.

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

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

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

Many foreign regulatory authorities have similar requirements. In addition, foreign trials are subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in product candidates that we may develop not receiving approval or clearance for commercialization in the applicable jurisdiction.

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

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

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

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and breach of warranty. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims,

we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

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

If we are unable to obtain and maintain sufficient product liability insurance at an acceptable cost and scope of coverage to protect against potential product liability claims, the commercialization of our current or any future product candidates we develop could be inhibited or prevented. We currently carry product liability insurance covering our clinical trials. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions and deductibles, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient funds to pay such amounts. Moreover, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. If and when we obtain approval for marketing any of our product candidates, we intend to expand our insurance coverage to include the sale of such product candidate; however, we may be unable to obtain this liability insurance on commercially reasonable terms or at all.

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

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

The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. The prevalent use of mobile devices that

#### **Table of Contents**

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

# Risk related to Our Industry

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

Our ALPHA-1062 oral formulation for Mild-to-Moderate Alzheimer's Disease is our only product that has completed bioavailability and bioequivalence pivotal trials and is submitted for FDA approval. All our other products are in the pre-clincal stage of developments. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for and then successfully commercialize our product candidates, and we may experience delays or fail to do so for many reasons, including the following:

- our product candidates may not successfully complete preclinical studies or clinical trials;
- receipt of feedback from regulatory authorities that requires us to modify the design of our clinical trials;
- clinical trial observations or results that require us to modify the design of our clinical trials;
- the number of patients required for clinical trials being larger than anticipated, enrollment in these clinical trials being slower than anticipated or participants dropping out of these clinical trials at a higher rate than anticipated;
- the suspension or termination of our clinical trials for various reasons, including non-compliance with regulatory requirements or a finding that our product candidates have undesirable side effects or other unexpected characteristics or risks;
- negative or inconclusive clinical trial results that may require us to conduct additional clinical trials or abandon certain drug development programs;
- the cost of clinical trials of our product candidates being greater than anticipated;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it does not meet applicable regulatory criteria;

- any changes to our manufacturing process that may be necessary or desired;
- third-party contractors not performing data collection or analysis in a timely or accurate manner;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other
  government or regulatory authorities for violations of regulatory requirements, in which case we may need
  to find a substitute contractor, and we may not be able to use some or all of the data produced by such
  contractors in support of our marketing applications;

#### **Table of Contents**

- our competitors may develop therapeutics that render our product candidates obsolete or less attractive;
- the market for a product candidate may change so that the continued development of that product candidate is no longer reasonable or commercially attractive;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- if a product candidate obtains regulatory approval, we may be unable to establish sales and marketing capabilities, or successfully market such approved product candidate; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

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

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

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

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

The ability of the FDA to review and/or approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain

key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. On March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to

35

# **Table of Contents**

prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

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

We are subject to or affected by federal, state and foreign data protection laws and regulations which address privacy and data security. In the United States, numerous federal and state laws and regulations, including the U.S. federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, or HITECH, state data breach notification laws, state health information privacy laws and federal and state consumer protection laws, including Section 5 of the Federal Trade Commission Act, which govern the collection, use, disclosure and protection of health-related and other personal information, may apply to our operations and the operations of any future collaborators. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, that are subject to privacy and security requirements under HIPAA, as amended by HITECH, and other privacy and data security laws. Depending on the facts and circumstances, we could be subject to significant administrative, civil and criminal penalties if we obtain, use or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA. Further, various states have implemented similar privacy laws and regulations. For example, California also recently enacted the California Consumer Privacy Act of 2018, or CCPA. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA also provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA went into effect on January 1, 2020 and grants the California Attorney General the power to bring enforcement actions for violations beginning July 1, 2020. The CCPA has been amended from time to time, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted. As currently written, the CCPA may impact our business activities and as a result may increase our compliance costs and potential liability. Many similar privacy laws have been proposed at the federal level and in other states.

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

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

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

36

# Table of Contents

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

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

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

There are a number of large pharmaceutical and biotechnology companies that are currently in market or pursuing the development of product candidates for the treatment of the diseases and disorders for which we have research programs, including Alzheimer's Disease, mTBI, and Amyotrophic Lateral Sclerosis. Current generic competitors in the Alzheimer's Disease market include donepezil, rivastigmine, galantamine, and memantine. Branded competitors include Namzaric® by maker Abbvie and newly approved Adlarity® by maker Corium. Alzheimer's Disease

companies developing therapeutics for similar indications include large companies with significant financial resources, such as Biogen, Eli Lilly, Corium, Taurz, Vasopharm. Neuren Pharmaceuticals, Abliva, and AB Science. In the TBI market, there are no current acute or chronic treatments approved to date. Companies currently in clinical trials for TBI include Vasopharm, SanBio/Sumitomo, Ostuka/Avanir Pharmaceuticals, Biogen, and Cellvation.

Many of our current or potential competitors, either alone or with their strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of mild-to-moderate Alzheimer's diseases, which could give such products significant regulatory and market timing advantages over any of our product candidates. Our competitors also may obtain FDA, EMA or other

37

# **Table of Contents**

regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA for indications our product candidates are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, products or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing any product candidates we may develop against competitors.

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

#### Risks Related to Commercialization and Manufacturing

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 clinical indications for which the product is approved and patient demand for approved products that treat those indications;
- the safety and efficacy of our product as compared to other available therapies;

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

38

#### **Table of Contents**

- any FDA requirement to undertake a REMS;
- the effectiveness of our sales, marketing and distribution efforts;
- adverse publicity about our products or favorable publicity about competitive products; and
- potential product liability claims.

We cannot assure you that our current or future product candidates, if approved, will achieve broad market acceptance among physicians, patients, healthcare payors and others in the medical community. Even 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. We do not control the manufacturing processes of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or comparable regulatory authorities in foreign jurisdictions, we may not be able to rely on their manufacturing facilities for the manufacture of our product candidates. In addition, we have limited control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority finds these facilities inadequate for the manufacture of our product candidates or if such facilities are subject to enforcement action in the future or are otherwise inadequate, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates.

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

39

#### **Table of Contents**

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

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

In addition, to manufacture our product candidates in the quantities which we believe would be required to meet anticipated market demand, our third-party manufacturers would likely need to increase manufacturing capacity and we may need to secure alternative sources of commercial supply, which could involve significant challenges and may require additional regulatory approvals. In addition, the development of commercial-scale manufacturing capabilities may require us and our third-party manufacturers to invest substantial additional funds and hire and retain the technical personnel who have the necessary manufacturing experience. Neither we nor our third-party manufacturers may

successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all. If our manufacturers or we are unable to purchase the raw materials necessary for the manufacture of our product candidates on acceptable terms, at sufficient quality levels or in adequate quantities, if at all, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of such product candidates, if approved.

We are subject to certain supply chain risks inherent in manufacturing our lead product, ALPHA-1062, and future products with respect to Taiwan. Risks including periodic foreign economic downturns and political instability, which may adversely affect the Company's ability to obtain materials and conduct business in Taiwan.

Our sole manufacturing location for ALPHA-1062 is located in Taiwan. There are risks inherent in manufacturing internationally, including the following: different regulatory environments; difficulties in enforcing agreements and collecting receivables through certain foreign legal systems; fluctuations in foreign currency exchange rates; tax rates in certain foreign countries that may exceed those in the United States and foreign earnings that may be subject to withholding requirements; the imposition of tariffs, exchange controls, or other trade restrictions; general economic and political conditions in countries where we operate or where our customers reside; government control of capital transactions, including the borrowing of funds for operations or the expatriation of cash; potential adverse tax consequences; security concerns and potential business interruption risks associated with political or social unrest in foreign countries where our facilities or assets are located; difficulties associated with managing a large organization spread throughout various countries; difficulties in enforcing intellectual property rights and weaker intellectual property rights protection in some countries; required compliance with a variety of foreign laws and regulations; and differing customer preferences. The factors described above may have a material adverse effect on our business, financial condition, and results of operations.

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

- international economic and political changes;
- the imposition of governmental controls or changes in government regulations, including tax laws, regulations, and treaties;

40

#### Table of Contents

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

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

efforts between Taiwan and mainland China. Relations between Taiwan and mainland China and other factors affecting military, political or economic conditions in Taiwan could materially and adversely affect our financial condition and results of operations, as well as the market price and the liquidity of our ordinary shares.

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

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

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

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

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

41

#### **Table of Contents**

quality assurance and quality control procedures. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures or product recalls. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable quality and efficacy of the products before and after such changes. If our third-party manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization as a result of these challenges, or otherwise, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

The successful commercialization of 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. It is possible that a third-party payor may consider our product candidates as substitutable and only offer to reimburse patients for the cost of the less expensive product. Even if we show improved efficacy or improved convenience of administration with our product candidates, pricing of existing third-party therapeutics may limit the amounts we will be able to charge for our product candidates. These payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed products at levels that are too low to enable us to realize an appropriate return on our investment in our product candidates. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our product candidates and may not be able to obtain a satisfactory financial return on our investment in the development of product candidates.

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

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

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe and other foreign jurisdictions have and will continue to put pressure on the pricing and usage of our product candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medical products, but monitor and control

42

### **Table of Contents**

company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amounts that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our product candidates may be reduced compared with the United States and may be insufficient to generate commercially-reasonable revenue and profits.

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

procedures and other treatments, has become intense. As a result, increasingly high barriers are being erected to the entry of new products.

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

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

### **Risks Related to Our Intellectual Property**

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

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

It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may choose not to seek patent protection for certain innovations or products and may choose not to pursue patent protection in certain jurisdictions, and under the laws of certain jurisdictions, patents

43

### Table of Contents

or other intellectual property rights may be unavailable or limited in scope and, in any event, any patent protection we obtain may be limited. As a result, some of our product candidates are not, and in the future may not be, protected by patents. We generally apply for patents in those countries where we intend to make, have made, use, offer for sale, or sell products and where we assess the risk of infringement to justify the cost of seeking patent protection. However, we do not seek protection in all countries where we intend to sell products and we may not accurately predict all the

countries where patent protection would ultimately be desirable. If we fail to timely file a patent application in any such country, we may be precluded from doing so at a later date. The patent applications that we own may fail to result in issued patents with claims that cover any of our product candidates in the United States or in other foreign countries. We may also inadvertently make statements to regulatory agencies during the regulatory approval process that may be inconsistent with positions that have been taken during prosecution of our patents, which may result in such patents being narrowed, invalidated or held unenforceable, and vice versa that may affect the regulatory approval process.

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

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

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

44

#### Table of Contents

Patent reform legislation in the United States, including the Leahy-Smith America Invents Act, or the Leahy-Smith Act, could increase those uncertainties and costs surrounding the prosecution of our patent applications and the

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

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

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

Moreover, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. We note that certain of our U.S. patents directed toward ALPHA-1062 and ALPHA-0602 are set to expire in 2026. In relation to these particular expiring patents we have other patents which we believe are sufficient to cover our patent protection needs in relation to ALPHA-1062 and ALPHA-0602. However, we may be wrong in this assessment or face unforeseen difficulties in relation to our patent coverage with could adversely impact the Company.

Without patent protection for our current or future product candidates, we may be open to competition from generic versions of such products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

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

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

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

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

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

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

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

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

#### **Table of Contents**

The validity, scope and enforceability of any patents listed in the Orange Book that cover our product candidates including our lead product candidate ALPHA-1062 can be challenged by third parties.

If one of our product candidates is approved by the FDA, one or more third parties may challenge the current patents, or patents that may issue in the future, within our portfolio which could result in the invalidation of, or render unenforceable, some or all of the relevant patent claims or a finding of non-infringement. For example, if a third party files an application under Section 505(b)(2) or an ANDA for a generic drug containing any of our product candidates, and relies in whole or in part on studies conducted by or for us, the third party will be required to certify to the FDA that either: (1) there is no patent information listed in the Orange Book with respect to our NDA for the applicable approved drug candidate; (2) the patents listed in the Orange Book have expired; (3) the listed patents have not expired, but will expire on a particular date and approval is sought after patent expiration; or (4) the listed patents are invalid or will not be infringed by the manufacture, use or sale of the third party's generic drug. A certification that the new drug will not infringe the Orange Book-listed patents for the applicable approved drug candidate, or that such patents are invalid, is called a paragraph IV certification. If the third party submits a paragraph IV certification to the FDA, a notice of the paragraph IV certification must also be sent to us once the third party's ANDA is accepted for filing by the FDA. We may then initiate a lawsuit to defend the patents identified in the notice. The filing of a patent infringement lawsuit within 45 days of receipt of the notice automatically prevents the FDA from approving the third party's ANDA until the earliest of 30 months or the date on which the patent expires, the lawsuit is settled, or the court reaches a decision in the infringement lawsuit in favor of the third party. If we do not file a patent infringement lawsuit within the required 45-day period, the third party's ANDA will not be subject to the 30-month stay of FDA approval.

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

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

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

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and other foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on our international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering any of our product candidates, our competitors might be able to enter the market earlier than anticipated, which would harm our business.

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

The issuance of a patent does not give us the right to practice the patented invention. A third party may hold intellectual property, including patent rights that are important or necessary to the development of our product candidates. Third parties may also have blocking patents that could prevent us from marketing our products or practicing our own patented technology. It may be necessary for us to use the patented or proprietary technology of third parties to

47

#### **Table of Contents**

commercialize our drug candidates, in which case we would be required to obtain a license from these third parties on commercially reasonable terms. Such a license may not be available, or it may not be available on commercially reasonable terms, in which case our business would be harmed.

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

Third-party claims or litigation alleging infringement of patents or other proprietary rights, or seeking to invalidate patents or other proprietary rights, may delay or prevent the development and commercialization of any of our product candidates including our lead product candidate, ALPHA-1062.

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

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

employees, consultants or contractors use intellectual property or proprietary information owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful infringement or other intellectual property claim against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our affected products, which may be impossible or require

48

#### **Table of Contents**

substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

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

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

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

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

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may

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

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

49

#### Table of Contents

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

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

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

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could

also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could harm the price of our common shares and warrants.

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

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

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

50

### Table of Contents

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

Derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensor. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with such proceedings could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring our product candidates to market.

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

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

Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our product including our lead product candidate, ALPHA-1062.

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

51

#### **Table of Contents**

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

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

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

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. Policing unauthorized use of our intellectual property is difficult, expensive and time-consuming, and we may be unable to determine the extent of any unauthorized use. Moreover, enforcing a claim that

a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

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

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

52

#### **Table of Contents**

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

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

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

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

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

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

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

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

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

Certain provisions in our intellectual property agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement, either of

53

#### Table of Contents

which could harm our business, financial condition, results of operations and prospects. As a consequence of these and other factors, our patent applications may fail to result in issued patents with claims that cover our product candidates in the United States or in other countries. Such a loss of patent protection could harm our business.

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

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

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

• others may be able to make product that is similar to product candidates we intend to commercialize that is not covered by the patents that we own;

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

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

54

### Table of Contents

#### **Risks Related to Government Regulation**

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

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

We cannot provide any assurance that any product candidates we may develop will progress through required clinical testing and obtain the regulatory approvals necessary for us to begin selling them.

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

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

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations and prospects. Any delay or failure in seeking or obtaining required approvals would have a material and adverse effect on our ability to generate revenue from any particular product candidates we are developing and for which we are seeking approval. Furthermore, any regulatory approval to market a drug may be subject to significant limitations on the approved uses or indications for which we may market, promote and advertise the drug

#### 55

### Table of Contents

or the labeling or other restrictions. In addition, the FDA has the authority to require a Risk Evaluation and Mitigation Strategy (REMS) plan as part of approving an NDA, or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug. These requirements or restrictions might include limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. These limitations and restrictions may significantly limit the size of the market for the drug and affect reimbursement by third-party payors.

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

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

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

# Even if we obtain regulatory approval for a product candidate, our products will remain subject to regulatory scrutiny.

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

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

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

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

- issue warning letters;
- impose civil or criminal penalties;

56

### **Table of Contents**

- suspend or withdraw regulatory approval;
- suspend any of our clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- impose restrictions on our operations, including closing our contract manufacturers' facilities; or

• seize or detain products, or require a product recall.

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

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

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and reimbursement of the product candidate in those countries. However, a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

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

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

Where possible, we plan to pursue accelerated development strategies in areas of high unmet need. We may seek an accelerated approval pathway for our one or more of our product candidates. Under the accelerated approval provisions in the Federal Food, Drug, and Cosmetic Act, and the FDA's implementing regulations, the FDA may grant accelerated approval to a product candidate designed to treat a serious or life-threatening condition that provides meaningful therapeutic benefit over available therapies upon a determination that the product candidate has an effect on a surrogate endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as irreversible morbidity or mortality. For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. An intermediate clinical endpoint is a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or other clinical benefit. The accelerated approval pathway may be used

#### 57

### **Table of Contents**

in cases in which the advantage of a new drug over available therapy may not be a direct therapeutic advantage, but is a clinically important improvement from a patient and public health perspective. If granted, accelerated approval is usually contingent on the sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory

studies to verify and describe the drug's clinical benefit. If such post-approval studies fail to confirm the drug's clinical benefit, the FDA may withdraw its approval of the drug.

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

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

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

The Affordable Care Act was intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. There have been significant ongoing administrative, executive and legislative efforts to modify or eliminate the Affordable Care Act. For example, the Tax Act enacted on December 22, 2017 repealed the shared responsibility payment for individuals who fail to maintain minimum essential coverage under section 5000A of the Internal Revenue Code, commonly referred to as the individual mandate. The Trump administration issued executive orders which sought to reduce burdens associated with the Affordable Care Act and modified how it was implemented. Other legislative changes have been proposed and adopted since passage of the Affordable Care Act. The Affordable Care Act has also been subject to challenges in the courts. On December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. On December 18, 2019, the Fifth Circuit U.S. Court of Appeals held that the individual mandate is unconstitutional and remanded the case to the Texas District Court to reconsider its earlier invalidation of the entire Affordable Care Act. An appeal was taken to the U.S. Supreme Court which heard oral arguments in the case on November 10, 2020. On June 17, 2021, the Supreme Court ruled that the plaintiffs lacked standing to challenge the law as they had not alleged personal injury traceable to the allegedly unlawful conduct. As a result, the Supreme Court did not rule on the constitutionality of the ACA or any of its provisions.

Further changes to and under the Affordable Care Act remain possible, although the new Biden administration has signaled that it plans to build on the Affordable Care Act and expand the number of people who are eligible for subsidies under it. President Biden indicated that he intends to use executive orders to undo changes to the Affordable Care Act made by the Trump administration and would advocate for legislation to build on the Affordable Care Act.

### **Table of Contents**

It is unknown what form any such changes or any law proposed to replace the Affordable Care Act would take, and how or whether it may affect our business in the future. We expect that changes to the Affordable Care Act, the Medicare and Medicaid programs, changes allowing the federal government to directly negotiate drug and biologic prices and changes stemming from other healthcare reform measures, especially with regard to healthcare access, financing or other legislation in individual states, could have a material adverse effect on the healthcare industry.

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

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

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we or any related third parties are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or any related third parties are not able to maintain regulatory compliance, 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.

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

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

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

#### **Table of Contents**

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

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

60

#### **Table of Contents**

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

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

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

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

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

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

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

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could impair our ability

to compete in domestic and international markets. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended, or FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors and other collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties to sell our products

6

#### Table of Contents

outside the United States, to conduct clinical trials and/or to obtain necessary permits, licenses, patent registrations and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

#### Risks Related to Employee Matters and Growth Management

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

As of June 13, 2024, we have 4 full-time employees and 1 part-time contractors in total. We will need to continue to expand our managerial, operational, finance and other resources in order to manage our operations and clinical trials, continue our development activities and commercialize 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. Our need to effectively execute our growth strategy requires that we:

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

Our future financial performance and our ability to develop, manufacture and commercialize ALPHA-1062 and our product candidates, if approved, will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert financial and other resources, and a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time, to managing these growth activities.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize ALPHA-1062, if approved, and our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

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

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

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

Our success depends in part on our continued ability to attract, recruit, retain, manage, and motivate highly qualified management, clinical, and scientific personnel, and we face significant competition for experienced personnel. We are highly dependent upon our senior management, particularly our Chief Executive Officer, Michal McFadden, as well as our senior scientists and other members of our management team. The loss of services of any of these individuals could delay or prevent the successful development of our product pipeline, initiation or completion of our clinical

62

#### Table of Contents

trials and preclinical studies, regulatory approvals or the commercialization of ALPHA-1062 or any future product candidates. Although we have executed employment agreements or offer letters with each member of our senior management team, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected. We do not currently maintain "key person" life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not have adequate compensation for the loss of the services of these individuals.

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

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

Our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors, may engage in misconduct or other improper activities,

including noncompliance with regulatory standards and requirements, which could have an adverse effect on our results of operations.

We are exposed to the risk that our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or other unauthorized activities that violate the laws and regulations of the FDA and other similar regulatory bodies, including those laws that require the reporting of true, complete and accurate information to such regulatory bodies; manufacturing standards; U.S. federal and state healthcare fraud and abuse, data privacy laws and other similar non-U.S. laws; or laws that require the true, complete and accurate reporting of financial information or data. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of clinical trials, the creation of fraudulent data in our preclinical studies or clinical trials, or illegal misappropriation of product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. In addition, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and financial results, including, without limitation, the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid and other U.S. healthcare programs, other sanctions, imprisonment, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

63

#### Table of Contents

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

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

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

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

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

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

From time to time, we may consider opportunities to acquire other companies, products or technologies that may enhance our product portfolio, manufacturing capabilities, expand the breadth of our markets or customer base, or advance our business strategies. Potential acquisitions involve numerous risks, including: problems assimilating the acquired service offerings, products or technologies; issues maintaining uniform standards, procedures, quality control and policies; unanticipated costs associated with acquisitions; diversion of management's attention from our existing business; risks associated with entering new markets in which we have limited or no experience; increased legal and accounting costs relating to the acquisitions or compliance with regulatory matters; and unanticipated or undisclosed liabilities of any target.

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

64

### **Table of Contents**

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

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

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

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

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

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

- results from, and any delays in, our current and future clinical trials with ALPHA-1062 or any other future clinical development programs, including any delays related to the COVID-19 pandemic;
- announcements of regulatory approval or disapproval of ALPHA-1062 or any future product candidates;
- failure or discontinuation of any of our research and development programs;
- the termination of any future collaborations or license agreements;
- delays in the commercialization of ALPHA-1062 or any future product candidates;
- public misperception regarding the use of our product candidates;
- acquisitions and sales of new products or product candidates, technologies or businesses;
- manufacturing and supply issues related to our product candidates for clinical trials or future product candidates for commercialization;
- quarterly variations in our results of operations or those of our competitors;
- changes in coverage and recommendations by securities analysts;
- announcements by us or our competitors of new products or product candidates, significant contracts, commercial relationships, acquisitions or capital commitments;
- developments with respect to intellectual property rights;

65

#### Table of Contents

- our commencement of, or involvement in, litigation;
- changes in financial estimates or guidance;
- any major changes in our board of directors or management;
- new legislation or regulation in the United States relating to the sale or pricing of pharmaceuticals;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- product liability claims or other litigation or public concern about the safety of our product candidates;
- market conditions in the biopharmaceutical sectors; and
- general economic conditions in the United States and abroad
- other events or factors, including those resulting from pandemics, natural disasters, war, including the
  ongoing conflict in Ukraine, acts of terrorism or responses to these events.

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

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

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

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

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

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

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of our initial public offering, (b) in which we have total annual gross revenue of at least \$1.07 billion, or (c) in which we are deemed to be a large accelerated

66

#### **Table of Contents**

filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30<sup>th</sup>, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

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

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

We believe we were a "passive foreign investment company" (a "PFIC") within the meaning of Section 1297 of the U.S. Internal Revenue Code of 1986, as amended (the "Code") for our most recently completed taxable year and based on current business plans and financial expectations, we expect to be a PFIC for our current taxable year and may be a PFIC in subsequent tax years. If we are a PFIC for any year during a U.S. taxpayer's holding period of common

shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares, then such U.S. taxpayer generally will be required to treat any gain realized upon a disposition of the common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares or any so-called "excess distribution" received on its common shares, pre-funded warrants, warrant shares or pre-funded warrant shares as ordinary income, and to pay an interest charge on a portion of such gain or distribution. In certain circumstances, the sum of the tax and the interest charge may exceed the total amount of proceeds realized on the disposition, or the amount of excess distribution received, by the U.S. taxpayer. Subject to certain limitations, these tax consequences may be mitigated if a U.S. taxpayer makes a timely and effective QEF Election (as defined below) with respect to the common shares, pre-funded warrants, warrant shares and pre-funded warrant shares or a Mark-to-Market Election (as defined below) with respect to the common shares, warrant shares and pre-funded warrant shares. A U.S. taxpayer generally may not make a QEF Election with respect to the warrants or a Mark-to-Market Election with respect to the pre-funded warrants or warrants. In addition, U.S. taxpayers should be aware that there can be no assurances that we will satisfy the record keeping requirements that apply to a QEF (as defined below), or that we will supply U.S. taxpayers with information that such U.S. taxpayers are required to report under the QEF rules, in the event that we are a PFIC. Thus, U.S. Holders may not be able to make a QEF Election with respect to their common shares, pre-funded warrants, warrant shares and prefunded warrant shares. A U.S. taxpayer 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, warrant shares or pre-funded warrant shares over the taxpayer's basis therein. Each potential investor who is a U.S. taxpayer should review the discussion below under the heading "Certain Material U.S. Federal Income Tax Considerations — Passive Foreign Investment Company Rules" in its entirety and should consult its own tax advisor regarding the tax consequences of the PFIC rules and the acquisition, ownership, and disposition of the common shares, pre-funded warrants, warrant shares or pre-funded warrant shares.

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

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

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

In addition, the Inflation Reduction Act of 2022 includes provisions that impact the U.S. federal income taxation of corporations. Among other items, this legislation includes provisions that impose a minimum tax on the book income of certain large corporations and an excise tax on certain corporate stock repurchases that are imposed on the corporation repurchasing such stock. It remains unclear in certain respects how this legislation will be implemented

67

### Table of Contents

by the U.S. Department of the Treasury and we cannot predict how this legislation or any future changes in tax laws might affect us or purchasers of the common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares.

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

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

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

### Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The public offering price of our common shares is substantially higher than the pro forma net tangible book value per common share before giving effect to this offering. Accordingly, if you purchase our common shares in this offering, you will incur immediate substantial dilution of approximately \$9.70 per share, based on an assumed public offering price of \$11.20 per share (the Reverse Stock Split adjusted closing price of our common shares on the OTCQB on June 13, 2024), and our pro forma as adjusted net tangible book value as of March 31, 2024. Furthermore, if the underwriters exercise their option to purchase additional shares or outstanding options are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section entitled "Dilution."

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

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

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

Our executive officers, directors and current beneficial owners of 5% or more of our common stock and their respective affiliates are expected to beneficially own 23.48% of our outstanding common stock following the sale of all common shares offered under this prospectus. As a result, these persons, acting together, would be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors, any merger, consolidation, sale of all or substantially all of our assets, or other significant corporate transactions.

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

#### 68

#### **Table of Contents**

### Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their common shares by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act, subject to certain limitations. In general, pursuant to Rule 144, non-affiliate stockholders may sell freely after six months, subject only to the current public information requirement. Affiliates may sell after six months, subject to the Rule 144 volume, manner of sale (for equity securities), current public information, and notice requirements. Of the approximately 7,516,277 shares of our common stock outstanding as of June 13, 2024, approximately [•] shares are tradable without restriction. Given the limited trading of our common shares, resale of even a small number of common

shares pursuant to Rule 144 or an effective registration statement may adversely affect the market price of our common shares.

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

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common shares in the public market after any legal restrictions on resale discussed in this prospectus lapse, the trading price of our common shares could decline. As of June 13, 2024, we have 7,516,277 common shares outstanding and 395,819 common shares issuable upon conversion of our Class B Series A Preferred Shares, 3,066,644 common shares issuable upon exercise of warrants at a weighted average exercise price of \$6.00, 1,019,968 common shares issuable upon exercise of options with a weighted average exercise price of \$3.48, 341,053 common shares issuable upon exercise of performance options with a weighted average exercise price of \$0.20. Of these shares, all of the common shares resold by selling stockholders in this offering will be freely tradable, without restriction, in the public market.

The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus. Based upon the number of shares outstanding as of June 13, 2024, approximately 1,030,139 shares (13.7%) are held by directors, executive officers and other affiliates and will be subject to lock-up agreements. The Underwriter may, however, in their sole discretion, permit our officers, directors and other stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements.

In addition, promptly following the effectiveness of this, we intend to file one or more registration statements on Form S-8 under the Securities Act of 1933, as amended, or the Securities Act, register the issuance of 2,070,349 common shares subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans. Shares registered under these registration statements on Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options,

# We have broad discretion to determine how to use the funds raised in this offering, and may use them in ways that may not enhance our operating results or the price of our common stock.

Our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. We currently expect to use the net proceeds from this offering to fund commercialization, manufacturing and continued research and development of our product candidates and development programs, as well as for working capital and other general corporate purposes, including costs and expenses associated with being a public company. However, our use of these proceeds may differ substantially from our current plans. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve the expected financial results, which could cause our stock price to decline.

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

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

69

#### **Table of Contents**

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

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

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

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

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

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

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

As at the date of this filing, the Company has outstanding warrants denominated in both Canadian and U.S. Dollars. 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.

#### Our common shares are subject to the penny stock rules, which make it more difficult to trade our common shares.

The Commission has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price per share of less than \$5.00, other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. The penny stock rules require a broker-dealer, before effecting a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that, before effecting any such transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is

#### **Table of Contents**

a suitable investment for the purchaser and receive (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common shares, and therefore stockholders may have difficulty selling their common shares.

#### FINRA sales practice requirements may limit a stockholder's ability to buy and sell our stock.

In addition to the "penny stock" rules described above, FINRA has adopted rules that require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative, low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. The FINRA requirements may make it more difficult for broker-dealers to recommend that their customers buy our common shares, which may have the effect of reducing the level of trading activity in our common shares. As a result, fewer broker-dealers may be willing to make a market in our common shares, reducing a stockholder's ability to resell our common shares.

### There is no public market for the Pre-Funded Warrants, Warrants or Units being offered by us in this offering.

There is no established public trading market for the pre-funded warrants or warrants and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants or warrants on any national securities exchange or other nationally recognized trading system, including the CSE or Nasdaq. Without an active market, the liquidity of the pre-funded warrants and warrants will be limited, which may adversely affect their value.

# Holders of Pre-Funded warrants, warrants and Units purchased in this offering will have no rights as common shareholders until such holders exercise their warrants and acquire warrant shares.

Until holders of pre-funded warrants and warrants acquire common shares upon exercise thereof, such holders will have no rights with respect to the pre-funded warrant and warrant shares. Upon exercise of the pre-funded warrants or warrants, the holders will be entitled to exercise the rights of a common shareholder only as to matters for which the record date occurs after the exercise date.

### **General Risk Factors**

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

Our business is susceptible to general conditions in the global economy and in the global financial markets. A global financial crisis or a global or regional political disruption could cause extreme volatility in the capital and credit markets. For example, the COVID-19 pandemic resulted in widespread unemployment, economic slowdown and extreme volatility in the capital markets. The Federal Reserve has raised interest rates multiple times in response to concerns about inflation and it may raise them again. Higher interest rates, coupled with reduced government spending and volatility in financial markets, may increase economic uncertainty and affect consumer spending. Similarly, the ongoing military conflict between Russia and Ukraine and increasing tensions between China and Taiwan have created extreme volatility in the global capital markets and may have further global economic consequences, including disruptions of the global supply chain. Any such volatility and disruptions may adversely affect our business or the third parties on whom we rely. If the equity and credit markets deteriorate, including as a result of political unrest or war, it may make any necessary debt or equity financing more difficult to complete, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and share price and could require us to delay or abandon development or commercialization plans. In addition, there is a risk that one or more of our service providers, manufacturers or other partners would not survive or be able to meet their commitments to us under such circumstances, which could directly affect our ability to attain our operating goals on schedule and on budget. We have experienced and may in the future experience disruptions as a result of such macroeconomic conditions, including delays or difficulties in initiating or expanding clinical trials and manufacturing sufficient quantities of materials. Any

71

#### **Table of Contents**

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

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

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

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

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

After effectiveness of the Registration Statement on Form S-1 of which this prospectus form a part, we will be subject to Section 404 and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Beginning with the second annual report that we will be required to file with the SEC, Section 404 requires an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting.

During the course of our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports. Furthermore, if we identify any material weaknesses, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting, which could materially and adversely affect our business, financial condition, results of operations and prospects, cause investors to lose confidence in our reported financial information and cause the trading price of our stock to fall. In addition, as a public company we will be required to file accurate and timely quarterly and annual reports with the SEC under the Exchange Act. In order to report our results of operations and financial statements on an accurate and timely basis, we will depend in part on CROs and other third parties to provide timely and accurate notice of their costs to us. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from the CSE or other adverse consequences that would materially and adversely affect our business, financial condition, results of operations and prospects.

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

Upon effectiveness of the Registration Statement on Form S-1 of which this prospectus form a part, we will become subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized, and reported within the time

72

#### **Table of Contents**

periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

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

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

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

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

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

situation remains uncertain, and while it is difficult to predict the impact of any of the foregoing, the conflict and actions taken in response to the conflict could increase our costs, disrupt our manufacturing and supply chain, reduce our sales and earnings, impair our ability to raise additional capital when needed on acceptable terms, if at all, or otherwise adversely affect our business, financial condition, and results of operations. Any disruption in the business of its supply chain, manufacturers, logistics providers, partners or customers that impacts sales at the end of a fiscal quarter could have a significant adverse impact on our financial results. All of the aforementioned risks may be further increased if disaster recovery plans prove to be inadequate. To the extent that any of the above should result in delays or cancellations of customer orders, or the delay in the manufacture, deployment, or shipment of our products, our business, financial condition, and results of operations would be adversely affected.

73

#### **Table of Contents**

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

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

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

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

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

- risks related to early stage of development and significant history of losses;
- risks related to our ability to generate revenue and achieve profitability;
- risks related to our lack of history in commercializing products;
- risks related to our need for substantial additional capital;
- risks related to COVID-19 adversely effecting our business operations;
- risks related to fluctuations in currency exchange rates;
- risks related to our reliance on the successful development, regulatory approval and commercialization of ALPHA-1062;

74

#### **Table of Contents**

- risks related to our ability to successfully expand our pipeline of product candidates;
- risks related to our focus on treatments for Alzheimer's Disease;
- risks related to substantial delays in our preclinical and clinical trials;
- risks related to the outcome of preclinical testing and early clinical trials not being predictive of later clinical trials;
- risks related to our reliance on third-parties to conduct our clinical trials;
- risks related to use of our therapeutic candidates being associated with side effects, adverse events or other properties or safety risks;
- risks related to preliminary data from studies or trials we announce changing as more data becomes available and are subject to audit and verification processes;
- risks related to foreign jurisdictions not accepting the data from our trials in the United States;
- risks related to product liability;
- risks related to our information systems;
- risks related to research and development of pharmaceuticals being lengthy and inherently risky;
- risks related to disruptions at the FDA;
- risks related to our failure to comply with health and data protection laws;
- risks related to approval in foreign jurisdictions;
- risks related to competition in our industry;
- risks related to commercialization and manufacturing;
- risks related to our market opportunity being smaller than we anticipate;
- risks related to our reliance on third-party suppliers;
- risks related to supply chain risks;

- risks related to our products never having been manufactured on a commercial scale;
- risks related to the complexity of manufacturing drugs;
- risks related to the successful commercialization of our product being dependent on governmental authorities and health insurers establishing adequate coverage, reimbursement levels and pricing policies;
- risks related to our lack of a sales organization;
- risks related to our ability to obtain and maintain patent protection for our technology and product candidates;
- risks related to protecting our intellectual property rights throughout the world;
- risks related to obtaining protection under Hatch-Waxman Amendments;
- risks related to the validity, scope and enforcement of any patents listed in the Orange Book;
- risks related to maintaining our patent protections;
- risks related to our need to license intellectual property from third parties;
- risks related to third party claims of infringement;
- risks related to our ability to identify third-party patents to avoid infringement;

75

#### **Table of Contents**

- risks related to lawsuits to protect and enforce our patents;
- risks related to unfavorable publicity;
- risks related to intellectual property litigation using substantial resources and distracting personnel;
- risks related to changes in U.S. patent law;
- risks related to sharing our trade secrets;
- risks related to claims that our employees, consultants or independent contractors have wrongfully used confidential information of former employers;
- risks related to claims we wrongfully hired employees;
- risks related to claims challenging inventorship;
- risks related to trademarks;
- risks related to regulatory approval processes being lengthy, time consuming and unpredictable;
- risks related to our products remaining subject to regulatory scrutiny;
- risks related to obtaining and maintaining regulatory approval in multiple jurisdictions;
- risks related to using accelerated pathways to FDA approval;
- risks related to healthcare legislation including unfavorable pricing;
- risks related to our business exposing us to regulatory penalties;
- risks related to our ability to comply with environmental, health and safety laws and regulations;
- risks related to U.S. foreign export and import laws;

- risks related to our need to increase the size of our organization;
- risks related to our need to attract and retain management and key scientific personnel;
- risks related to our employees or contractors violating the law or engaging in misconduct;
- risks related to establishing sales and marketing personnel;
- risks related to exploring strategic collaborations;
- risks related to acquisitions and related integrations; and
- risks related to our common shares and this offering.

We have based these forward-looking statements largely on our current expectations, estimates, forecasts and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur at all. You should refer to the section entitled "Risk Factors" and elsewhere in this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. Except as required by law, including applicable Canadian laws, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

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

76

#### **Table of Contents**

# **CURRENCY PRESENTATION**

Unless otherwise indicated, all references to monetary amounts in this Prospectus are denominated in United States (US) dollars. The consolidated financial statements of the Company incorporated herein by reference are reported in US dollars and are prepared in accordance with U.S. Generally Accepted Accounting Principles (U.S. GAAP). Unless otherwise indicated, all references to "\$" and "dollars" in this Prospectus refer to US dollars. References to "CAD\$" or "C\$" in this Prospectus refer to Canadian dollars. On June 13, 2024, the daily exchange rate for one United States dollar expressed in Canadian dollars, as quoted by the Bank of Canada, was US\$1.00 = C\$1.3746 (or C\$1.00 = US\$0.7275).

#### MARKET AND INDUSTRY DATA

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

performance are necessarily subject to uncertainty and risk due to a variety of factors, including those described in "Risk Factors" and "Special Note Regarding Forward-Looking Statements." These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

#### **TRADEMARKS**

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

77

# **Table of Contents**

# MARKET INFORMATION AND DIVIDEND POLICY

Our common shares are currently traded on the CSE under the symbol "ACOG" and quoted for trading on the OTCQB in under the symbol "ACOGF". On June 13, 2024, the last reported sale price of our common shares on the CSE was C\$0.80 and the last quoted price of our common shares on OTCQB was \$0.56.

# **Holders**

As of June 13, 2024, we had 266 registered holders of our common shares. This number does not include an indeterminate number of stockholders whose shares are held by brokers in street name through depositaries, including CDS & Co and CEDE & Co.

#### **Dividends**

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

See "Risks Related to our Common Shares and this Offering" in Risk Factors.

78

#### **Table of Contents**

# **USE OF PROCEEDS**

We estimate that the net proceeds to us from this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$13.40 million, or approximately \$15.47 million if the underwriters exercise their full its option to purchase additional shares, based on an assumed combined public offering price of \$11.20 per common share and accompanying warrant (the Reverse Stock Split adjusted last reported closing trading price of our common shares on the OTCQB on June 13, 2024) and assuming the issuance of no prefunded warrants and assuming none of the warrants issued in this offering are exercised.

Assuming no exercise of the underwriters option to purchase additional common shares and/or pre-funded warrants and/or warrants, each \$1.00 increase (decrease) in the assumed combined public offering price of \$11.20 per common share and accompanying warrant would increase (decrease) the net proceeds to us from this offering by approximately

\$1.23 million, assuming the number of common shares and accompanying warrants offered by us, as set forth on the cover of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated expenses payable by us. Similarly, an increase (decrease) of 100,000 common shares and accompanying warrants sold in this offering by us would increase (decrease) our net proceeds by approximately \$1.03 million, assuming the assumed combined public offering price of \$11.20 per common share and accompanying warrant remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds we receive from this offering to fund support of our filed NDA; begin our efforts toward our commercialization and launch of ALPHA-1062 in Alzheimer's Disease; further research and development of our pipeline product candidates; continued commercial CMC activities (chemistry, manufacturing, and controls); and for working capital and general corporate purposes, which may include funding capital expenditures, acquisitions, and investments. We believe the net proceeds from this offering will allow us to meet our planned base operating expenditures for the 12 months following the offering, including certain initial costs to prepare for commercialization of ALPHA-1062 in AD and ongoing operating expenses of the Company.

The Company is also contemplating raising additional capital; to fully execute its commercial and operating plans should we receive the NDA approval for ALPHA-1062 from the FDA. Any additional capital would further support our planned costs to begin commercial activities including launching U.S. sales of ALPHA-1062 in AD. This additional capital raise would currently be contemplated to follow the NDA approval, if approved by the FDA.

The allocation of net proceeds may be subject to future revision depending on, among other factors, market conditions, future operating results, and acquisition opportunities.

The above-noted allocation represents our intention with respect to its use of proceeds based on current knowledge and planning by our management. There may be circumstances where, for sound business reasons, we reallocate the use of proceeds in a manner that management believes to be in the best interests of the Company. In such circumstances, the actual expenditures may differ from the estimates set forth above. Accordingly, our management team will have broad discretion in using the remaining net proceeds from this offering. Pending the use of proceeds from this offering, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing securities.

79

## **Table of Contents**

#### DETERMINATION OF OFFERING PRICE

The initial public offering price will be determined by arm's length negotiations between us and the underwriters. In determining the initial public offering price, we and the underwriters expect to consider a number of factors including:

- the trading price of the common shares on the CSE and the OTCQB and the information set forth in this prospectus and otherwise available to the representatives;
- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common shares of generally comparable companies; and
- other factors deemed relevant by the representatives of the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for the common shares, or that the common shares will trade in the public market at or above the initial public offering price. See "Underwriting" for additional information regarding our arrangement with our underwriters.

# **Table of Contents**

#### **CAPITALIZATION**

The following table sets forth our cash and capitalization as of March 31, 2024, on:

- an actual basis; and
- an as-adjusted basis to reflect our receipt of the net proceeds from our sale of common shares and accompanying warrants in this offering at an assumed combined public offering price of \$[•] per common share and accompanying warrant (being the Reverse Stock Split adjusted closing price of our common shares as quoted on the OTCQB on June 13, 2024), and assuming the issuance of no pre-funded warrants and assuming none of the warrants issued in this offering are exercised.

The as-adjusted information below is illustrative only, and our capitalization following the closing of this offering will be adjusted based on the actual terms of this offering determined at the time of pricing as well as our actual expenses. You should read this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes appearing elsewhere in this prospectus. The following table sets forth the capitalization of the Company assuming the sale of [•] common shares and accompanying warrants offered for sale by us at an assumed combined offering price of \$[•] (assigning \$[•] to the common share and \$0.01 to the warrant).

		As of March 31, 2024		
	•	Actual <sup>(1)</sup>		Pro Forma as Adjusted
Cash and cash equivalents	\$	2,259,384	\$	15,663,384
Common shares, no par value: unlimited shares authorized, 7,496,277 (149,925,536 pre-Reverse Stock Split) shares issued and outstanding, actual; [•] issued and outstanding, pro forma as adjusted		48,758,033		62,153,253
Class B preferred shares, \$5.00 par value, unlimited shares authorized, 395,819 (7,916,380 pre-Reverse Stock Split) issued and outstanding, pro forma as adjusted		62		62
Additional paid-in capital	\$	18,182,009	\$	18,190,789
Accumulated other comprehensive loss		(104,301)		(104,301)
Accumulated deficit		(66,650,884)		(66,650,884)
Total shareholders' equity	\$	184,919	\$	13,588,919
(1) Adjusted for the 1-for-20 Reverse Stock Split				
01				

# **Table of Contents**

#### **DILUTION**

If you invest in our common shares in this offering, your ownership interest will be immediately diluted to the extent of the difference between the offering price per share and the pro forma as adjusted net tangible book value per share after this offering. Historical net tangible book value per share represents the amount of our total tangible assets less total liabilities, divided by the number of shares of common stock outstanding. Dilution in pro forma net tangible book value per share represents the difference between the amount per share paid by purchasers of our common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after the consummation of this offering.

Our net tangible book value as of March 31, 2024 was approximately \$(287,331), or \$(0.04) per share after giving effect to the Reverse Stock Split ((\$0.00) per common share pre-Reverse Stock Split) based on 7,496,277 shares outstanding on March 31, 2024, as adjusted for the Reverse Stock Split.

After giving effect to the sale of 1,334,821 common shares and accompanying warrants at the assumed combined public offering price of \$11.20 (being the Reverse Stock Split adjusted closing price of our common shares as quoted on the OTCQB on June 13, 2024) and assuming the issuance of no pre-funded warrants in this offering and assuming none of the warrants issued in this offering are exercised, our pro forma as adjusted net tangible book value as of March 31, 2024 would have been approximately \$13.12 million, or approximately \$1.49 per share based on 8,831,098 common shares outstanding after adjustment to give effect to the sale of common shares and accompanying warrants in this offering. This represents an immediate increase in net tangible book value of \$1.53 per share to existing stockholders and an immediate dilution in net tangible book value of \$9.70 per share to new investors of common shares in this offering (assigning \$11.19 of the assumed combined public offering price of \$11.20 to the common share). The following table illustrates this per share dilution:

Assumed initial public offering price per common share		\$ 11.19
Historical net tangible book value per share as of March 31, 2024	\$ (0.04)	
Increase in pro forma net tangible book value per share attributable to new investors in this offering	\$ 1.53	
Pro forma net tangible book value per share immediately after this offering		\$ 1.49
Dilution per share to new investors in this offering		\$ 9.70

Each \$1.00 increase (decrease) in the assumed combined public offering price of \$11.20 per common share and accompanying warrant, would increase (decrease) our as adjusted net tangible book value, after this offering by approximately \$1.23 million, or \$0.14 per share and the dilution to new investors by \$1.22 per share, in each case assuming the number of common shares and accompanying warrants offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

A 100,000 share increase (decrease) in the number of common shares and accompanying warrants offered by us would increase (decrease) our as adjusted net tangible book value by approximately \$1.03 million, or \$0.12 per share, and decrease (increase) in the dilution to new investors by approximately (\$0.12) per share, in each case assuming the public offering price of \$11.20 per share (assigning \$11.19 of the assumed combined public offering price of \$11.20 to the common share) remains the same, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters were to fully exercise their option to purchase additional common shares and accompanying warrants, our pro forma net tangible book value would be approximately \$15.18 million or \$1.68 per share. This represents a increase in pro forma as adjusted net tangible book value of \$1.72 per share to our existing investors and an immediate dilution of \$9.47 per share to new investors.

The following table summarizes, on an as adjusted basis as of March 31, 2024, after giving effect to this offering, the total number of common shares purchased from us, the total cash consideration paid to us, or to be paid, and the

82

#### Table of Contents

average price per share paid, or to be paid, by new investors purchasing shares in this offering, at an assumed public offering price of \$11.19 per share (assigning \$11.19 of the assumed combined public offering price of \$11.20 to the common share), before deducting the estimated underwriting discounts and commissions:

	Shares Pur	ourchased Total Con		deration	Average Price  Per Share
	Number	Percent	Amount	Percent	Percent
Existing stockholders	7,496,277	85% \$	48,758,033	77%	\$ 573,623
New investors	1,334,821	15% \$	14,936,647	23%	\$ 995,776

Total 8,831,098 100% \$ 63,694,680 100% \$ 636,947

If the underwriters were to fully exercise their option to purchase 200,893 additional common shares, the percentage of common shares held by existing investors would be 83%, and the percentage of shares of our common stock held by new investors would be 17%.

The foregoing tables and calculations exclude:

- 3,066,644 common shares issuable upon exercise of outstanding warrants with an average weighted exercise price of \$6.00,
- 395,819 common shares issuable upon conversion of Class B Preferred Series A Shares;
- 1,019,968 common shares underlying options granted under our equity plans, exercisable at an average weighted exercise price of \$3.48 per share; and
- 341,053 common shares underlying performance options granted under our equity plans, exercisable at an average weighted exercise price of \$0.20 per share.

The above discussion and tables are based on the number of shares outstanding at March 31, 2024. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities could result in further dilution to our stockholders.

83

#### **Table of Contents**

#### **BUSINESS**

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

#### **Business Overview**

Alpha Cognition, Inc. is a pre-commercial stage, biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's disease, for which there are limited treatment options. The Company is focused on the development of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's disease following the recent NDA submission and pending FDA review and approval and subsequent commercial sales of ALPHA-1062 oral tablet formulation. The Company's ALPHA-1062 development program is primarily focused on clinical and regulatory development, CMC, and commercial readiness. The Company has two additional development programs: 1) ALPHA-1062 in combination with memantine for the treatment of moderate-to-severe Alzheimer's disease; and 2) ALPHA-1062IN formulation for the treatment of mild cognitive impairment with TBI.

Our Company's lead product, ALPHA-1062 is a prodrug of an approved acetylcholinesterase inhibitor, designed to significantly reduce the side-effects observed with the other acetylcholinesterase inhibitors. ALPHA-1062, a proprietary, delayed release oral tablet is being developed for the treatment of mild-to-moderate Alzheimer's with a goal of FDA approval and subsequent commercialization. ALPHA-1062, is a patented new innovative product 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 pre-clinical development in combination with memantine to treat moderate to severe Alzheimer's disease, in pre-clinical development with sublingual formulation for patients suffering from dysphagia, and is intended to be out-licensed for pre-clinical development to study an intranasal formulation for cognitive impairment with mTBI.

The Company has other pre-clinical assets which include 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. Other pre-clinical assets include ALPHA-0702 and ALPHA-0802, which 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.

# Alzheimer's Disease Mild-to-Moderate Stage Program

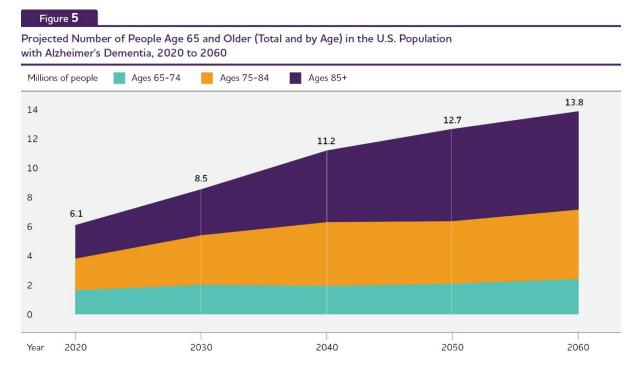
#### Disease and Market Overview

Alzheimer's Disease is the most common form of dementia and affects a large portion of the elderly population, approximately 6.7 million people in the United States 65 years or older. Alzheimer's Disease is a progressive disease of the brain which causes damage or destroys neurons in the section of the brain that controls cognition and functional ability, such as thinking, learning and memory.

84

#### **Table of Contents**

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



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

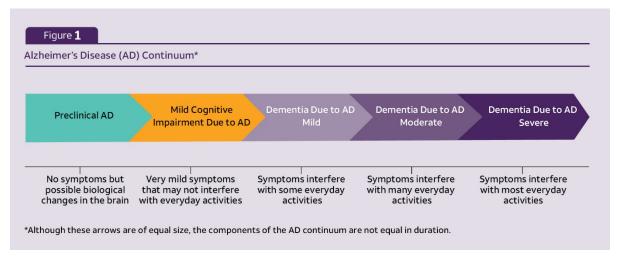
#### **Symptoms**

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

85

#### **Table of Contents**

drinking, and overall mobility. Alzheimer's Disease progresses within each person differently. Depending on the individual risk factors, time of diagnosis, and other factors, the length of time a patient is within each stage of the continuum will vary greatly.



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

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

# Adapted from Porsteinsson 2021

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

# Alzheimer's Disease caregivers carry a heavy burden

People suffering from Alzheimer's Disease are not relegated only to the patients. Family members and caregivers are affected greatly and carry a huge burden due to this progressive disease. The vast majority (83%) of the 11 million unpaid Americans that provide care for Alzheimer's Disease patients are doing so for a family member, usually a

86

#### **Table of Contents**

parent or parent-in-law. Two-thirds are women and the majority are under the age of 65 years old. These caregivers provide upwards to 18 billion hours of unpaid care, which equates to \$339.5 billion a year. While many believe they don't have the information or resources necessary to do their job as a caregiver well, they feel they have no choice but to take on this role, as cited in a 2014 Alzheimer's Association poll. In addition to providing help with daily activities, caregivers are also providing emotional, physical, communication, and financial support. As the disease progresses and the patient exhibits behavioral and functional changes that are more severe, the burden becomes larger and the overall stress increases. According to the Alzheimer's Association, caregivers report feeling high emotional stress, and experience financial and physical difficulties while caring for their loved one.

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

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

<sup>\*</sup>Combination of coronary heart disease and stroke.

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

# Long-term care homes and death rates

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

Alzheimer's disease was officially listed as the sixth-leading cause of death in the United States in 2019.371 In 2020 and 2021, when COVID-19 became the third-leading cause of death, Alzheimer's disease was the seventh-leading cause of death; official counts for 2022 are still being compiled. Alarmingly, deaths from Alzheimer's Disease have more than doubled from 2000 to 2019, to 145.2%, while all other major causes of deaths have declined or remained the same, such as cancer, heart disease or stroke. Alzheimer's Disease accounts for two-thirds of deaths in a nursing home, which is greater than cancer and any other condition. Due to the stress associated with caring for a loved one suffering from Alzheimer's Disease, 72% of family caregivers experienced relief when the person with Alzheimer's or another dementia died.

87

#### **Table of Contents**

# 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 former related party through common shareholders, and subsequently, on completion of

Table includes caregivers age 18 and older.

Created from data from the Behavioral Risk Factor Surveillance System survey.  $^{\mbox{\tiny 409}}$ 

Table includes caregivers age 18 and older

<sup>\*</sup> Cardiovascular disease - combination of coronary heart disease and stroke

the ALPHA-1062 license agreement, by the Company. The Phase I human studies included a SAD Study followed by a MAD Study. These Phase I studies were designed to determine the safety of the drug, which was administered to healthy subjects, including elderly, at increasing doses of ALPHA-1062, initially one time in the SAD Study, and subsequently multiple times over a seven-day period in the MAD Study. These studies indicated that ALPHA-1062 formulations may have reduced gastrointestinal side effects (nausea, diarrhea, vomiting) as compared to one of the existing treatments; Razadyne (galantamine is the generic name).

Bioavailability and Bioequivalence Pivotal Trials: The Company completed two studies (fed and fasted) in Q2 2022 (from April to June) and a third in Q3 2022 (from July to August). All studies were completed in India with Vimta Labs, Inc., a clinical research organization with significant experience in running bioanalytical and bioequivalence studies. The studies were designed to demonstrate pharmacokinetic equivalence in healthy subjects compared to the reference listed drug galantamine hydrobromide immediate release (fed and fasted) and galantamine hydrobromide extended release, which are standard of care treatments for patients with mild to moderate Alzheimer's disease. The studies were designed in accordance with FDA 505b2 guidance for industry. Primary endpoints of all studies were to evaluate bioavailability and bioequivalence by comparative measurements of peak plasma concentration (Cmax), and area under the plasma concentration-time curve from time zero to infinity (AUC0-inf.). Secondary endpoints were to measure adverse events and safety outcomes. Topline results from the bioequivalence studies suggested that ALPHA-1062 achieved bioequivalent area-under-the-curve (fed and fasted) and peak exposures (fed) relative to galantamine hydrobromide immediate release and galantamine hydrobromide extended release. There were minimal adverse events (<3%) reported for ALPHA-1062 during these studies. With these bioavailability and bioequivalence pivotal study results, the Company filed 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. Approval by the FDA may not occur in this timeframe or at all.

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



# Pivotal Trial Results Provided Data Enabling NDA Filing

#### Bioequivalence Studies vs. Immediate Release

PK Parameter	ALPHA-1062 Delayed Release 5mg (n=36)	Gal HBr Immediate Release 4mg (n=36)	% to Reference Drug 80-125%	Enabled NDA Filing
AUCO-inf (μg x h/mL) Fasted State	306.8	321.5	95%	1
Cmax (ng/mL) Fasted State	30.7	40.5	76%	1
AUCO-inf (µg x h/mL) Fed State	286.7	329.9	87%	1
Cmax (ng/mL) Fed State	27.6	30.2	91%	1

#### Bioequivalence Study vs. Extended Release

PK Parameter	ALPHA- 1062 Delayed Release 5mg (n=20)	Gal HBr Extended Release 8mg (n=20)	% to Reference Drug 80-125%	Enabled NDA Filing
AUCO-24 (μg x h/mL) Steady State	527.5	492.1	107%	1
Cmax (ng/mL) Steady State	41.7	32.8	127%	✓

- Data suggests ALPHA-1062 AUC was bioequivalent to galantamine hydrobromide IR and ER<sup>1</sup>
- Cmax for ALPHA-1062 is bracketed between IR and ER (lower than IR, higher than ER) providing data for NDA filing (scientific bridge)
- Minimal adverse events reported in these trials
- Enabled NDA filing based on 505(b)(2) requirements

90% Confidence Interval (CI) acceptance criteria is 80-125% for the test/reference ratio  $^3$ 

COPYRIGHT 2021 ALPHA COGNITION, INC. 1. DA Guidance: https://www.fda.gov/files/drugs/published/Bioavailability-and-Bioequivalence-Studies-Submitted-in-NDAs-or-INDs

# 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 oral ALPHA-1062 (or galantamine benzoate) 5mg delayed release tablet compared to galantamine hydrobromide tablet 4mg immediate release — the reference drug. Primary endpoints of these studies were to evaluate bioavailability and bioequivalence by comparative measurements of peak plasma concentration (Cmax), and area under the plasma concentration-time curve from time zero to infinity (AUC0-inf.). Secondary endpoints were to measure adverse events and safety outcomes. Thirty-six healthy subjects were enrolled in each trial.

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

A secondary objective of the studies was to evaluate the safety and tolerability of single-dose administration of ALPHA-1062 5mg tablet. The primary pharmacokinetic outcomes were AUC0-inf 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 appeared to be established in both the fed and fasted studies with the 90% confidence intervals for area under the curve falling within the 80%-125% bioequivalence range. The mean area under the curve ratio to reference drug for ALPHA-1062 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 appeared to be 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 appeared to be 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 should allow for a 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 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 oral ALPHA-1062 5mg delayed release tablets and 8 mg galantamine hydrobromide extended release capsules, when dosed to steady state. Bioequivalence appeared to be established based on total drug exposure (AUC) and the Cmax was expectedly higher than that of the extended release reference. These data, coupled with the bioavailability and bioequivalence pivotal data released in June, appears to establish bioequivalence to both formulations of galantamine hydrobromide and supplements the NDA application for ALPHA-1062 in mild-to-moderate Alzheimer's disease, filed in Q3 2023. The Company prepared and filed the NDA with the FDA and the file is pending FDA review and approval.

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. Primary endpoints of all studies were to evaluate at day seven bioavailability and bioequivalence by comparative measurements of peak plasma concentration of test and reference (Cmax), and area under the plasma concentration-time curve from time zero to infinity (AUC0-24.). Secondary endpoints were to measure adverse events and safety outcomes.

# **Table of Contents**

Topline results suggested 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 the data set for the NDA filing. These data further describe the delayed release profile of ALPHA-1062 and supplements the NDA data set by characterizing the therapeutic and acceptable exposures compared to both the immediate release and extended release products.

Multiple dose administration of ALPHA-1062 was well tolerated with two adverse events reported, both of which were mild and transitory. No serious safety issues were observed in the study. During the second quarter of 2022, the Company met with FDA regarding the ALPHA-1062 program for mild-to-moderate Alzheimer's disease. The Company received feedback regarding the ALPHA-1062 RESOLVE trial, labeling, and manufacturing. Labeling and manufacturing guidance for stability of ALPHA-1062 was provided by FDA to support commercial strengths in commercially marketed product. The Company believes it has demonstrated the required stability endpoints for twelve months of long-term stability data in the three potential strengths of ALPHA-1062. The RESOLVE trial was a trial designed to measure adverse events in an Alzheimer's population and provide label enabling data for ALPHA-1062. It was not a required trial to complete in order to submit an NDA application for approval. Post second quarter meeting with FDA, the Company determined this trial would not be implemented and informed the FDA on this matter. As a result of the agency's feedback that the ALPHA-1062 RESOLVE trial was not required for the submission of an NDA, the Company filed its NDA for ALPHA-1062 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 PDUFA date for ALPHA-1062 is July 27, 2024. There is no guarantee that the FDA will approve the NDA by the PDUFA date, if at all. See the section entitled "Risk Factors — Risks Related to Government Regulation — The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable".

#### Commercialization Strategy

#### ALPHA-1062 Alzheimer's Disease Commercialization Strategy

During the second half of 2023 the Company started, in parallel with the Company's regulatory activities, taking steps to develop a commercialization team to launch ALPHA-1062 in the U.S. The Company has completed sufficient planning to indicate that ALPHA-1062 could be launched using a specialty sales force that will focus on LTC physicians in the U.S. LTC physicians who treat elderly patients that reside in nursing homes also make pharmacologic decisions in concert with the LTC treatment team. Our research has indicated that the acetylcholinesterase inhibitor (AChEI) prescription market in the U.S. from the LTC market is large, representing 36% of the over 11 million prescriptions filled in pharmacies each year. The AChEI class includes Aricept, Exelon, Exelon Patch, Razadyne, Adlarity, Namzaric, and generic versions of the AChEIs. Prescription data suggests that there is currently high turnover of patients treated with currently approved AChEI medications, with 30% of patients discontinuing treatment by month 4 and 55% discontinuing treatment within one year. The Company believes that patients who discontinue a first therapy will try a 2<sup>nd</sup> and 3<sup>rd</sup> 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. The Company will attempt to secure 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 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. Distributors often have a deep understanding of local market dynamics, including regulatory requirements, distribution channels, and consumer preferences. Partnering with a local distributor should allow the Company to leverage this expertise and navigate the complexities of entering a new market more effectively. FDA regulatory approval does not guarantee regulatory approval for distribution in other territories. We will need to seek and obtain regulatory approval through

#### **Table of Contents**

candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials". Additionally, the Company intends to seek approval for potential additional indications and product line extensions.

# Potential ALPHA-1062 coverage and reimbursement in the United States

The Company believes ALPHA-1062 will have limited payor barriers based on current US access and reimbursement data of generic Alzheimer's Disease symptomatic medications (e.g., acetylcholinesterase inhibitors, memantine) and branded Namzaric® which are widely accessible to most MA-covered lives. Donepezil and Namzaric® are mostly covered by health care plans.

Third party market research with pharmacy and medical directors, indicates that coverage of ALPHA-1062 would be similar to Namzaric. They forecast ALPHA-1062 to be managed at a preferred or non-preferred branded tier, without Prior Authorization or step edits, depending on rebates, as long as it is competitively priced and differentiated from other products via its improved tolerability. Importantly, caregiver market research highlights cost is not an issue. They are willing to pay a premium for a product that is more efficacious with less side effects. This provides additional confidence to the Company that family members will request branded ALPHA-1062 for their mild-to-moderate Alzheimer's Disease patients, even at a higher cost than current generics.

#### Competitive Conditions and ALPHA-1062 Positioning

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

There are 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

9

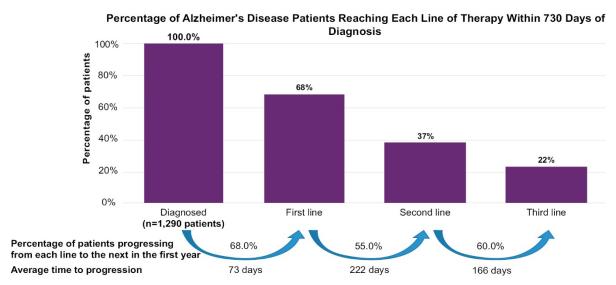
# **Table of Contents**

- (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. It is important to note that DMT agents will not be a competitor to the current standard of care, the AChEI class. DMTs will be used in combination with these medications, as they do not address the symptoms of the disease.

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

# Treatment Initiation and Progression



Source: Decision Resources Group, 2021

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

92

# Table of Contents

nausea, vomiting, dizziness and decreased appetite among acetylcholinesterase inhibitors. Prescribing habits within long-term care physicians, seem to be well entrenched, and overall, physicians report feeling dissatisfied and/or apathetic about their symptomatic treatment options. Caregivers also expresses dissatisfaction with the currently approved symptomatic treatments options.

#### Our solution: ALPHA-1062

There is a significant unmet need for better treatment options for patients suffering from Alzheimer's disease. The Company believes that ALPHA-1062 is poised to be a next-generation treatment option. The Company believes that we can differentiate ALPHA-1062 based on several potential advantages to Alzheimer's Disease patients:

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

According to primary market research conducted by and for the Company, including a report prepared by a third-party paid for by the Company in October 2021, we believe the market research confirms that based on the product attributes listed above, 88% of LTC prescribers are likely to prescribe ALPHA-1062, with a 29% preference share.

#### Alzheimer's Disease Moderate-To-Severe Stage Program

# Disease and Market Overview

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

#### Increasing caregiver burden

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

# Our Product and Approach to Treatment

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

93

#### **Table of Contents**

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

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

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

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

# Potential ALPHA-1062 coverage and reimbursement in the United States

US payers have granted branded Namzaric<sup>®</sup> wide access to most MA-covered lives and it is mostly covered on preferred tiers. The Company believes the ALPHA-1062 + memantine would be treated similarly. Ref 17 DRG Access-Reimbursement AD US May 2019. Pg <sup>4</sup> Should ALPHA-1062 receive approval for mild-to-moderate Alzheimer's Disease, the

payer team intends glean additional insights from their customers to determine commercial price and potential payer coverage by the payer community.

# **Intellectual Property**

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

#### ALPHA-1062 Patent Portfolio

The ALPHA-1062 patent portfolio is based on a therapeutic use (method of treatment) patent for ALPHA-1062, that covers treatment of a variety of neurological diseases with a cholinergic deficit, being memory deficits related to the cholinergic neurons, or brain disease with cognitive impairment. The Company's intellectual property strategy builds on this patent by avoiding traditional fast-release oral or transdermal routes for administering ALPHA-1062. Both routes would result in the premature cleavage of the pro-portion of the ALPHA 1062, in essence delivering the old drug (galantamine) with its attendant limitations. Delivery, polymorph, and formulation patents therefore expand on the original therapeutic use patent. The Company intends to patent all commercially relevant forms, formulations and routes/methods of ALPHA-1062 delivery in order to extend the effective patent protection lifetime. Effective patent protection of ALPHA-1062 and therapeutically relevant salts, polymorphs and/or formulations thereof may potentially be extended beyond 2042.

94

#### **Table of Contents**

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	<b>Expiry Date</b>
Canada	CA 2,721,007	Granted	04/2028
China	ZL200880128608.5	Granted	04/2028
Europe (11 European Patent Convention member states)	EP 2137192	Granted	04/2028
United States	US 9,763,953	Granted	12/2026
	US 10,265,325	Granted	12/2026

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

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 transmucosal routes of administration of lipophilic prodrugs (PCT application WO2014016430).

Jurisdiction	Patent/Application number	Status	<b>Expiry Date</b>
Australia	AU 2013294917	Granted	07/2033
Europe (11, and 18, European Patent	EP 2877165	Granted	07/2033
Convention member states)	EP 3417862	Granted Divisional	

Japan	JP 6574002	Granted	07/2033
	JP 6799648	Granted Divisional	
Canada	CA 2,878,135	Granted	07/2033
United States	US 11,077,119	Granted	07/2033
	US 17/356,136	Pending Continuation	

The granted claims in the jurisdictions above are directed to the therapeutic use of ALPHA-1062 and corresponding pharmaceutical compositions in the treatment of brain disease associated with cognitive impairment, wherein the claims cover intranasal, sublingual or buccal administration of the gluconate, saccharate or lactate salt of ALPHA-1062. Divisional applications have been filed and issued in some jurisdictions (e.g. in 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 WO2022236396).

Jurisdiction	Application number	Status	<b>Expiry Date</b>
Australia	2021445637	Pending	05/2041
Canada	3,218,929	Pending	05/2041
China	2021800981674	Pending	05/2041
Hong Kong	n/a	Pending	05/2041
Europe	21941020.6	Pending	05/2041
Japan	2023-570185	Pending	05/2041
United States	18/560,636	Pending	05/2041

#### **Table of Contents**

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

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

Jurisdiction	Patent/Application number	Status	<b>Expiry Date</b>
United States	US 11,795,176 18/463157	Granted Pending Continuation	01/2042
Europe	21152317.0 22738869.1	Priority Pending Pending	01/2042
Singapore	11202304626U	Pending	01/2042
Russia	2023121087	Pending	01/2042
Mexico	MX/a/2023/008276	Pending	01/2042
Korea	10-2023-7024970	Pending	01/2042
Japan	2023-565641	Pending	01/2042
Israel	303907	Pending	01/2042
China	2022800098271	Pending	01/2042
Hong Kong	62024086161.2	Pending	01/2042
Canada	3,205,859	Pending	01/2042

Brazil	BR 11 2023 013926 0	Pending	01/2042
Australia	2022208641	Pending	01/2042

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

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

Jurisdiction	Application number	Status	Expiry Date
PCT application	WO2023092231	Pending	est. 2042
United States	18/549,309	Pending	

This invention is based on preclinical animal studies in TBI showing enhanced therapeutic benefit, suited for multiuse intranasal administration, building on the antimicrobial properties of ALPHA 1062. The European priority application remains pending. The international PCT-application is pending, and national phases are to be elected in May 2024. The US national phase has already been initiated and remains pending.

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

Jurisdiction	Application number	Status	<b>Expiry Date</b>
US provisional	63/504292	Priority filing, PCT intended (not published)	est. 2043

This invention is based on treating cognitive impairment in patients with persistent post-concussion symptoms (PCS) after TBI, using ALPHA 1062. A US provisional application was filed May 25, 2023. An international PCT application is planned in May 2024.

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

Jurisdiction	Application number	Status	<b>Expiry Date</b>
United States	18/434155	Priority filing, PCT intended (not published)	est. 2045
	96		

# **Table of Contents**

This invention is based on an oral tablet formulation for administering ALPHA 1062, employing a coating for pH dependent release. The formulation enables beneficial pharmacokinetic properties and side effect profile. A US application was filed on February 6, 2024. An international PCT application is planned in February 2025.

#### **Employees and Human Capital Resources**

The Company has 4 full-time employees and 1 part time contractors in total. Employees and contractors work virtually and in offices located in Vancouver BC, West Palm Beach, Florida and Dallas/Fort Worth, Texas. Employees utilize remote video conferencing and other connection tools to meet and advance business projects.

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

• *Talent development, compensation, and retention:* We strive to provide our employees with a rewarding flexible and remote work environment. We provide a competitive compensation and benefits

package, including bonus and equity incentive plans — all designed to attract and retain a skilled and diverse workforce.

- *Health and safety:* We support the health and safety of our employees by providing comprehensive insurance benefits, company-paid holidays, a personal time-off program, and other additional benefits which are intended to assist employees to manage their well-being.
- *Inclusion and diversity:* We are committed to efforts to increase diversity and foster an inclusive work environment that supports our workforce.

# **Foreign Operations**

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

# 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.

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

# 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.

97

# Table of Contents

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. Distributors often have a deep understanding of local market dynamics, including regulatory requirements, distribution channels, and consumer preferences. Partnering with a local distributor allows pharmaceutical companies to leverage this expertise and navigate the complexities of entering a new market more effectively. By outsourcing distribution activities to a reliable partner, the Company can focus our resources and expertise on our core competencies, such as commercializing in the U.S. FDA regulatory approval does not guarantee approval and/or distribution in other territories.

# **Government Regulation**

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

#### U.S. Drug Development Process

In the United States, the FDA regulates drugs under the federal Food, Drug, and Cosmetic Act ("FDCA"), and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, the approval process or after approval may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

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

- completion of nonclinical laboratory tests, animal studies, and formulation studies in accordance with FDA's good laboratory requirements and other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent Institutional Review Board ethics committee, either centralized or with respect to each clinical site, before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with GCP requirements to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA after completion of all pivotal trials;
- determination by the FDA within 60 days of its receipt of an NDA to accept the filing for substantive review;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practice ("cGMP") requirements to ensure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality, and purity, and of selected clinical investigation sites to assess compliance with GCP;

98

#### **Table of Contents**

- FDA review and approval of the NDA to permit commercial marketing of the product for particular indications for use in the United States;
- compliance with any post-approval requirements, including potential requirements to conduct any post-approval studies required by the FDA or the potential requirement to implement risk evaluation and mitigation strategies ("REMS"); and
- compliance with the United States *Pediatric Research Equity Act of 2003* ("PREA"), which requires either exemption from the requirements or may require conducting clinical research in a pediatric population.

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

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

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

# NDA Review and Approval Process

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

The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality, and purity. Under the PDUFA, guidelines that are currently in effect, the FDA has a goal of ten months from the date of "filing" of a standard NDA for a new molecular entity to review and act on the submission. This review typically takes 12 months from the date the NDA is submitted to FDA because the FDA has approximately two months to make a "filing" decision after the application is submitted. The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing.

The FDA may refer an application for a novel drug to an advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

99

#### **Table of Contents**

Before approving an NDA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance

with GCP. If the FDA determines that the application, manufacturing process, or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

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

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA with a REMS to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a medicine and to enable patients to have continued access to such medicines by managing their safe use. It could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries, and other risk minimization tools. The FDA also may offer conditional approval subject to, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may also require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing of the product based on the results of these post-marketing studies. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could impact the timeline for regulatory approval or otherwise impact ongoing development programs.

# **Orphan Drug Designation**

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

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

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

# **Expedited Development and Review Programs**

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

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

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

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

Fast track designation, priority review, accelerated approval, and breakthrough therapy designation do not change the standards for approval, but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. We may explore some of these opportunities for our product candidates as appropriate.

# Post-Approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There are continuing, annual program fees for any marketed products. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change,

#### **Table of Contents**

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.

#### **Table of Contents**

# Marketing Exclusivity

Market exclusivity provisions authorized under the FDCA can delay the submission and approval of certain marketing applications for products containing the same active ingredient. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity ("NCE"). A drug is an NCE if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. The FDCA also permits patent term restoration of up to five years as compensation for a patent term lost during product development and FDA regulatory review process to the first applicant to obtain approval of an NDA for a new innovative product in the United States. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. During the NCE exclusivity period, the FDA may not approve, or even accept for review, an 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 noninfringement to one of the patents listed in the FDA's publication Approved Drug Products with Therapeutic Equivalence Evaluations, which we refer to as the Orange Book, with the FDA by the innovator NDA holder. Upon approval of an NDA, each of the patents listed in the application for the drug is then published in the Orange Book. These products may be cited by potential competitors in support of approval of an ANDA or 505(b)(2) NDA. Any competitor who files an ANDA seeking approval of a generic equivalent version of a drug listed in the Orange Book or a 505(b)(2) NDA referencing a drug listed in the Orange Book must make patent certifications to the FDA that: (1) no patent information on the drug or method of use that is the subject of the application has been submitted to the FDA; (2) the patent has expired; (3) the date on which the patent has expired and approval will not be sought until after the patent expiration; or (4) the patent is invalid or will not be infringed upon by the manufacture, use, or sale of the drug product for which the application is submitted. Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired. If the ANDA or 505(b)(2) NDA applicant has provided a paragraph IV certification the applicant must send notice of the paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the paragraph IV certification. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve. Thus, approval of an ANDA or 505(b)(2) NDA could be delayed for a significant period of time depending on the patent certification the applicant makes and the reference drug sponsor's decision to initiate patent litigation. If the drug has NCE exclusivity and the ANDA is submitted four years after approval, the 30-month stay is extended so that it expires 7½ years after approval of the innovator drug, unless the patent expires or there is a decision in the infringement case that is favorable to the ANDA applicant before then.

The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages, or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and

103

three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a

#### **Table of Contents**

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

#### Other Healthcare Laws

Pharmaceutical manufacturers are subject to additional healthcare laws, regulation, and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such laws include, without limitation, U.S. federal anti-kickback, anti-self-referral, false claims, transparency, including the federal Physician Payments Sunshine Act, consumer fraud, pricing reporting, data privacy, data protection, and security laws and regulations as well as similar foreign laws in the jurisdictions outside the U.S. Similar state and local laws and regulations may also restrict business practices in the pharmaceutical industry, such as state anti-kickback and false claims laws, which may apply to business practices, including but not limited to, research, distribution, sales, and marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental thirdparty payors, including private insurers, or by patients themselves; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information; state and local laws which require the tracking of gifts and other remuneration and any transfer of value provided to physicians, other healthcare providers and entities; and state and local laws that require the registration of pharmaceutical sales representatives; and state and local laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by the United States Health Insurance Portability and Accountability Act of 1996 (HIPAA), thus complicating compliance efforts. For example, California recently enacted the California Consumer Privacy Act of 2018 ("CCPA"), which creates individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling certain personal data of consumers or households. The CCPA requires covered companies to provide new disclosure to consumers about such companies' data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action. Under the CCPA the California Attorney General may bring enforcement actions for violations of the CCPA. Further, California voters approved a new privacy law, the California Privacy Rights Act ("CPRA"), in the November 3, 2020 election which amends and expands the CCPA. The CPRA became fully effective on January 1, 2023. The CPRA significantly modifies the CCPA, including by expanding consumers' rights with respect to certain sensitive personal information. The CPRA also creates a new state agency, the California Privacy Protection Agency, that is vested with authority to implement and enforce the CCPA and the CPRA. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally.

The risk of our being found in violation of these or other laws and regulations is increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts and their provisions are open to various interpretations. These laws and regulations are subject to change, which can increase the resources needed for compliance and delay drug approval or commercialization. Any action brought against us for violations of these laws or regulations, even successfully defended, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Also, we may be subject to private "qui tam" actions brought by individual whistleblowers on behalf of the federal or state governments. Actual or alleged violation of any such laws or regulations may lead to investigations and other claims and proceedings by regulatory authorities and in

certain cases, private actors, and violation of any of such laws or any other governmental regulations that apply may result in penalties, including, without limitation, significant administrative, civil and criminal penalties, damages, fines, additional reporting obligations, and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, the curtailment or restructuring of operations, exclusion from participation in government healthcare programs and imprisonment.

104

#### Table of Contents

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

105

# **Table of Contents**

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, such efforts may potentially impact our business in the future.

President Joseph R. Biden, Jr. signed the Executive Order on Strengthening Medicaid and stating his administration's intentions to reverse the actions of his predecessor and strengthen the ACA. As part of this Executive Order, the Department of Health and Human Services, United States Treasury, and the Department of Labor are to review all existing regulations, orders, guidance documents, policies, and agency actions to consider if they are consistent with ensuring both coverage under the ACA and if they make high-quality healthcare affordable and accessible to Americans. We are unable to predict the likelihood of changes to the Affordable Care Act or other healthcare laws which may negatively impact our profitability. President Biden intends, as his predecessor did, to take action against drug prices which are considered "high". Drug pricing continues to be a subject of debate at the executive and legislative levels of U.S. government, and we expect to see legislation focusing on this in the coming year. The

American Rescue Plan Act of 2021 signed into law by President Biden on March 14, 2021 includes a provision that will eliminate the statutory cap on rebates drug manufacturers pay to Medicaid 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

106

#### **Table of Contents**

inflation, cap out-of-pocket expenses for Medicare Part D beneficiaries, and proposes a number of changes to how drugs are reimbursed in Medicare Part B. We cannot predict whether any proposed legislation will become law and the effect of these possible changes on our business cannot be predicted at this time.

#### Specialized Skill and Knowledge

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

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

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

#### **Corporate Structure**

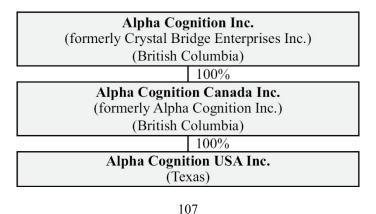
The Company was incorporated on November 15, 2017, under the Business Corporations Act (British Columbia) ("BCBCA") under the name "Crystal Bridge Enterprises Inc.". The Company is a reporting issuer in all of the provinces and territories of Canada. The Company completed its Qualifying Transaction with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

to Alpha Cognition Inc. As a result of the Qualifying Transaction Alpha Canada became the Company's wholly-owned subsidiary.

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

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

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



#### **Table of Contents**

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

# **Legal Proceedings**

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

# Competition

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

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

Many of our competitors, either alone or in combination with their respective strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, the regulatory approval process, commercialization, and marketing than we do. Mergers and acquisition activity in the biopharmaceutical sector is

likely to result in greater resource concentration among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through sizeable collaborative arrangements with established companies. These competitors also compete with us in recruiting and retain qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

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

108

### **Table of Contents**

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

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

# Overview

The Company is the parent company of Alpha Cognition Canada Inc. ("Alpha Canada" or "ACI Canada") which is the parent company of Alpha Cognition USA Inc. ("ACI USA"). As of May 1, 2023, the Company's common shares commenced trading on the CSE under the symbol "ACOG", previously the Company's shares were traded on the TSX-V until April 28, 2023 when the Company had them delisted. The Company's shares also trade on the OTCQB under the trading symbol "ACOGF".

The Company is a pre-commercial, biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's Disease and Cognitive Impairment with Traumatic Brain Injury ("TBI"), for which there are limited or no treatment options. The Company is focused on the development of ALPHA-1062 for the treatment of mild-to-moderate Alzheimer's Disease following the Q3 2023 submission of its New Drug Application ("NDA"). The NDA is subject to FDA review for potential 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 sublingual formulation, ALPHA-1062 intranasal ("ALPHA-1062IN") formulation for the treatment of cognitive impairment with mild traumatic brain injury (mTBI; otherwise known as concussion) and ALPHA-0602, ALPHA-0702 & ALPHA-0802, also referred to as 'Progranulin' and 'Progranulin GEM's', for the treatment of neurodegenerative diseases including amyotrophic lateral sclerosis, otherwise known as ALS or Lou Gehrig's disease and spinal muscular atrophy (SMA).

ALPHA-1062, is a patented new innovative product being developed as a next generation acetylcholinesterase inhibitor for the treatment of Alzheimer's Disease, with potentially 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 with sublingual formulation for patients suffering from dysphagia, is planned to be out-licensed to study an intranasal formulation for cognitive impairment with mTBI (otherwise known as concussion).

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

# **Operations**

The Company has not generated revenues from its operations to date and as at March 31, 2024, had a deficit of \$66,650,884 (December 31, 2023 – \$61,648,173) which has been primarily financed by equity. The Company had \$2,423,062 in cash and cash equivalents, including restricted cash, and \$2,158,471 in current liabilities (of which \$56,634 is payable from the Company's available restricted cash balance) as of March 31, 2024. The Company's continuing operations, as intended, are highly dependent upon its ability to obtain additional funding and generate cash flows. Management is of

109

### Table of Contents

the opinion that it does not have sufficient working capital to fully meet the Company's liabilities and commitments as outlined and planned in the following discussion. Management is of the opinion it will need to raise additional capital to cover upcoming planned R&D, commercialization and operating costs. Possible sources of such capital may come from private placements and public offerings of the Company's common shares and funds received from the exercise of warrants and share options. Additionally, the Company will also consider funding that may arise through partnership activities 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. We believe the net proceeds from this offering will allow us to meet our planned base operating expenditures for the 12 months following the offering, including certain initial costs to prepare for commercialization of ALPHA-1062 in AD and ongoing operating expenses of the Company.

The Company is also contemplating raising additional capital; to fully execute its commercial and operating plans should we receive the NDA approval for ALPHA-1062 from the FDA. Any additional capital would further support our planned costs to begin commercial activities including launching U.S. sales of ALPHA-1062 in AD. This additional capital raise would currently be contemplated to follow the NDA approval, if approved by the FDA.

# **Reverse Stock Split**

Although not yet effective, on May [•], our Board of Directors approved a reverse stock split which a stock split ratio of 1-for-20 ("Reverse Stock Split"). We anticipate affecting the Reverse Stock Split immediately prior to the uplisting of our common shares on the Nasdaq Capital Market and such Reverse Stock Split being effective on, or just before, the date our common shares are uplisted to the Nasdaq Capital Market. The reverse stock split is intended to allow us to meet the minimum share price requirement of the Nasdaq Capital Market.

Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our common shares, share data, per share data and related information depict the Reverse Stock Split as if it was effective and as if it had occurred at the beginning of the earliest period presented. The Reverse Stock Split, when effective, will combine each twenty shares of our outstanding common shares into one common share, without any change in the par value per share which will remain no par value, and the Reverse Stock Split correspondingly will adjust, among other things, the number of common shares issuable upon exercise of outstanding options and warrants and the exercise price of such options and warrants and shares issuable upon conversion of preferred stock and other convertible securities with the par value of the preferred stock being adjusted to reflect the effect of the Reverse Stock

Split. No fractional shares will be issued in connection with the Reverse Stock Split, and any fractional shares resulting from the Reverse Stock Split will be rounded to the nearest whole share.

# **Components of our Results of Operations**

# Research and development

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

Research and development expenses consists primarily of the following:

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

### General and administrative expenses

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

110

# Table of Contents

# Foreign exchange (loss) gain

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

#### Liability-Based Awards

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

# Share Based Compensation

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

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

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

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

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

#### Interest income

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

#### Grant revenue

The Company received grant revenue from the Army Medical Research and Material Command on June 5, 2023, for a pre-clinical study on the use of the ALPHA-1062 Intranasal to reduce blast of mTBI induced functional deficit and brain abnormalities. All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of operations and comprehensive loss. When grant proceeds are initially received, they are recorded as deferred income and restricted cash. Grant proceeds used to pay for study costs and are expensed as incurred, with a corresponding amount of grant revenue recorded along with a reduction of the balance of the deferred income liability. The Company classifies the balance of cash received from grants as restricted cash, when the proceeds from the grant have been designated for use in specified research. During the three months ended March 31, 2024, and March 31, 2023, the Company recorded grant income of \$133,779 and \$0, respectively, from its R&D Grant in the consolidated statements of operations and comprehensive loss.

#### Interest expense

Interest expense relates primarily to the interest paid on the Neurodyn Life Sciences Inc. ("NLS") promissory note.

111

# Table of Contents

### Change in fair value of derivatives

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

# Currency translation adjustment

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

# **Results of Operations**

Cor	nparison o	f the 'I	Three Moi	nths ende	<u>d March</u>	31, 202	24, and 2023
-----	------------	----------	-----------	-----------	----------------	---------	--------------

For the Three Months	Dollar	Percentage
Ended March 31,	Change	Change

	2024	2023		
Operating expenses				
Research and development	\$ 916,716	\$ 1,097,938	\$ (181,222)	(17)%
General and administrative expenses	3,494,802	888,409	2,606,393	293
Total operating expenses	4,411,518	1,986,347	2,425,171	122
Net operating loss	(4,411,518)	(1,986,347)	(2,425,171)	122
Other income (expense)				
Foreign exchange (loss) gain	(14,629)	28,019	(42,648)	(152)
Interest income	12,070	172	11,898	6,917
Grant income	133,779	_	133,779	100
Interest expense	(8,258)	(2,875)	(5,383)	187
Impairment of intangible assets	(39,166)	_	(39,166)	(100)
Change in fair value of warrant liability	(619,989)	55,198	(675,187)	(1,223)
Provision for loan losses	(55,000)		(55,000)	(100)
Total other income (expense)	(591,193)	80,514	(671,707)	(834)
Net loss	(5,002,711)	(1,905,833)	(3,096,878)	162
Other comprehensive loss				
Currency translation adjustment		(36,239)	36,239	(100)
Comprehensive loss	<u>\$ (5,002,711)</u>	<u>\$ (1,942,072)</u>	<u>\$ (3,060,639)</u>	158%
Net loss per share, basic and diluted	<b>\$</b> (0.70)	<b>\$</b> (0.50)	<b>\$</b> (0.20)	40%
Weighted-average shares used to compute net loss per share, basic and diluted	7,180,799	3,892,451	3,288,348	84%
	112			

# **Table of Contents**

# Research and development expenses

Research and development expenses decreased by \$181,222, or 17%, from \$1,097,938 for the three months ended March 31, 2023, to \$916,716 for the three months ended March 31, 2024. Research and development costs decreased primarily due to lower product development costs for ALPHA-1062 in AD following the submission of the NDA filed in September of 2023, offset by grant expenses of \$133,779 which were incurred in 2024. The Company's research and development expenses are summarized below:

	F	or the three mor March 3		Dollar	Percentage
		2024	2023	Change	Change
Product development	\$	417,543 \$	831,795 \$	(414,252)	(50)

Management fees and salaries	187,795	120,903	66,892	55
Share-based compensation	87,847	71,008	16,839	24
R&D grant expenses	133,779		133,779	100
Consulting fees	4,505	_	4,505	100%
Subcontractors	85,247	74,232	11,015	15
	\$ 916,716	\$ 1,097,938	<b>\$</b> (181,222)	(17)%

### General and administrative expenses

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

General and administrative expenses increased by \$2,606,393, or 293%, from \$888,409 for the three months ended March 31, 2023, to \$3,494,802, for the three months ended March 31, 2024, primarily due to the increase in expenses related to consulting fees, management fees and salaries, professional fees, and share based compensation. Consulting fees during the three months ended March 31, 2024, included \$2,273,949 relating to the issuance of 10,336,130 Common Shares pursuant to the Spartan Consulting Agreement. Management fees and salaries and professional fees were primarily higher in the three months ended March 31, 2024, in support of the Company's NDA filing for ALPHA-1062 and general business operating support. Share-based compensation was higher primarily due to fluctuations in the Company stock price and accounting for equity awards that were issued after March 31, 2023. The following table depicts the fluctuation in the general and administrative accounts:

	<u>.</u>	For the Three months ended March 31,			 Dollar	Percentage
		2024		2023	Change	Change
General and Administrative Expenses:						
Accretion expenses	\$	16,612	\$	9,574	\$ 7,038	74%
Amortization expense		20,594		20,594	_	_
Consulting fees		2,308,784		21,460	2,287,324	10,659
Depreciation		237		526	(289)	(55)
Investor relations		52,248		4,067	48,181	1,185
Management fees and salaries		357,620		278,613	79,007	28
Marketing		3,001		5,774	(2,773)	(48)
Other general and administrative		62,288		71,175	(8,887)	(12)
Professional fees		376,403		293,131	83,272	28
Registrar and filing fees		30,684		11,788	18,896	160
Share-based compensation		260,238		168,055	92,183	55
Subcontractor		_		3,652	(3,652)	(100)
Travel and related		6,093		_	6,093	100
	\$	3,494,802	\$	888,409	\$ 2,606,393	293%
		112				

# **Table of Contents**

# Foreign Exchange (Loss) Gain

The foreign exchange (loss) gain amount consists of changes in the value of the Canadian Dollar compared to the U.S. Dollar throughout the year. The loss reported for the three months ended March 31, 2024 was due to strengthening of the U.S. Dollar relative to the Canadian Dollar. The gain reported for the three months ended March 31, 2023 was due to the weakening of the U.S. Dollar relative to the Canadian Dollar.

The foreign exchange (loss) gain increased by \$42,648, or 152%, from a gain of \$28,019 as of March 31, 2023, to a loss of \$14,629 as of March 31, 2024, due primarily to the fluctuations in exchange rate between the Canadian Dollar and the U.S. Dollar. This variance is largely due to the Company changing its functional currency from the CAD to the USD on August 31, 2023, therefore having less transactions needing to be denominated in a foreign currency. The change in mix and balance of the Company's assets and liabilities over the periods also impacted the changes in foreign currency exchange (loss) gain.

#### Interest Income

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

Interest income increased \$11,898, or 6,97%, from \$172 for the three months ended March 31, 2023, to \$12,070 for the three months ended March 31, 2024.

#### **Grant Income**

The Company received grant revenue from the Army Medical Research and Material Command on June 5, 2023, for a pre-clinical study on the use of the ALPHA-1062 Intranasal to reduce blast of mTBI induced functional deficit and brain abnormalities. During the three months ended March 31, 2024, the Company recorded grant income of \$133,779 from its R&D Grant.

# Interest Expense

Interest expense increased \$5,383, or 187%, from \$2,875 for the three months ended March 31, 2023, to \$8,258 for the three months ended March 31, 2024, following the increase in interest rates on the NLS note which occurred in 2023. Interest expense relates primarily to the interest paid on the NLS promissory note.

# Impairment of Intangible Assets

During the three months ended March 31, 2024, the Company recorded an impairment of intangible assets of \$39,166 from the impairment of the ALPHA-0602 license as the Company decided to discontinue development of the ALPHA-602 technology.

# Change in Fair Value of Derivatives

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

The loss of \$619,989 for the three months ended March 31, 2024 for the fair value of the warrant liability was a net change of \$675,187, or 1,223%, compared to a gain of \$55,198 for the three months ended March 31, 2024. The change was primarily due to the fluctuation in the Company's stock price as well as the volatility of the financial markets, coupled with the addition of new warrants issued during the first quarter of 2023 which were priced differently that the Company's functional currency at the time of issuance.

# Provision for Loan Losses

The Company recorded a provision for loan losses of \$55,000 relating to its loan to Alpha Seven during the three months ended March 31, 2024, following a delay in Alpha Seven's initial capital raise and therefore potential inability to repay the loan when due.

114

# **Table of Contents**

# **Currency Translation Adjustment**

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

The currency translation adjustment was \$36,239 for March 31, 2023, compared to \$nil for the three months ended March 31, 2024. The change is due to the Company changing its functional currency from the CAD to the USD on August 31, 2023, resulting in no currency translation adjustment being required after August 31, 2023.

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

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

Net loss per share, basic and diluted	\$	(2.92)	\$ (3.55)	\$	0.63	(18)%
Weighted-average shares used to compute net						
loss per share, basic and diluted	4,7	17,774	3,398,610	1	1,319,164	39%

# Research and development expenses

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

115

# **Table of Contents**

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

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

# General and administrative expenses

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

		For the Year December	Dollar	Percentage		
	2023		2022	Change	Change	
General and Administrative Expenses:						
Accretion expenses	\$	59,777 \$	24,274 \$	35,503	146%	
Amortization expense		82,376	82,376	_	_	
Consulting fees		248,251	162,287	85,964	53	
Depreciation		2,103	8,547	(6,444)	(75)	

Investor relations	31,548	191,515	(159,967)	(84)
Management fees and salaries	1,586,572	1,478,791	107,781	7
Marketing	19,791	31,733	(11,942)	(38)
Other general and administrative	261,235	324,871	(63,636)	(20)
Professional fees	858,233	1,068,099	209,866	(20)
Registrar and filing fees	56,689	57,336	(647)	(1)
Share-based compensation	1,829,509	1,151,046	678,463	59
Subcontractors	18,036	243,316	(225,280)	(93)
Travel and related		17,693	(17,693)	(100)
	\$ 5,054,120	\$ 4,841,884	\$ 212,236	4%

# The foreign exchange gain

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

#### Interest income

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

116

#### **Table of Contents**

# Grant income

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

# Interest expense

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

# Change in fair value of derivatives

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

# The currency translation adjustment

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

# **Liquidity and Capital Resources**

# Sources of Liquidity

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

# Future Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we continue our development of, seeking regulatory approval for, and potentially commercialize ALPHA-1062 and potentially seek to discover and develop additional product candidates, conduct our ongoing and planned clinical trials and preclinical studies, continue our R&D activities, utilize third parties to manufacture ALPHA-1062, hire additional personnel, expand and protect our intellectual property, and incur additional costs associated with being a public company.

Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses, and prepaid expenses. The timing and amount of our funding requirements will depend on many factors, including:

- the initiation, type, number, scope, progress, expansions, results, costs and timing of clinical trials and
  preclinical studies of ALPHA-1062 and any future product candidates we may choose to pursue, including
  the costs of modification to clinical development plans based on feedback that we may receive from
  regulatory authorities and any third-party products used as combination agents in our clinical trials
- the costs, timing and outcome of regulatory meetings and reviews of ALPHA-1062 or any future product candidates, including requirements of regulatory authorities in any additional jurisdictions in which we may seek approval for ALPHA-1062 and any future product candidates;
- the costs of obtaining, maintaining, enforcing and protecting our patents and other intellectual property and proprietary rights;

#### 117

# **Table of Contents**

- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal control over financial reporting;
- the costs associated with hiring additional personnel and consultants as our business grows, including additional executive officers and clinical development, regulatory, CMC quality and commercial personnel;
- the costs and timing of establishing or securing sales and marketing capabilities if ALPHA-1062 or any future product candidate is approved;
- our ability to achieve sufficient market acceptance, coverage, and adequate reimbursement from thirdparty payors and adequate market share and revenue for any approved products;
- our ability and strategic decision to develop future product candidates other than ALPHA-1062, and the timing of such development, if any;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements; and

• costs associated with any products or technologies that we may in-license or acquire.

Based upon our current operating plan, we estimate that our existing cash, cash equivalents and marketable securities as of the date of this prospectus, and the gross capital proceeds raised in January 2024 of \$3.7 million, will not be sufficient to fund our projected ongoing operating expenses, pre-commercial, commercial and capital expenditure requirements through at least the next 12 months. Therefore, we expect to look to raise additional capital possibly prior to and/or following should we receive FDA approval of ALPHA-1062 in AD, to continue to advance our pre-commercial and commercialization plans. However, we have based our estimates on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. In addition, we could utilize our available capital resources sooner than we expect.

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

# Financing Activities

As of March 31, 2024 and December 31, 2023, we had \$2,423,062 and \$1,494,573, respectively, of cash and cash equivalents, including restricted cash of \$163,678 and \$90,413, respectively, and an accumulated deficit of \$66,650,884 at March 31, 2024 and \$61,648,173 and December 31, 2023. Our primary uses of cash are to fund operating expenses, primarily our research and development expenditures, NDA filing costs, general and administrative costs, and pre-commercialization costs. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses. We believe, based on our current operating plan, and expected expenditures, that our existing cash, cash equivalents and marketable securities will not be sufficient to meet our anticipated operating and capital expenditure requirements for the upcoming 12 months. We recognize we may need to raise additional financing, in addition the

118

# Table of Contents

Q2 2023 PP financing the Company completed in January 2024, to cover upcoming planned NDA filing expenses, research and development, commercialization costs, CMC and operating costs. Possible sources of such capital may come from additional 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. We have based this estimate on assumptions that may prove to be wrong. We could also utilize our available capital resources sooner than we currently expect if our commercialization efforts are expanded or accelerated and as our product candidates enter new and more advanced stages of clinical development or advance beyond the discovery and pre-clinical stages. We expect to require additional financing to commercialize ALPHA-1062 in AD should the product gain FDA approval, advance our product candidates through further clinical development and toward potential regulatory approval and to develop, acquire or in-license other potential product candidates.

# Recent capital raising activities

During the third quarter of 2022 the Company initiated cost cutting measures to extend its cash runway and reduce ongoing cash burn. The Company streamlined R&D programs and has prioritized spend towards the 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 1,333,333 units at a price of CAD\$5.10 per unit for gross proceeds of up to CAD\$6,800,000 ("February 2023 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\$7.80 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 2023 PP by issuing 839,761 units of the Company at a price of CAD\$5.10 per unit, for gross proceeds of CAD\$4,282,781.

On March 15, 2023, the Company closed the second tranche of the February 2023 PP by issuing 347,621 units of the Company at a price of CAD\$5.10 per unit, for gross proceeds of CAD\$1,772,869.

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

On May 30, 2023, the Company announced a best-efforts private placement offering of up to \$6,500,000 of units at the initial pricing of \$4.40 per unit ("Q2 2023 PP"). Each unit consists of one common share and one-half of a warrant. Each whole warrant will entitle the holder to purchase an additional common share of the Company at the initial pricing of \$6.20 per share for a period of three years from the closing date. The aggregate proceeds may be increased by 30% to accommodate any overallotment. The Company also announced that it entered into an Investment Banking Agreement ("IBA") with Spartan Securities LLC ("Spartan") pursuant to which Spartan will act as agent on a best-efforts basis in connection with the Q2 2023 PP. In accordance with the Q2 2023 PP, the Company has agreed to pay Spartan cash commissions of 10% of the gross proceeds, issue Spartan finder's warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list.

119

#### **Table of Contents**

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

The Following table summarizes the Q2 2023 PP closing activity:

Date Issued	Tranche	# Units Issued at \$4.40 per share	Gross Proceeds	# of Warrants issued at \$6.20 per Warrant	Co	Cash ommissions Paid <sup>(2)</sup>	Agent Warrants Issued <sup>(1)</sup>	Warrant Expiry date	
August 31, 2023	Tranche 1	305,703	\$ 1,345,093	152,851	\$	180,051	13,604	August 31, 2026	

October 16, 2023	Tranche 2	79,842	\$ 351,303	39,921	\$ 5,160	3,909	October 16, 2026
November 8, 2023	Tranche 3	229,545	\$ 1,009,999	114,772	\$ 151,500	11,477	November 8, 2026
December 22, 2023	Tranche 4	457,077	\$ 2,011,137	457,077	\$ 238,515	36,139	December 22, 2026
January 19, 2024	Tranche 5	848,288	\$ 3,732,469	848,288	\$ 342,320	51,867	January 19, 2027
Totals		1,920,455	\$ 8,450,000	1,612,909	\$ 917,546	116,995	

<sup>(1)</sup> Each warrant is exercisable at \$6.20 per warrant.

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

#### **Cash Flows**

The following table provides information regarding our cash flows for the years ended March 31, 2024, and 2023:

		e Months Ended rch 31,	- Dollar	Percentage
	2024	2023	Change	Change
<b>Consolidated Statement of Cash Flows Data</b>		_	_	
Cash used in operating activities	\$ (2,471,492)	\$ (2,468,014)	\$ (3,478)	0%
Cash provided by investing activities	\$ —	\$ —	\$ —	<u>     %                               </u>
Net cash provided by financing activities	\$ 3,399,981	\$ 4,297,369	\$ (897,388)	(21)%
Share-based compensation	\$ 348,085	\$ 239,063	\$ 109,022	46%

# Cash used in operating activities

Cash used in operating activities increased by \$3,478 to \$2,471,492 for the three months ended March 31, 2024, from \$2,468,014 for the comparative period. The increase in cash flows from operating activities represents the effect on cash flows from net losses adjusted for items not affecting cash, principally amortization and depreciation, accrued expenditures for government grant, share-based compensation, impairment of intangible assets, provision for loan losses, shares issued for services, and the changes in the value of warrant liability and bonus rights liability, in addition to net changes in non-cash balances related to working capital items.

#### Cash provided by/(used in) investing activities

There were no investing activities that occurred during the three months ended March 31, 2024, or 2023.

# Cash provided by financing activities

Cash provided by financing activities for the three months ended March 31, 2024, decreased by \$897,388 compared to the comparative period. During the three months ended March 31, 2024, financing activities primarily consisted of raising proceeds of \$3,732,469 from units issued for cash and receiving \$180,000 in government grant proceeds offset by \$106,735 of related expenses. The funds raised under financing activities were offset by share issuance costs of \$405,753. During the three months ended March 31, 2023, financing activities primarily consisted of raising proceeds of \$4,506,055 from units issued for cash offset by share issuance costs of \$208,686.

<sup>(2)</sup> On November 8, 2023, the Company also paid a consulting fee of US\$160,000 pursuant to the Spartan Consulting Agreement. In January 2024 the Company also paid a consulting fee of US\$320,000 and issued 727,914 common shares to Spartan pursuant to a consulting agreement. The Company also paid to certain finders aggregate cash commission of US\$48,858, being 6% of the gross proceeds raised under the offering from investors introduced to the Company by such finders.

# **Table of Contents**

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

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

### Cash used in operating activities

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

# Cash provided by/(used in) investing activities

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

# Cash provided by financing activities

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

# **Contractual Obligations and Other Commitments**

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

# 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 \$10,675,000 (EUR10,000,000). The cumulative total may be increased to \$16,013,000 (EUR15,000,000) subject to certain provisions involving sub-licensing the ALPHA-1062 technology and Company the receiving an upfront out-licensing payment of no less than \$8,540,000 (EUR8,000,000). Royalty payments are determined as follows (collectively the "Galantos Royalty Payments"):

- 3% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
- 10% of any sublicensing revenue; and
- 25% of an upfront payment or milestone payment paid by a sub-licensee to the Company.

121

# **Table of Contents**

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;

• The issuance of a promissory note of \$1,400,000 to NLS.

The expiration date is twenty years from the Commencement Date (March 15, 2035) or the expiration of the last patent obtained (existing patents extend through 2042) pursuant, whichever event shall last occur, unless earlier terminated pursuant to bankruptcy or insolvency of the licensee; court order against the licensee; or a winding up, liquidation or termination of the existence of the licensee occurs.

No payments have been made to date related to the Galantos Royalty Payments; however, the Company has issued the promissory note of \$1,400,000 to NLS. The principal balance of the NLS promissory note is \$1,211,463 which incurs interest at 7% per annum with a maturity date of July 15, 2025. Additionally, \$300,000 is due on December 31, 2024, with the remaining principal balance due at maturity.

On January 1, 2016, the Company assumed NLS's obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consist of cumulative total payments to Galantos Consulting of \$2,135,000 (EUR2,000,000), the cumulative total may be increased to \$3,203,000 (EUR3,000,000) subject to certain provisions which is to be paid as follows (collectively the "Galantos Consulting Payments"):

- 1% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
- 2% of any sublicensing revenue; and
- 2% of an upfront payment or milestone payment paid by a sub-licensee to the Company.

The termination date is set as the date at which no further payments of any nature are due. No payments have been made to date relating to the Galantos Consulting Payments.

On March 6, 2023, the Company and NLS agreed to amend the License Agreement to now incorporate both Alpha Cognition Inc. and Alpha Cognition Canada Inc. under the License Agreement and added clarity to certain terms and definitions in the License Agreement.

# 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;
- a royalty of 1.5% of the commercial sales, capped at \$2,000,000, to NLS; and
- 10% of any Upfront Payments the Company may receive in the future in excess of \$2,000,000.

The total amount payable to NLS under this agreement shall not exceed \$2,000,000. Regarding the ALPHA-602 technology the Company paid \$50,000 in January 2021 as per the license agreement. No payments have been made to date under the above NLS world-wide exclusive rights for the royalties or Upfront Payments the Company may receive.

# **Spartan Capital Securities, LLC Agreement**

On May 30, 2023, the Company agreed to enter into an ongoing consulting services agreement (the "Spartan Consulting Agreement") for a three-year term with Spartan Capital Securities, LLC ("Spartan"). The services include advising and assisting on potential business development transactions, strategic introductions, assisting management with enhancing corporate and stockholder value, and capital raising advice. Pursuant to the agreement the Company will pay Spartan a consulting fee in the aggregate amount of \$480,000, payable in three equal installments with each installment being subject to the Company achieving certain business development and capital raising objectives. Spartan will also be entitled to earn and receive additional Common Shares of the Company which will be issued to Spartan on a rolling basis upon completion of predetermined business development objectives including the closing of certain offering amounts and the completion of material business transactions. As of December 31, 2023, \$160,000

122

# **Table of Contents**

in consulting fees have been paid and no additional common shares had been issued under the consulting services agreement with Spartan. As of January 19, 2024, the Company paid the remaining consulting fee of \$320,000 and issued 727,914 common shares to Spartan and its assignees pursuant to the Spartan Consulting Agreement.

# **Contingencies**

The Company did not have any contingencies as at March 31, 2024, or the date of this report.

#### **Critical Accounting Policies and Estimates**

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

# Use of Estimates and Assumptions

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

#### Functional Currency

The functional currency of an entity is the currency of the primary economic environment in which the entity operates. Effective August 31, 2023, the functional currency of the Company was updated to the United States Dollar ("USD" or U.S. Dollar") as management assessed that the currency of the primary economic environment in which the Company operates changed to USD on that date. The key factor influencing this decision was the change in the Company's primary funding from Canadian dollars ("CAD") to USD, whereas the functional currency of its

subsidiaries was unchanged and remain in USD. Prior to USD the functional currency of the Company was CAD, and its subsidiaries was USD. Changes to the Company's functional currency have been accounted for on a prospective basis from August 31, 2023. The determination of functional currency was made in accordance with the Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") 830, Foreign Currency Matters.

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

# **Grant Accounting**

All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of comprehensive loss. When grant proceeds are

123

### **Table of Contents**

initially received they are recorded as deferred income and restricted cash. Grant proceeds are then used to pay for study costs and are expensed, the Company will also record a corresponding amount to grant revenue and reduce the balance of the deferred income liability.

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

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

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

### Fair Value Measurements

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

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

• Level 3 — inputs that are unobservable.

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

# Share Based Compensation

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

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

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

124

# **Table of Contents**

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

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

# Liability-Based Awards

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

# Research and Development Costs

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

any of our product candidates. Our research and development programs are subject to change from time to time as we evaluate our priorities and available resources.

# Going concern

We continue to assess the ability to continue as a going concern, which involves management judgement and analysis of resources and prospects. The Company has reported negative cash flow from operating activities since inception and expects to experience negative operating cash flows for the foreseeable future.

#### Income taxes

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

# Impairment of intangible assets

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

125

#### Table of Contents

# Useful lives of intangible assets

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

# Valuation of debt modification

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

# Recent Accounting Pronouncements Not Yet Adopted

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

# **Emerging Growth Company Status and Smaller Reporting Company Status**

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

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

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

### **Table of Contents**

#### **DESCRIPTION OF PROPERTIES**

The Company does not own or rent any real estate with respect to its corporate head office and laboratory facilities.

Our corporate head office is located at Suite 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8.

127

### **Table of Contents**

### MANAGEMENT

The following table sets forth the names, ages and titles of our directors and executive officers.

Name, Age, Position with Alpha Cognition and Municipality of Residence

# **Principal Occupation**

### Michael McFadden

Age: 56

Chief Executive Officer Since April 12, 2021 and Director since March 28, 2021

Texas, United States

Mr. McFadden brings more than 30 years of successful leadership experience spanning pre-IND drug discovery through the commercialization and has launched over a dozen therapies in neurology, psychiatry, endocrinology and urology. He has over 16 years' experience in neuroscience. Mr. McFadden's principal occupation has been acting Chief Executive Officer of the Company since April 12, 2021. Prior to that Mr. McFadden was Chief Commercial Officer at MPower Health from February 2020 through April 2021, Chief Commercial Officer at Urovant Sciences (Nasdaq: UROV) from January 2018 through November 2019, and SVP Sales and Marketing at Avanir Pharmaceuticals (Nasdaq: AVNR) from April 2015 through January 2017. Prior to these roles, Mr. McFadden held leadership roles at Amylin Pharmaceuticals (Nasdaq: AMLN) and Pharmacia. He serves on advisory boards at MPower Health and MindLab. We believe that Mr. McFadden is qualified to serve on our board of directors due to his current role as Chief Executive Officer of the Company and his extensive experience in the industry.

#### Len Mertz

Age: 69

Chairman and Director Since March 18, 2021

Mr. Mertz has been a director since Alpha Cognition's founding and was named Chairman in 2021. Mr. Mertz' principal occupation has been as the Chairman of Shannon West Texas Memorial Hospital, a CMS rated 5-star hospital, with currently budgeted gross revenues exceeding \$1 billion and since January 1982 as

Texas, United States

a co-founder and partner of Mayne & Mertz, Inc. an oil & gas exploration company. He has over 35 years of experience as a co-founder, board member, or investor in various companies including Triumvira Immunologics and Akido Labs. In addition, he serves on the board of the First National Bank of Mertzon. He began his career as a certified public accountant and obtained his BBA in Finance with Highest Honors and his Masters in Professional Accounting both from the University of Texas at Austin.

We believe that Mr. Mertz is qualified to serve on our board of directors due to his experience with the Company and his training as a certified public accountant.

# **Kenneth Cawkell**

Age: 72

Corporate Secretary and Director Since March 18, 2021 New Westminster, British Columbia

# **John Havens**

Age: 68

Director Since March 18, 2021 *Texas, United States* 

Mr. Cawkell co-founded Cawkell Brodie LLP, a Vancouver based law firm, where he was acting as managing partner from 1987 to 2022, when he retired from practice. Mr. Cawkell was the founder of the Company and serviced Company's interim Chief Executive Officer through its qualifying transaction in March of 2021. He has also served as Corporate Secretary and a consultant to the Company since March 18, 2021 to current. Mr. Cawkell is the founder and CEO of Neurodyn Life Sciences Inc., a private biotech company focused on developing natural based products to treat Alzheimer's and other neurodegenerative diseases. He has been active in the biotech industry within public, private and venture capital markets as a professional advisor and as a principal or investor for over 25 years. We believe that Mr. Cawkell is qualified to serve on our board of directors due to his legal expertise and extensive experience with the Company and in developing treatments for Alzheimer's disease.

Since 1978, Mr. Havens' principal occupation has been as the President of Seismic Exchange, Inc. Mr. Havens also has a long history as an entrepreneur as both a founder and significant investor in various industries, with a focus on growth through vertical integration and strategic acquisitions. He has served as Vice Chairman/Board Member of the Houston Astros and as an active member of numerous other business and community boards.

We believe that Mr. Havens is qualified to serve on our board of directors due to the breadth of his experience in helping early state companies focus on growth.

128

# Table of Contents

Name, Age, Position with Alpha Cognition and Municipality of Residence

# **Phillip Mertz**

Age: 40

Director Since March 18, 2021 Virginia, United States

#### **Principal Occupation**

Mr. Mertz became a director in 2019. Since 2010, he is a co-founder and partner of Cenizas Capital, an investment firm focused on public and private equity, which has been his principal occupation. He is an initial investor and board member of Secure Open Solutions, a cybersecurity firm that provides compliance services to defense contractors. He also co-founded Py Square, a software development company that makes practical software solutions for the legal industry, and he is a partner in the investment group, Mertz Holdings. Previously he led business development for a natural gas fuel start-up, CNG Energy, and worked as a management consultant with Touchstone Consulting Group in Washington D.C. He graduated from Harvard University in 2006 with an B.A. in Economics.

We believe that Mr. Mertz is qualified to serve on our board of directors due to his experience with neurotechnology and neurodegenerative diseases.

Rejeev 'Rob' Bakshi

Age: 65

Mr. Bakshi has been the Chief Executive Officer of Active Witness Corp. from 2018 to present. Mr. Bakshi was the co-founder of technology company, Silent

Director Since November 15, 2017

White Rock, British Columbia

\$90 million in 2003. Since then, he has been involved with industrial land development, building a Convention Centre in Calgary and other strategic investments. In 2009, Mr. Bakshi began working with a South Korean company to establish Apivio Systems Inc. He led the strategy to turn the business into a Canadian company, putting together an independent board of directors, financing, and corporate governance in his capacity as Executive Chairman. In 2013, he was appointed CEO and was responsible for taking the company public. Apivio Systems Inc. was acquired by Nuri Telecom Company in an all-cash transaction in the spring of 2017. Mr. Bakshi is an accomplished real estate and technology investor and advises both private and public companies. We believe that Mr. Bakshi is qualified to serve on our board of directors due to his experience with NASDAO and TSX cross-listed companies.

Mr. Kalkofen's experience includes twenty years as a CFO in both public and private companies. Prior to joining Alpha Cognition, in April of 2022, from

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

#### Don Kalkofen

Age: 60 Chief Financial Officer since April 18, 2022 Texas, United States

February of 2019 through April 2022. Mr. Kalkofen served as CFO of Protagonist Therapeutics Inc. (Nasdaq: PTGX), a publicly-traded biopharmaceutical company where he was instrumental in supporting the Company's successful capital and debt financings, in excess of \$550 million. Mr. Kalkofen has also held key management positions including the CFO of several financial services and global SaaS companies as well as supporting global medical device and specialty pharmaceutical companies in key financial areas. He started his career at PricewaterhouseCoopers, received his B.A. in accounting from Washington State University, and from 1992 to 2022 held the distinction of being a Certified Public Accountant.

# Lauren D'Angelo

Age: 46 Chief Commercial Officer since May 4, 2021, and Chief Operating Officer since 2023. Texas, United States Ms. D'Angelo has more than 20 years of experience leading successful drug commercialization efforts across eight therapeutic areas, including multiple central nervous system therapies. Prior to joining Alpha Cognition in May of 2021, Ms. D'Angelo was Vice President, Marketing and Commercial Strategy at Urovant Sciences, Inc. from October 2017 through May 2021. Ms. D'Angelo has extensive marketing, sales, and operations experience in specialty areas including central nervous system, oncology, gastrointestinal, pain management, respiratory, urology and diabetes. Ms. D'Angelo was recognized as a 2023 PharmaVoice Top 100 Industry Leader, Medical Marketing & Media's (MM+M) 2022 Woman of Distinction, MM+M's 2017 Woman to Watch, and was selected as one of Pharmaceutical Executive's Emerging Pharma Leaders for 2020. Ms. D'Angelo received a B.S. in Management Information Systems from Florida State University and an MBA from the University of Florida.

129

# **Table of Contents**

# **Family Relationships**

There are no family relationships among any of our directors or executive officers, except that Len Mertz is the father of Phillip Mertz.

# **Arrangements between Officers and Directors**

To our knowledge, there is no arrangement or understanding between any of our officers and any other person, including directors, pursuant to which the officer was selected to serve as an officer.

# **Involvement in Certain Legal Proceedings**

# Corporate Cease Trade Orders

To our knowledge, no director or executive officer of Alpha Cognition is, as of the date hereof, or was within ten years before the date hereof, a director, chief executive officer or chief financial officer of any company (including Alpha Cognition), that:

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

Mr. Cawkell is a director of Centurion Minerals Ltd. ("Centurion"). Centurion was subject to a cease trade order (the "CTO") issued by the British Columbia Securities Commission on December 5, 2017, for failure to file its audited annual financial statements for the year ended July 31, 2017. Subsequently, Centurion dismissed its auditor on February 13, 2018, as its board of directors lost confidence in the former auditors' ability to complete the audit in a timely fashion, if at all. Centurion engaged a new auditor to complete the audit and filed its audited annual financials for the year ended July 31, 2017, on March 1, 2018 and its first quarter on March 13, 2018. The CTO was revoked on May 3, 2018.

# **Bankruptcies and Other Proceedings**

To Alpha Cognition's knowledge, no director or executive officer of Alpha Cognition, or a shareholder holding a sufficient number of securities of Alpha Cognition to affect materially the control of Alpha Cognition:

- (a) is, as of the date hereof, or has been within the ten years before the date hereof, a director or executive officer of any company (including Alpha Cognition) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) has, within the ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

#### **Penalties or Sanctions**

To our knowledge, no director or executive officer of Alpha Cognition has been subject to any legal proceeding or other event described in Item 401(f) of Regulation S-K during the past ten years.

130

# Table of Contents

# **Board Composition**

The composition of the Board currently consists of the following six members: Rajeev 'Rob' Bakshi, Len Mertz, John Havens, Phillip Mertz, Kenneth Cawkell and Michael McFadden.

# **Director Independence**

Pursuant to the requirements of Item 407(a)(1)(ii) of Regulation S-K under the Exchange Act, the Board has elected to evaluates the independence of each director in accordance with the listing rules of the Nasdaq Stock Market, LLC ("Nasdaq Listing Rules"). The Company is not listed on any Nasdaq market and is not subject to regulation or oversight by Nasdaq. The discussion below regarding independence uses the Nasdaq Listing Rules solely for disclosure purposes herein regarding director independence and committee composition. Pursuant to these rules, a majority of our Board must be "independent directors" within the meaning of the Nasdaq Listing Rules, and all directors who sit on our Audit Committee, Governance and Nomination Committee and Compensation Committee must also be independent directors.

The Nasdaq definition of "independence" includes a series of objective tests, such as the director or director nominee is not, and was not during the last three years, an employee of the Company and has not received certain payments from, or engaged in various types of business dealings with, the Company. In addition, as further required by the Nasdaq Listing Rules, the Board has made a subjective determination as to each independent director that no relationships exist which, in the opinion of the Board, would interfere with such individual's exercise of independent judgment in carrying out his or her responsibilities as a director. In making these determinations, the Board reviewed and discussed information provided by the directors with regard to each director's business and personal activities as they may relate to Company and its management, including the beneficial ownership of our capital stock by each non-employee director, and any transactions involving them described in the section entitled "Certain Relationships and Related Party Transactions."

As a result, the Board has affirmatively determined that each of Rajeev 'Rob' Bakshi, John Havens, Len Mertz and Phillip Mertz are independent in accordance with the Nasdaq Listing Rules.

# **Other Directorships**

The following sets forth the directors of the Company who are directors of other reporting issuers as at May [\*], 2024:

Kenneth Cawkell: Westmount Minerals Corp., Portofino Resources Inc., Centurion Minerals Inc. and Well Health Technologies Corp.

# **Orientation and Continuing Education**

Management of the Company takes steps to ensure that its directors and officers are continually updated as to the latest corporate and securities policies which may affect the directors, officers, committee members and the Company as a whole. The Company continually reviews the latest securities rules and policies. Any such changes or new requirements are then brought to the attention of the Company's directors either by way of a director or committee meetings or circulated in a memorandum.

# **Board Leadership Structure and Role in Risk Oversight**

Our Board currently consists of six directors. The Board has appointed a non-executive Chairman of the Board to assist the independent directors in risk oversight. Due to the size of the Board, the independent directors are able to closely monitor the activities of our Company. In addition, the independent directors are able to meet independently with the Company's independent registered public accounting firm without management to discuss the Company's financial statements and related audits. Therefore, the Board has determined that the current structure of the Board with a non-executive Chairman is sufficient for independent oversight at this time. To the extent the composition of the Board changes and/or grows in the future, the Board may re-evaluate this structure.

Management is responsible for the day-to-day management of risks the Company faces, while the Board as a whole has ultimate responsibility for the Company's oversight of risk management. Our Board takes an enterprise-wide approach to risk oversight, designed to support the achievement of organizational objectives, including strategic objectives, to improve long-term organizational performance and enhance stockholder value. A fundamental part of risk oversight is

# **Table of Contents**

not only understanding the risks a Company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for the Company. As a critical part of this risk management oversight role, our Board encourages full and open communication between management and the Board. Our Board regularly reviews material strategic, operational, financial, compensation and compliance risks with management. In addition our management team regularly reports to the full Board regarding their areas of responsibility and a component of these reports is risk within the area of responsibility and the steps management has taken to monitor and control such exposures. Additional review or reporting on risk is conducted as needed or as requested by our Board.

#### **Ethical Business Conduct**

The Board has found that the fiduciary duties placed on individual directors by the Company's governing corporate legislation and the common law and the restrictions placed by applicable corporate legislation on an individual director's participation in decisions of the Board in which the director has an interest have been sufficient to ensure that the Board operates independently of management and in the best interests of the Company. Pursuant to corporate legislation, a director is required to act honestly and in good faith with a view to the best interests of the Company and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances, and disclose to the Board the nature and extent of any interest of the director in any material contract or material transaction, whether made or proposed, if the director is a party to the contract or transaction, is a director or officer (or an individual acting in a similar capacity) of a party to the contract or transaction or has a material interest in a party to the contract or transaction. If the director abstains from voting after disclosure of their interest, the directors approve the contract or transaction and the contract or transaction was reasonable and fair to the Company at the time it was entered into, the contract or transaction is not invalid and the director is not accountable to the Company for any profit realized from the contract or transaction. Otherwise, the director must have acted honestly and in good faith, the contract or transaction must have been reasonable and fair to the Company and the contract or transaction be approved by the shareholders by a special resolution after receiving full disclosure of its terms in order for the director to avoid such liability or to avoid the contract or transaction being found invalid.

# **Code of Business Conduct and Ethics**

In accordance with SEC rules, the Company has adopted a code of business conduct and ethics that applies to the Company's officers, directors, employees, and contractors.

We have adopted a corporate Code of Business Conduct and Ethics (the "Code") that applies to all our employees including our principal executive officer, principal financial officer, and principal accounting officer and is administered by our Chief Financial Officer and the Chair of the Governance and Nomination Committee. We believe our Code provides written standards for deterring, and is reasonably designed to deter, wrongdoing. The purpose of our Code is to promote:

- honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- full, fair, accurate, timely and understandable disclosure in reports and documents that are filed with, or submitted to, the SEC and in other public communications made by the Company;
- compliance with applicable governmental laws, rules and regulations;
- prompt internal reporting of violations of the Code to an appropriate person or persons identified in the Code; and
- accountability for adherence to the Code.

Our Code is available on our website at www.alphacognition.com. A copy of the Code will be provided to any person without charge upon written request to the Company at its executive offices, attention: Secretary. We intend to disclose on our website any amendment to the Code or waiver from a provision of our Code that applies to any of our principal executive officer, principal financial officer, principal accounting officer, controller, or persons performing similar functions that relates to any element of our Code.

#### **Table of Contents**

# **Hedging Policy**

The Company's share trading policy prohibits hedging or monetization transactions. The policy sets forth hedging or monetization transactions as transactions that can be accomplished through the use of various financial instruments, including prepaid variable forwards, equity swaps, collars and exchange funds. The policy notes that these transactions may permit continued ownership of the Company's securities obtained through employee benefit plans or otherwise without the full risks and rewards of ownership. When that occurs, a person entering into these types of transactions may no longer have the same objectives as the Company's other shareholders. In addition, under the policy no director or officer of the Company is permitted to purchase financial instruments, including, for greater certainty, prepaid variable forward contracts, equity swaps, collars, or units of exchange funds that are designed to hedge or offset a decrease in market value of any the Company's securities granted as compensation or held, directly or indirectly, by such director or officer.

# **Governance and Nomination Committee**

The Governance and Nomination Committee consists of Len Mertz and John Havens who serves as chairperson of the Governance and Nomination Committee. Specific responsibilities of the Nominating Committee include: (i) identifying, evaluating and selecting, or recommending that the Board approve, nominees for election to the Board; (ii) evaluating, on an annual basis, the performance of the Board and of individual directors; (iii) establishing subcommittees for the purpose of evaluating special or unique matters; (iv) evaluating the adequacy of corporate governance practices and reporting; (v) reviewing management succession plans; and (vi) developing and making recommendations to the Board regarding corporate governance guidelines and matters.

Our Board adopted a written charter for the Governance and Nomination Committee, which is available on the Company's website at www.alphacognition.com.

# Nomination of Directors

The Board considers its size each year when it considers the number of directors to recommend to the shareholders for election at the annual meeting of shareholders, taking into account the number required to carry out the Board's duties effectively and to maintain a diversity of views and experience. The policy of our Governance and Nomination Committee is to consider properly submitted recommendations for candidates to the Board from stockholders. Any stockholder recommendations for consideration by the Governance and Nomination Committee should include the candidate's name, biographical information, information regarding any relationships between the candidate and the Company within the last three years, a description of all arrangements between the candidate and the recommending stockholder and any other person pursuant to which the candidate is being recommended, a written indication of the candidate's willingness to serve on the Board, any other information required to be provided under securities laws and regulations, and a written indication to provide such other information as the Governance and Nomination Committee may reasonably request. There are no differences in the manner in which the Governance and Nomination Committee evaluates nominees for director based on whether the nominee is recommended by a stockholder or otherwise. Stockholder recommendations to the Board should be sent in writing to the Company's executive offices, attention: Secretary.

# Director Qualifications

The Board believes that all directors should have the highest personal integrity and have a record of exceptional ability and judgment. The Board also believes that directors should ideally reflect a mix of experience and other qualifications. There is no firm requirement of minimum qualifications or skills that candidates must possess. The Governance and Nomination Committee evaluates director candidates based on a number of qualifications, including their independence, judgment, leadership ability, expertise in the industry, experience developing and analyzing business strategies, financial literacy, risk management skills, and, for incumbent directors, his or her past performance. While neither the Board nor the Governance and Nomination Committee has adopted a formal policy with regard to the consideration of diversity when evaluating candidates for election to the Board, it is our goal to

have a balanced Board, with members whose skills, background and experience are complimentary and, together, cover the variety of areas that impact our business.

The Governance and Nomination Committee initially evaluates a prospective nominee on the basis of his or her resume and other background information that has been made available to the committee. A member of the Governance and

133

# **Table of Contents**

Nomination Committee will contact for further review those candidates who the committee believes are qualified, who may fulfill a specific board need and who would otherwise best make a contribution to the Board. If, after further discussions with the candidate, and other further review and consideration as necessary, the Governance and Nomination Committee believes that it has identified a qualified candidate, it will make a recommendation to the Board

The qualifications of each of the Company's directors are set forth in their respective biographies above.

# Diversity

The Board values the benefits that diversity can bring and seeks to maintain a Board comprised of talented and dedicated directors with a diverse mix of experience, skills and backgrounds collectively reflecting the strategic needs of the business and the nature of the environment in which the Company operates.

In identifying qualified candidates for nomination to the Board, the Governance and Nomination Committee will consider prospective candidates based on merit, having regard to those competencies, expertise, skills, background and other qualities identified from time to time by the Board as being important in fostering a diverse and inclusive culture which solicits multiple perspectives and views and is free of conscious or unconscious bias and discrimination.

The Governance and Nomination Committee must give due consideration to characteristics, such as gender, age, ethnicity, disability, sexual orientation and geographic representation, which contribute to board diversity. The Governance and Nomination Committee may, in addition to conducting its own search, engage qualified independent advisors to assist in identifying prospective diverse director candidates that meet the selection criteria established by the Board and that support its diversity objectives. In implementing its responsibilities under this policy, the Governance and Nomination Committee will take into account the Board's diversity objectives and the diverse nature of the business environment in which the Company operates, as well as the need to maintain flexibility to effectively address succession planning and to ensure that the Company continues to attract and retain highly qualified individuals to serve on the Board.

#### **Compensation Committee**

The Company's compensation committee (the "Compensation Committee") is comprised of two directors of the Company, Phillip Mertz (Chair), and Rob Bakshi. The Board has determined that Phillp Mertz and Rob Bakshi members of the Compensation Committee are "independent" within the meaning of Rule 5605 of the Nasdaq Listing Rules.

The Compensation Committee is responsible for determining the compensation for the directors and the executive officers. The Compensation Committee reviews the adequacy of remuneration for the executive officers by evaluating their performance in light of the Company's goals and objectives, and by comparing it with other reporting issuers of similar size in the same industry. The Compensation Committee also periodically reviews the adequacy and form of directors' compensation and recommends to the Board a compensation model that appropriately compensates directors for the responsibilities and risks involved with being a director and a member of one or more committees, as applicable. The Compensation Committee is also responsible for reviewing the executive compensation disclosure before the Company discloses this information publicly. The Compensation Committee is also responsible for: (i) ensuring that the mission and strategic direction of the Company is reviewed annually; (ii) ensuring that the Board and each of its committees carry out its functions in accordance with due process; (iii) assessing the effectiveness of the Board as a whole, each committee of the Board, and the contribution of each individual director; (iv) identifying, recruiting, endorsing, appointing, and orienting new directors; (v) reviewing and making compensation related recommendations

and determinations regarding senior executives and directors; and (vi) the Company's human resources and compensation policies and processes.

Our Board adopted a written charter for the Compensation Committee, which is available on the Company's website at www.alphacognition.com.

# Compensation Committee Interlocks and Insider Participation

During the fiscal year ended December 31, 2023, no member of the Compensation Committee served as an officer or employee of Alpha Cognition. Mr. Bakshi served as Chief Executive Officer of the Company through its qualifying

134

#### **Table of Contents**

transaction in March of 2021. None of Alpha Cognition's executive officers serve, or have served during the last fiscal year, as a member of the Board, compensation committee, or other board committee performing equivalent functions of any other entity that has one or more executive officers serving as one of Alpha Cognition's directors or on the Compensation Committee.

# **Audit Committee**

We have a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Nasdaq Listing Rules.

The Audit Committee consists of Len Mertz (Chair), John Havens and Rajeev 'Rob' Bakshi. The Board has determined that Mr. Mertz, Mr. Havens and Mr. Bakshi are "independent" and "financially literate," within the meaning of Rule 5605 of the Nasdaq Listing Rules and Rule 10A-3 of the Exchange Act. Our Board has determined that Len Mertz qualifies as an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K based on education, professional designations held, experience and background.

Our Board adopted a written charter for the Audit Committee, which is available on the Company's website at www.alphacognition.com.

# Relevant Education and Experience

Len Mertz — Mr. Mertz has been a director since Alpha Cognition's founding and was named Chairman in 2021. He is also the Chairman of Shannon West Texas Memorial Hospital, a CMS rated 5-star hospital, with currently budgeted gross revenues exceeding \$1 billion. He has over 35 years of experience as a co-founder, board member, or investor in various companies including Triumvira Immunologics and Akido Labs. In addition, he serves on the board of the First National Bank of Mertzon and is a co-founder of Mayne & Mertz, Inc. an oil & gas exploration company. He began his career as a certified public accountant and obtained his BBA in Finance with Highest Honors and his Masters in Professional Accounting both from the University of Texas at Austin. Mr. Mertz's educational background as a CPA, his experience with First National Bank of Mertzon and his experience as a co-founder, board member and investor in various companies has provided him with an understanding of the accounting principles used by the Company to prepare its financial statements, including the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions. These experiences have provided Mr. Mertz with the skills to analyze and evaluate the Company's financial statements and understand the internal controls and procedures for financial reporting.

John Havens — Since 1978, Mr. Havens has been the President of Seismic Exchange, Inc. Mr. Havens also has a long history as an entrepreneur as both a founder and significant investor in various industries, with a focus on growth through vertical integration and strategic acquisitions. He has served as Vice Chairman/Board Member of the Houston Astros and as an active member of numerous other business and community boards. Mr. Havens' experience working with various public companies in a number of different roles has provided him with an understanding of the accounting principles used by the Company to prepare its financial statements, including the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions.

Mr. Havens' experience allows him to analyze and evaluate the Company's financial statements and understand the internal controls and procedures for financial reporting.

Rajeev 'Rob' Bakshi — Mr. Bakshi was the co-founder of technology company, Silent Witness Enterprises Ltd., which was listed on the TSX and NASDAQ. He oversaw the company's growth strategy before being sold to Honeywell for approximately \$90 million in 2003. Since then, he has been involved with industrial land development, building a Convention Centre in Calgary and other strategic investments. In 2009, Mr. Bakshi began working with a South Korean company to establish Apivio Systems Inc. He led the strategy to turn the business into a Canadian company, putting together an independent board of directors, financing, and corporate governance in his capacity as Executive Chairman. In 2013, he was appointed CEO and was responsible for taking the company public. Apivio Systems Inc. was acquired by Nuri Telecom Company in an all-cash transaction in the spring of 2017. Mr. Bakshi is an accomplished real estate and technology investor and advises both private and public companies. Mr. Bakshi's experience developing public companies and advising both private and public companies has provided him with an understanding of the accounting principles used by the Company to prepare its financial statements, including the ability to assess the general

135

# **Table of Contents**

application of such accounting principles in connection with the accounting for estimates, accruals and provisions. Mr. Bakshi's experience allows him to analyze and evaluate the Company's financial statements and understand the internal controls and procedures for financial reporting.

# Audit Committee Oversight

Since the commencement of the Company's most recently completed fiscal year, the Audit Committee of the Company has not made any recommendations to nominate or compensate an external auditor that were not adopted by the board of directors.

### **Pre-Approval Policies and Procedures**

The Audit Committee has not adopted any specific policies and procedures for the engagement of non-audit services.

136

### **Table of Contents**

### **EXECUTIVE COMPENSATION**

As an emerging growth company under the JOBS Act, we have opted to comply with the executive compensation disclosure rules applicable to "smaller reporting companies" as such term is defined in the rules promulgated under the Securities Act, which permit us to limit reporting of executive compensation to our principal executive officer and our two other most highly compensated executive officers.

The following table contains compensation data for our named executive officers for the current fiscal year. In this section "Named Executive Officer" or "NEO" means the Principal Executive Officer (President) and each of the two most highly compensated executive officers, other than the Chief Executive Officer, who were serving as executive officers for the year ended December 31, 2023 and whose total salary and bonus exceeds \$100,000, as well as any additional individuals for whom disclosure would have been provided except that the individual was not serving as an officer of Alpha Cognition at the end of the most recently completed financial year end.

The following table sets forth all direct and indirect compensation paid, payable, awarded, granted, given or otherwise provided, directly or indirectly, by Alpha Cognition Inc. and any subsidiary thereof to each Named Executive Officer and each director of Alpha Cognition, in any capacity, including, for greater certainty, all plan and non-plan compensation, direct and indirect pay, remuneration, economic or financial award, reward, benefit, gift or perquisite paid, payable, awarded, granted, given or otherwise provided to the Named Executive Officers or director for services provided and for services to be provided, directly or indirectly, to Alpha Cognition or any subsidiary thereof:

Name and Position (a)	Year (b)	Salary (\$) (c)	Bonus (\$) (d)	Stock Award s (\$) (e)	Option Awards <sup>(2)</sup> (\$) (f)	Non- Equity Incentive Plan Compensatio n (\$) (g)	Non- qualified Deferred Compensatio n Earnings (\$) (h)	All Other Compensation <sup>(12</sup> ) (\$) (i)	Total (\$) (j)
Michael McFaddde n	202 \$	500,00	\$ 125,00 0	\$\$	1,507,29 <sup>(3)(4)</sup> 2	\$ —	\$ —	\$ 30,186 \$	S 2,162,47 8
Chief Executive Officer <sup>(1)</sup>	202 \$	500,00	\$ 483,20 5(3		57,492	\$ —	\$ —	\$ 28,551 \$	S 1,069,24 8
<b>Don Kalkofen</b> Chief  Financial  Officer <sup>(5)</sup>	3	420,00 0 305,45 5(14 )	\$ 76,364 \$ —		727,617 <sup>(6)(7)</sup> 381,839	\$ — \$ —			6 1,273,71 6 703,644
Lauren D'Angelo	202 \$	410,09	\$ 89,928	\$\$	684,184 (10)(11	\$ —	\$ —	\$ 30,186 \$	\$ 1,214,39 7
Chief Commercial Officer and Chief Operating Officer <sup>(8)</sup>	202 \$	359,71 2(15 )	\$ 195,35 0(9		132,673	\$ —	\$ —	\$ 25,551 \$	S 712,286

### Notes:

- (1) Mr. McFadden was appointed as CEO of the Company effective as of April 12, 2021, and as a director of the Company effective as of March 28, 2022. Mr. McFadden received compensation for acting as the CEO of the Company.
- (2) In January 2023, the Company canceled 100,000 outstanding stock options with an exercise price of CAD\$18.00 and issued 100,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (3) Granted 409,787 bonus rights entitled to a cash bonus equal to an amount by which the fair market value of one common share of the Company exceeds \$31.60 multiplied by the number of bonus rights vested. The Officer had earned 81,957 bonus rights.
- (4) In June 2023, the Company granted 300,000 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly instalments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (5) Mr. Kalkofen was appointed as CFO of the Company effective as of April 11, 2022.
- (6) In January 2023, the Company canceled 22,500 outstanding stock options with an exercise price of CAD\$18.60 and issued 22,500 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (7) In June 2023, the Company granted 212,500 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly instalments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (8) Mrs. D'Angelo was appointed as Chief Operating Officer of the Company effective as of September 28, 2023, previously she served as Chief Commercial Officer.

- (9) Granted 53,272 bonus rights entitled to a cash bonus equal to an amount by which the fair market value of one common share of the Company exceeds \$31.60 multiplied by the number of bonus rights vested. The Officer had earned 36,881 bonus rights.
- (10) In January 2023, the Company canceled 30,000 outstanding stock options with an exercise price of CAD\$18.00 and issued 30,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 7,500 outstanding stock options with an exercise price of CAD\$21.00 and issued 7,500 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged.
- (11) In June 2023, the Company granted 197,500 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (12) Healthcare benefits.
- (13) Includes \$72,917 of deferred compensation paid in 2023.
- (14) Includes \$61,250 of deferred compensation paid in 2023.
- (15) Includes \$46,840 of deferred compensation paid in 2023.

# **Narrative Disclosure to Summary Compensation Table**

The Company's compensation philosophy for its executive officers is designed to attract well-qualified individuals by paying market based base salaries plus short and long-term incentive compensation in the form of stock options or awards under the Long Term Incentive Plan. In making its determinations regarding the various elements of executive compensation, the Board will have access to and will rely on published studies of compensation paid in comparable businesses.

The duties and responsibilities of the Chief Executive Officer are typical of those of a business entity of the Company's size in a similar business and include direct reporting responsibility to the chair of the Board, overseeing activities of all other executives of the Company, representing the Company, providing leadership and responsibility for achieving corporate goals, and implementing corporate policies and initiatives.

The objectives of the Company's executive compensation program are as follows:

- to attract, retain and motivate talented executives who create and sustain the Company's continued success:
- to align the interests of the Company's executives with the interests of the Company's shareholders; and
- to provide total compensation to executives that is competitive with that paid by other companies of comparable size engaged in a similar business in appropriate regions

Overall, the executive compensation program aims to design executive compensation packages that mirror executive compensation packages for executives with similar talents, qualifications and responsibilities at companies with similar financial, operating and industrial characteristics. The Company expects to undergo rapid growth and is committed to retaining its key executives for the next several critical years, while at the same time ensuring that executive compensation is tied to specific corporate goals and objectives. The Company's executive compensation program has been designed to reward executives for reinforcing the Company's business objectives and values, for achieving the Company's performance objectives, and for their individual performance. The executive compensation program consists of a combination of base salary, Long Term Incentive Plan awards and stock option incentives.

# Base Salary

The base salary of an executive officer is intended to attract and retain executives by providing a reasonable amount of non-contingent remuneration. The base salary review of any executive officer takes into consideration the current competitive market conditions, experience, proven or expected performance, and the particular skills of the executive officer. Base salary is not evaluated against a formal "peer group."

# Stock Options

The Company believes that equity-based compensation in the form of stock options will link the interests of its executive officers with the long-term interests of the Company's shareholders. Stock option awards to executive officers will typically be subject to time-based vesting provisions. The Company believes that such awards will encourage executive officers to focus on long-term company performance and increasing long-term shareholder value, and will serve as a useful retention mechanism by encouraging executive officers to remain employed with the Company.

The Company does not have any formal policy regarding when stock options are to be granted or the size of any given grant, and the Company does not intend to tie such grants directly to any pre-established corporate or individual goals. The Company Board or a committee thereof will, however, consider and evaluate the total compensation package, including base salary and Long Term Incentive Plan awards, received or to be received by a particular executive officer, and will seek to ensure that such total compensation package is fair, reasonable and competitive. When considering an award of options to an executive officer, consideration of the number of options previously granted to the executive may be taken into account.

# **Employment Agreements**

The Company, through its subsidiary Alpha Cognition (USA), Inc., entered into an employment agreement dated February 22, 2021, as amended on March 28, 2022, with Michael McFadden, pursuant to which the Company retained Mr. McFadden to act as CEO of the Company effective as of April 12, 2021. Mr. McFadden was also appointed as a director of the Company effective as of March 28, 2022. Pursuant to the agreement, the Company agreed to pay Mr. McFadden an annual base salary of \$500,000 and to grant Mr. McFadden an equity interest in the Company based on the value of the Company on a sale or merger, or a listing on the Nasdaq exchange. Mr. McFadden is also entitled to an annual bonus based on achievement of certain milestones, up to a maximum of 50% of his base salary. The agreement may be terminated by either party at any time, for any reason. In the event the agreement is terminated by the Company for any reason other than cause, or by Mr. McFadden for good reason, Mr. McFadden will be entitled to receive his base compensation through to the date of termination, together with severance of six months of base compensation, plus three months of half of base compensation, plus three months of one quarter of base compensation, plus the average of actual performance bonuses paid over the last two years. Mr. McFadden will be entitled to keep options which have vested, however any unvested options would be forfeited. Pursuant to the agreement, in the event of a change of control, Mr. McFadden will receive: a) a cash payment equal to his annual base salary; b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and c) continuation of healthcare benefits for twelve months from date of the change of control event.

The Company, through its subsidiary Alpha Cognition (USA), Inc., entered into an employment agreement dated April 11, 2022, as amended on June 15, 2022, with Don Kalkofen, pursuant to which the Company retained Mr. Kalkofen to act as CFO of the Company effective as of April 11, 2022. Pursuant to the agreement, the Company agreed to pay Mr. Kalkofen an annual base salary of \$420,000 and Mr. Kalkofen was granted 22,500 options. In the event the agreement is terminated by the Company for any reason other than cause, or by Mr. Kalkofen for good reason, Mr. Kalkofen will be entitled to receive his base compensation through to the date of termination. Mr. Kalkofen will be entitled to keep options which have vested, however any unvested options would be forfeited. Pursuant to the agreement, in the event of a change of control, Mr. Kalkofen will receive: a) a cash payment equal to his annual base salary; b) a cash bonus equal to 50% of his annual base salary; and c) continuation of healthcare benefits for twelve months from date of change of control event.

The Company entered into an employment agreement with Lauren D'Angelo pursuant to which the Company retained Ms. D'Angelo to act as the Chief Commercial Officer effective as of May 4, 2021. Ms. D'Angelo was promoted to Chief Operating Officer as of September 28, 2023. Pursuant to the agreement, the Company agreed to pay Ms. D'Angelo an annual base salary which is currently \$420,000 and Ms. D'Angelo is entitled to an annual bonus based on criteria established by the CEO and approved by the Board, with the target bonus to be 50% of base salary. Ms. D'Angelo is also entitled to receive options. The agreement may be terminated by either party at any time, for any reason, with or without advance notice or cause. Pursuant to the agreement, in the event of a change of control, Ms. D'Angelo will receive: a) a cash payment equal to the annual base salary; b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and c) continuation of healthcare benefits for twelve months from date of change of control event.

# **Table of Contents**

# **Outstanding Equity Awards at Fiscal Year-End**

A summary of the number and the value of the outstanding equity awards as of December 31, 2023, held by the named executive officers is set out in the table below.

		Number of	Option Awards Number of		
	Option Grant Date	Securities Underlying Unexercised Options (#) Exercisable	Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Michael McFadden	1/18/2023(1)	37,018	14,796	\$ 4.20	1/18/2033
	1/18/2023(2)	46,315	1,871	\$ 4.20	1/18/2033
	6/8/2023(1)	127,734	133,669	\$ 3.40	6/8/2033
	6/8/2023(2)		38,596	\$ 3.40	6/8/2033
Donald Kalkofen	1/18/2023(2)	4,438	8,438	\$ 4.20	1/18/2033
	6/8/2023(1)	48,571	87,000	\$ 3.40	6/8/2033
	6/8/2023(2)	25,335	35,021	\$ 3.40	6/8/2033
Lauren D'Angelo	1/18/2023(2)	25,000	5,000	\$ 4.20	1/18/2033
	1/18/2023(2)	4,688	2,813	\$ 4.20	2/14/2033
	6/8/2023(1)	51,546	69,217	\$ 3.40	6/8/2033
	6/8/2023(2)	32,546	44,191	\$ 3.40	6/8/2033

# **Notes:**

- (1) Non-qualified stock option grant.
- (2) Incentive stock option grant.

# **Director Compensation**

The following table sets forth the compensation granted to our directors who are not also executive officers for the year ended December 31, 2023. Compensation to directors that are also executive officers is detailed above and is not included in this table.

Name (a)	Fees arned or Paid in Cash (\$) (b)	St Aw	ock ards \$) c)	Option Awards (\$) (d)	Incen Comp	-Equity tive Plan pensation (\$) (e)	Nonqualified Deferred Compensation Earnings (\$) (f)	All Other Compensation (\$) (g)	Total (\$) (h)
Len Mertz	\$ _	\$	_	\$ 93,202(1)(2)	\$	_	\$ —	\$ — \$	93,202
John Havens	\$ _	\$	_	\$ 74,812 <sup>(3)(4)</sup>	\$	_	\$ —	\$ -\$	74,812
Phillip Mertz	\$ _	\$	_	\$ 61,990 <sup>(5)(6)</sup>	\$	_	\$ —	\$ -\$	61,990
Rajeev 'Rob' Bakshi	\$ _	\$	_	\$ 61,990 <sup>(7)(8)</sup>	\$	_	s —	s — s	61,990

**Notes:** 

- (1) In January 2023, the Company canceled 5,000 outstanding stock options with an exercise price of CAD\$12.80 and issued 5,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 7,500 outstanding stock options with an exercise price of CAD\$22.40 and issued 7,500 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (2) In June 2023, the Company granted 25,000 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly instalments until January 30, 2026. These options have an expiry date of June 8, 2033.

140

# **Table of Contents**

- (3) In January 2023, the Company canceled 5,000 outstanding stock options with an exercise price of CAD\$12.80 and issued 5,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 12,000 outstanding stock options with an exercise price of CAD\$22.40 and issued 12,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged.
- (4) In June 2023, the Company granted 20,000 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (5) In January 2023, the Company canceled 5,000 outstanding stock options with an exercise price of CAD\$12.80 and issued 5,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly instalments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 10,000 outstanding stock options with an exercise price of CAD\$22.40 and issued 10,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged.
- (6) In June 2023, the Company granted 16,500 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (7) In January 2023, the Company canceled 5,000 outstanding stock options with an exercise price of CAD\$12.80 and issued 5,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged. In addition, in January 2023, the Company canceled 10,000 outstanding stock options with an exercise price of CAD\$22.40 and issued 10,000 new options with an exercise price of CAD\$5.60 with new vesting terms of equal monthly installments until July 31, 2024. The expiry dates remained unchanged.
- (8) In June 2023, the Company granted 16,500 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (9) In June 2023, the Company granted 16,500 Common Share options with an exercise price of CAD\$4.40 per share. The options will be subject to the following vesting terms: 12.5% will vest on June 8, 2023, and the remaining 87.5% will vest in equal monthly installments until January 30, 2026. These options have an expiry date of June 8, 2033.
- (10) Mr. Cawkell provided monthly consulting services to the Company totaling \$43,230 during 2023. On April 30, 2023, the Company amended the agreement to an hourly fee of \$400 for further services rendered. The amendment included a payment of \$54,000 for the monthly contract termination fee.

### Narrative Disclosure to Director Compensation Table

Due to the Company being in the development stage and not currently generating revenue, our Board has not adopted a compensation policy for the directors and directors are not currently paid any cash fees in relation to their service on the Board or its committees. Instead, the Compensation Committee periodically reviews director compensation matters and grants options in the Company based on their assessment of fair compensation for services rendered to the Board. The grant of options is not conducted pursuant to a fixed schedule and is completely at the discretion of the Compensation Committee.

# PRINCIPAL STOCKHOLDERS

The following table sets forth information concerning beneficial ownership of our capital stock outstanding as of the date of this prospectus, by: (1) each stockholder known to be the beneficial owner of more than five percent of any class of our voting stock then outstanding; (2) each of our directors and nominees to serve as director; (3) each of our named executive officers; and (4) our current directors and executive officers as a group.

As of June 13, 2024 there were 7,516,277 (150,325,536 before the effect of the Reverse Stock Split) common shares issued and outstanding and 395,819 (7,916,380 before the effect of the Reverse Stock Split) Class B preferred Series A shares issued and outstanding. Each common share entitles the holder thereof to one vote. Each share of Class B preferred Series A shares entitles the holder thereof to one vote.

The information regarding beneficial ownership of our capital stock has been presented in accordance with the rules of the SEC. Under these rules, a person may be deemed to beneficially own any shares of capital stock as to which such person, directly or indirectly, has or shares voting power or investment power, and as to which such person has the right to acquire voting or investment power within 60 days through the exercise of any stock option or other right. The percentage of beneficial ownership as to any person as of a particular date is calculated by dividing (1) (i) the number of shares beneficially owned by such person plus (ii) the number of shares as to which such person has the right to acquire voting or investment power within 60 days by (2) the total number of shares outstanding as of such date, plus any shares that such person has the right to acquire from us within 60 days. Including those shares in the tables does not, however, constitute an admission that the named stockholder is a direct or indirect beneficial owner of those shares. Unless otherwise indicated, each person or entity named in the table has sole voting power and investment power (or shares that power with that person's spouse) with respect to all shares of capital stock listed as owned by that person or entity, subject to applicable community property laws.

	Amount of Owner			Percent of	
Name of Beneficial Owner	Common Shares	Class B Preferred Series A Shares	Percent of Common Shares <sup>(1)</sup>	Class B Preferred Series A Shares <sup>(1)</sup>	Percent of Total Voting Stock <sup>(1)</sup>
Greater than 5% stockholders					
Manchester Management Company LLC <sup>(2)(3)</sup>	737,336	_	9.8%	_	9.0%
Rotorua Partners L.P. <sup>(4)</sup>	524,815		7.0%		6.4%
Nutie Dowdle <sup>(5)</sup>	520,530		6.9%		6.4%
All greater than 5% shareholders as a group, other than insiders	1,782,681	_	23.7%	_	21.8%
Named Executive Officers and Directors					
Len Mertz, Chairman of the Board <sup>(6)</sup>	312,102	75,019	4.1%	19.0%	4.9%
Ken Cawkell, Director <sup>(7)</sup>	481,104	100,000	6.4%	25.3%	7.2%
John Havens, Director <sup>(8)</sup>	378,705	_	5.0%		4.8%
Phillip Mertz, Director <sup>(9)</sup>	101,870	55,200	1.4%	13.9%	2.0%
Michael McFadden, Chief Executive Officer <sup>(10)</sup>	273,579	_	3.5%	_	3.3%
Don Kalkofen, Chief Financial Officer <sup>(11)</sup>	130,605	_	1.7%	_	1.6%
Lauren D'Angelo, Chief Operating Officer <sup>(12)</sup>	135,918	_	1.8%	_	1.67%
Rajeev 'Rob' Bakshi, Director <sup>(13)</sup>	44,433	_	0.6%	_	0.5%
All directors and officers as a group (eight persons)	1,858,316	230,219	22.8%	58.2%	26.0%

#### Notes:

Unless otherwise noted, the address of each of the persons listed above is 20073 Fiddler's Green, Frisco Texas 75036.

- (1) The percentage is calculated on a partially diluted basis and based on 7,516,277 shares of Common Stock issued and outstanding and 395,819 Class B Preferred Series A Shares issued and outstanding as of June 13, 2024, plus shares persons have the right to acquire within 60 days of June 13, 2024.
- (2) Address: 2 Calle Candina, #1701 San Juan PR 00907. James Besser and Morgan Frank exercise joint voting and dispositive authority over the securities of Manchester Explorer, L.P.
- (3) 474,178 common shares, 263,158 warrants

142

## **Table of Contents**

- (4) Rotorua Partners L.P. is a limited partnership formed under the laws of Texas with its principal address at 21715 103<sup>rd</sup> Ave. Ct. E., Suite D403, Graham, WA 98338. Beneficial ownership includes 276,596 common shares and 248,219 common shares underlying warrants. Rotorua Partners, L.P. is under common control by Gary Gray 70.5%, Donna R. Gray 19.8%, D. Rhys Gray 4.95%, Mykal C. Gray 4.95% and Dean Campbell 0.25%. Gary M. Gray the President of the named entity has sole voting and dispositive power over the shares.
- (5) 288,390 common shares, 45,455 of which are held through Axos Clearing Cust FBO Nutie Dowdle IRA, and 4,642,795 common shares underlying warrants
- (6) 279,407 common shares, 75,019 preferred class B shares, 32.695 vested stock options
- (7) 273,095 common shares, 100,000 preferred class B shares, 25,077 warrants, 8.379 vested stock options and 174,553 vested performance shares
- (8) 351,549 common shares, and 27,156 vested stock options
- (9) 78,491 common shares, 55,200 preferred class B shares, 23.379 vested stock options
- (10) 14,417 common shares, 3,409 warrants, and 252,344 vested stock options
- (11) 18,375 common shares, and 112,230 vested stock options
- (12) 135,918 vested stock options
- (13) 14,804 common shares, and 23,379 vested stock options

# **Change in Control**

We are not aware of any arrangement that might result in a change in control in the future. We have no knowledge of any arrangements, including any pledge by any person of our securities, the operation of which may at a subsequent date result in a change in Alpha Cognition's control.

143

# **Table of Contents**

#### CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our executive officers and directors which are described elsewhere in this prospectus, see "Executive Compensation — Narrative Disclosure to Summary Compensation Table — *Employment Agreements*," below we describe transactions since January 1, 2022 to which we were or will be a participant and in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding voting securities, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest.

# Transactions with related persons

In March 2015, the Company issued a promissory note of \$1,400,000 to NLS, a related party through a common director, for the acquisition of the Alpha-1062 Technology ("NLS Promissory Note"). In April 2015, the Company and NLS entered into an amendment to the License Agreement pursuant to which the interest rate was reduced to 2% and the maturity date was extended to December 31, 2022, with interest only payments commencing April 1, 2019, at the rate of \$2,000 per month. In March 2023, the Company and NLS entered into a second amending agreement pursuant to which the interest rate was increased to 5.5% and the maturity date was extended to July 15, 2024, with monthly interest only payments required. The Company may pay all or any portion of the note and accrued interest

prior to the maturity date. As at September 30, 2023, the Company owed NLS \$1,211,463 for an outstanding promissory note.

Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 15, 2024, to July 15, 2025. Additionally, \$300,000 is now due on December 31, 2024, with the remaining principal balance due at maturity.

On July 7, 2023, the Company entered into a loan agreement with Alpha Seven a related party through a common director and officers, to advance an amount up to \$150,000. The outstanding balance has an interest rate of 12% per annum, a term of 12 months, and is unsecured. To date the Company has advanced \$55,000.

#### Indemnification

Our articles contain provisions limiting the liability of directors and provide that we will indemnify the directors and executive officers to the fullest extent permitted under British Columbia law. Our articles also provide the Board with discretion to indemnify the other officers, employees, and agents when determined appropriate by the Board. In addition, we entered into an indemnification agreement with each of our directors and executive officers, which requires us to indemnify them.

## **Related Person Transactions Policy and Procedure**

Our Code of Ethics requires we avoid, wherever possible, all related party transactions that could result in actual or potential conflicts of interests, except under guidelines approved by the Board (or the audit committee). Related-party transactions are defined as transactions in which (1) the aggregate amount involved will or may be expected to exceed \$120,000 in any calendar year, (2) Alpha Cognition or any of its subsidiaries is a participant, and (3) any (a) executive officer, director or nominee for election as a director, (b) greater than 5% beneficial owner of our common shares, or (c) immediate family member, of the persons referred to in clauses (a) and (b), has or will have a direct or indirect material interest (other than solely as a result of being a director or a less than 10% beneficial owner of another entity). A conflict of interest situation can arise when a person takes actions or has interests that may make it difficult to perform his or her work objectively and effectively. Conflicts of interest may also arise if a person, or a member of his or her family, receives improper personal benefits as a result of his or her position.

Our audit committee, pursuant to its written charter, is responsible for reviewing and approving related-party transactions to the extent we enter into such transactions. The audit committee will consider all relevant factors when determining whether to approve a related party transaction, including whether the related party transaction is on terms no less favorable to us than terms generally available from an unaffiliated third-party under the same or similar circumstances and the extent of the related party's interest in the transaction.

144

## **Table of Contents**

#### DESCRIPTION OF SHARE CAPITAL AND SECURITIES BEING ISSUED

# **Common Shares**

The authorized capital of the Company consists of an unlimited number of Common Shares without par value, an unlimited number of Class A restricted voting shares ("Restricted Shares") and an unlimited number of Class B Preferred Series A shares ("Preferred Shares"). As of June 13, 2024, there were 7,516,277 common shares issued and outstanding, and 395,819 Preferred Shares issued and outstanding.

There are options outstanding to purchase up to 1,019,968 common shares at exercise prices ranging from \$3.20 to \$8.00. There are warrants outstanding to purchase up to 3,066,644 common shares at exercise prices ranging from \$5.80 to \$8.00. There are performance shares outstanding to purchase up to 341,053 common shares at an exercise price of \$0.20. Holders of Common Shares are entitled to one vote per Common Share at all meetings of shareholders, to receive dividends as and when declared by our Board of Directors and to receive a *pro rata* share of the assets of the Company available for distribution to the shareholders in the event of the liquidation, dissolution or winding-up of the Company. There are no pre-emptive, conversion or redemption rights attached to the Common Shares.

Holders of Common Shares do not have cumulative voting rights. Therefore, holders of a majority of the Common Shares voting for the election of directors can elect all of the directors. A single holder of the Common Shares of the voting power of the capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of holders of Common Shares. A vote by two-thirds of the votes cast on a resolution are required to effectuate certain special resolutions at Alpha Cognition's annual general meeting. There are no provisions for sinking or purchase funds, for permitting or restricting the issuance of additional securities and any other material restrictions, and for requiring a holder of Common Shares to contribute additional capital.

# **Class A Restricted Voting Shares**

The Company issued Restricted Shares to certain holders of common shares of Alpha Canada who are resident in the United States in connection with the Company's Business Combination to allow the Company to maintain its status as a Foreign Private Issuer. As of January 1, 2023, the Company no longer qualifies as a Foreign Private Issuer. On August 29, 2023, the Company converted all 350,000 outstanding Restricted Shares to Common Shares by resolution of the Board. There are currently no Restricted Shares issued and outstanding. The class of Restricted Shares differs from the Common Shares in that they do not entitle the holder to exercise voting rights in respect of the election of directors of the Company.

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

- (1) The holders of the Restricted Shares are entitled to receive notice of and attend all meetings of the shareholders of the Company and are entitled to vote at meetings of the holders of Common Shares, except those holders of Restricted Shares are not entitled to vote for the election or removal of directors of the Company.
- (2) The holders of Restricted Shares are entitled to receive dividends as and when declared by the Board of the Company, provided that no dividend may be declared or paid in respect of Restricted Shares unless concurrently therewith the same dividend is declared or paid on the Common Shares.
- (3) The holders of Restricted Shares are entitled, in the event of any liquidation, dissolution or winding-up, whether voluntary or involuntary, or any other distribution of the assets of the Company among its shareholders for the purpose of winding up its affairs, to share ratably, together with the holders of the Common Shares, in such assets of the Company as are available for distribution.
- (4) Restricted Shares may only be transferred pursuant to an offer to purchase Restricted Shares made to all of the holders of the Restricted Shares.
- (5) If an offer is made to purchase all or substantially all of the Common Shares, each Restricted Share shall be deemed converted into one Common Share concurrent with closing of the offer.

# 145

# **Table of Contents**

Each Restricted Share may be convertible into one Common Share at the option of the holder of the Restricted Share at any time: (i) if the Company enters into a binding agreement that would result in a change of control; or (ii) if a meeting of shareholders is called to elect directors who are not nominees of the Company or management of the Company or if a meeting of shareholders is called at which a contested election of directors will be considered.

#### **Class B Preferred Series A Shares**

The Class B Preferred Series A Shares were issued to certain founders of Alpha Canada in connection with the Company's Business Combination.

The Class B Preferred Series A Shares include the following restrictions, conditions and limitations:

- (1) The Class B Preferred Series A Shares have a deemed issue price of \$5.00 ("Deemed Issue Price").
- (2) The holders of the Class B Preferred Series A Shares will be entitled to receive notice of and attend all meetings of the shareholders of the Company and will be entitled to vote at meetings of the holders of

- Common Shares. The holders of Class B Preferred Series A Shares will vote together with holders of Common Shares and Restricted Shares as a single class.
- (3) The holders of Class B Preferred Series A Shares will be entitled to receive dividends as and when declared by the Board. The Class B Preferred Series A Shares rank in priority to the Common Shares and Restricted Shares for payment of dividends. Dividends on the Class B Preferred Series A Shares are non-cumulative. If the holders of the Class B Preferred Series A Shares receive dividends in an aggregate amount equal to or greater than the Deemed Issue Price, the Class B Preferred Series A Shares shall be automatically converted to Common Shares.
- (4) In the event of any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of the Class B Preferred Series A Shares shall be entitled to receive out of the assets and funds of the Company, prior and in preference to any distribution of any of the assets or funds of the Company to the holders of the Common Shares and Restricted Shares, an amount per Preferred Share equal to two times the Deemed Issue Price of the Class B Preferred Series A Shares (as appropriately adjusted for any stock dividends, combinations or splits) plus all accrued or declared but unpaid dividends on such Class B Preferred Series A Shares (the "Liquidation Preference"). After payment in full of the Liquidation Preference has been made to the holders of the Class B Preferred Series A Shares, all remaining assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Class B Preferred Series A Shares, Common Shares and Restricted Shares. Upon payment of the Liquidation Preference, each Class B Preferred Series A Shares will convert into one Common Share.
- (5) Each Class B Preferred Series A Shares shall, at the option of the holder, be convertible into Common Shares at the rate of one Common Share for each Preferred Share. All of the Class B Preferred Series A Shares will be automatically converted to Common Shares if any of the following events occur:
  - (a) upon the completion of an initial public offering, or a reverse take-over with a qualifying secondary offering, pursuant to which the Common Shares are listed for trading on the New York Stock Exchange, NYSE Amex, the NASDAQ National Market or SmallCap Quotation System or a successor to any of the foregoing, raising at least \$40 million, and a price per share which values the Company at \$160 million or more, prior to listing;
  - (b) a third party makes a bona fide offer to acquire 100% of the Common Shares, or execute a merger or amalgamation in which effective control of the Company is transferred, and such offer has been approved by the Board of the Company and its shareholders, such that shareholders receive proceeds from the transaction of at least \$160 million in the form of shares or cash or a combination of both;
  - (c) a third party makes a bona fide offer to acquire all or substantially all of the Company's assets, for sale proceeds of at least \$180 million and such offer has been approved by the Board and its shareholders, and provided that the shareholders on closing receive proceeds from the transaction by way of dividend and return of capital or otherwise of at least \$160 million; or

# 146

# **Table of Contents**

(d) a third party makes a bona fide offer to acquire certain specific Company asset(s), for sale proceeds of at least \$180 million, and provided that the provision of subsection (c) is not triggered, and such offer has been approved by the Board and provided that the shareholders on closing receive proceeds from the transaction by way of dividend, return of capital or otherwise of at least \$160 million,

If the Class B Preferred Series A Shares are subject to automatic conversion as a result of the occurrence of one of the above events, prior to such conversion they shall be entitled to receive a dividend per Preferred Share equal to the Deemed Issue Price.

# Listing

We have applied to list our common stock on Nasdaq under the symbol "ACOG." Our common shares are currently traded on the CSE under the symbol "ACOG" and quoted for trading on the OTCQB in under the symbol "ACOGF".

# Transfer Agent and Registrar

The transfer agent and registrar for our common shares is Computershare Investor Services Inc. with its principal office at 510 Burrard Street, 3<sup>rd</sup> Floor, Vancouver, British Columbia V6C 3B9.

# Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides details of compensation plans under which equity securities of Alpha Cognition are authorized for issuance as of December 31, 2023. A description of the significant terms of each of the equity compensation plans of Alpha Cognition follows the table below:

Number of ecurities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted- average exercise price of outstanding options, warrants and rights <sup>(1)</sup> (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
1,374,663	\$ 2.80	385,145
_	\$ —	_
1,374,663	\$ 2.80	385,145
	ecurities to be issued upon exercise of outstanding options, warrants and rights (a) 1,374,663	ecurities to be issued upon exercise of outstanding options, warrants and rights (a) 4 2.80 4 2.80

#### **Notes:**

- (1) The exercise price for some options and Performance Shares is expressed in United States dollars.
- (2) The total number of securities which may be issued under the 2023 Plan is, at any time, 20% of the Company's issued and outstanding Common Shares and Restricted Shares at such time. As of December 31, 2023, the Company has a total of 5,910,449 Common Shares and no Restricted Shares issued and outstanding.
- (3) 236,665 shares are issued and remain outstanding under the 2022 Stock Option Plan, at an average exercise price of \$4.20 per share.
- (4) 796,945 shares are issued and remain outstanding under the 2023 Stock Option Plan, at an average exercise price of \$3.40 per share.
- (5) 341,053 Performance Shares are issued and remain outstanding at an exercise price of \$0.20, per share. These Performance Shares were issued pursuant to the Legacy Compensation Plan (as defined below).

# Stock option plans and other incentive plans

The Company currently has three forms of incentive plans for its directors, officers, employees and consultants, being: (i) option-based awards pursuant to the 2023 stock option plan (the "2023 Plan"); (ii) non-equity based awards in the form of cash bonuses, pursuant to the Company's cash bonus policy (the "Cash Bonus Policy"); and (iii) cash-settled share-based payment awards pursuant to the Company's bonus rights plan (the "Bonus Rights Plan").

# 2023 Stock Option Plan

The 2023 Plan was approved by the Board on April 13, 2023 and approved by the shareholders of the Company at their annual general meeting held on June 27, 2023. The purpose of the 2023 Plan is to provide an incentive to directors, senior officers, employees or consultants of the Company or any of its subsidiaries, to acquire a proprietary interest in the Company, to continue their participation in the affairs of the Company and to increase their efforts on behalf of the Company.

The following summary of the material terms of the 2023 Plan does not purport to be complete and is qualified in its entirety by reference to the 2023 Plan.

Eligible Participants. Options may be granted under the 2023 Plan to directors and senior officers of the Company or its subsidiaries, management company employees (collectively, the "Directors"), employees of the Company or its subsidiaries (collectively, the "Employees") or consultants of the Company, its subsidiaries, or its subsidiaries of subsidiaries (collectively, the "Consultants"). The Board, in its discretion, determines which of the Directors, Employees or Consultants will be awarded options under the 2023 Plan.

<u>Number of Shares Reserved.</u> The number of Common Shares which may be issued pursuant to options granted under the 2023 Plan may not exceed 20% of the issued and outstanding Common Shares and Restricted Shares at the date of granting of options. Options that are exercised, cancelled or expire prior to exercise continue to be issuable under the 2023 Plan.

<u>Exercise Price.</u> The exercise price of options granted under the 2023 Plan will be determined by the Board at the time of grant, subject to the following:

- (a) if the Common Shares are listed on the CSE, the exercise price will not be lower than the greater of the last closing price for the Common Shares as quoted on the CSE: (i) on the trading day prior to the date of grant; and (ii) the date of grant; or
- (b) if the Common Shares are not listed on a stock exchange, the price will be determined solely by the Board.

<u>Term of Options.</u> Subject to the termination and change of control provisions noted below, the term of any options granted under the 2023 Plan is determined by the Board and may not exceed ten (10) years from the date of grant.

<u>Vesting.</u> All options granted pursuant to the 2023 Plan will be subject to such vesting requirements as may be imposed by the Board. In the event of a Change of Control, as defined in the 2023 Plan, all unvested options will vest immediately.

Termination. Any options granted pursuant to the 2023 Plan will terminate upon the earliest of:

- (a) the end of the term of the option;
- (b) on the date the holder ceases to be eligible to hold the option (the "Cessation Date"), if the Cessation Date is as a result of dismissal for cause;
- (c) one year from the date of death or disability, if the Cessation Date is as a result of death or disability;
- (d) 90 days from the Cessation Date, if the Cessation Date is as a result of a reason other than death, disability or cause; or
- (e) on such other date as fixed by the Board, provided that the date is no more than one year from the Cessation Date, if the Cessation Date is as a result of a reason other than death, disability or cause.

<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 ("Cashless Exercise").</u> 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.

## **Table of Contents**

The brokerage firm receives an equivalent number of Common Shares from the exercise of the options and the optionee then receives the balance of the Common Shares or the cash proceeds from the balance of such Common Shares.

- (b) Net Exercise ("Net Exercise"). The Company may accept the exercise of options without the optionee making any cash payment so the Company does not receive any cash from the exercise of the subject options, and instead the optionee receives only the number of Common Shares that is the equal to the quotient obtained by dividing:
  - (i) the product of the number of options being exercised multiplied by the difference between the volume weighted average price ("VWAP") of the Common Shares and the exercise price of the options; by
  - (ii) the VWAP of the Common Shares.

In the event of a Cashless Exercise or Net Exercise, the number of options exercised, surrendered or converted, and not the number of Common Shares actually issued by the Company, must be included in calculating the limits set forth in Section 5(a) of the 2023 Plan.

The 2023 Plan also contains provisions permitting the Company to issue options that qualify as "Incentive Stock Options" under Section 422 of the U.S. Internal Revenue Code of 1986, as amended.

#### Cash Bonus Policy

The Company maintains a bonus plan. The Board and the Compensation Committee administer the Cash Bonus Policy and may grant discretionary cash bonuses to eligible participants.

# Bonus Rights Plan

The Company implemented its Bonus Rights Plan as a cash incentive program that is formula-based and measured against pre-determined performance targets, including financial and individual performance measures. The Board administers the Bonus Rights Plan and may grant bonus rights to eligible participants. The grant is conditional on the eligible participant executing a grant agreement (a "Grant Agreement") and such ancillary documents as the Board may determine to be appropriate. Each Grant Agreement evidencing an award of bonus rights will set forth: (i) the grant date; (ii) the number of bonus rights; (iii) the grant price; (iv) any vesting conditions and vesting dates; (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.

The 2022 Plan was previously adopted by the board and approved by shareholders on July 19, 2022, and pursuant to which incentive stock options were granted to certain Directors, Employees and Consultants (the "2022 Options"). In connection with listing of the Common Shares on the CSE, the Company adopted the 2023 Plan and determined that

149

# **Table of Contents**

the 2022 Plan be closed to new grants. The outstanding 2022 Options issued prior to the adoption of the 2023 Plan are not included in the maximum number of stock options available for grant pursuant to the 2023 Plan and are not subject to the terms of the 2023 Plan, and such outstanding 2022 Options will continue to be governed by the 2022 Plan.

The following is a summary of the material terms of the 2022 Plan:

<u>Eligible Participants.</u> Options were granted pursuant to the 2022 Plan to certain Directors, Employees and Consultants. The Board, in its discretion, determined which of the Directors, Employees or Consultants were awarded 2022 Options under the 2022 Plan.

<u>Number of Shares Reserved.</u> The number of Common Shares issuable pursuant to options granted under the 2022 Plan may not exceed 10% of the issued and outstanding Common Shares and Restricted Shares at the date of granting of 2022 Options.

<u>Limitations.</u> Under the 2022 Plan, the aggregate number of options granted to any one person (including companies wholly-owned by that person) in a 12-month period must not exceed 5% of the issued and outstanding Common Shares of the Company, calculated on the date the option is granted. The aggregate number of options granted to any one Consultant in a 12-month period must not exceed 2% of the issued and outstanding Common Shares of the Company, calculated at the date the option is granted. The aggregate number of options granted to all persons retained to provide investor relations services to the Company (including Consultants and Employees or directors or officers whose role and duties primarily consist of providing investor relations services) must not exceed 2% of the issued and outstanding Common Shares of the Company in any 12-month period, calculated at the date an option is granted to any such person. Disinterested shareholder approval was required for any grant of options which would result in the number of options granted to Insiders (as defined in the *Securities Act* (British Columbia)) as a group at any point in time or within a 12 month period exceeding 10% of the issued and outstanding Common Shares of the Company.

<u>Exercise Price.</u> The exercise price of options granted under the 2022 Plan was determined by the Board, in accordance with the policies of the TSX Venture Exchange. The exercise price of 2022 Options granted to Insiders may not be decreased without disinterested Shareholder approval at the time of the proposed amendment.

<u>Term of Options</u>. Subject to the termination and change of control provisions noted below, the term of any 2022 Options were determined by the Board and may not exceed ten (10) years from the date of grant. Disinterested Shareholder approval will be required for any extension to 2022 Options granted to individuals that are Insiders at the time of the proposed amendment.

<u>Vesting.</u> All 2022 Options are subject to such vesting requirements as may be prescribed by the policies of the TSX Venture Exchange, if applicable, or as may be imposed by the Board. 2022 Options issued to persons retained to provide investor relations activities must vest in stages over 12 months with no more than one-quarter of the options vesting in any three month period. In the event of a Change of Control, as defined in the 2022 Plan, all unvested 2022 Options will vest immediately.

<u>Dividend entitlement.</u> The 2022 Plan does not include any dividend entitlement to participants. If participants were entitled to receive options in lieu of dividends declared by the Company, and if the Company did not have sufficient unallocated options available to satisfy the obligation, then the Company may settle those entitlements with cash.

Termination. Any 2022 Options granted pursuant to the 2022 Plan will terminate upon the earliest of:

(a) the end of the term of the 2022 Option;

- (b) on the Cessation Date, if the Cessation Date is as a result of dismissal for cause;
- (c) one year from the date of death or disability, if the Cessation Date is as a result of death or disability;
- (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.

150

# **Table of Contents**

<u>Exercise of 2022 Options.</u> The exercise price of an option must be paid in cash, other than as described below as determined by the Board:

- (a) Cashless Exercise (as defined under the heading "2023 Stock Option Plan" above); or
- (b) Net Exercise (as defined under the heading "2023 Stock Option Plan" above).

In the event of a Cashless Exercise or Net Exercise, the number of 2022 Options exercised, surrendered or converted, and not the number of Common Shares actually issued by the Company, must be included in calculating the limits set forth in Section 5(a) and Sections 6(f)(i)-(iii) of the 2022 Plan.

The 2022 Plan also contains provisions permitting the Company to issue 2022 Options that qualify as "Incentive Stock Options" under Section 422 of the U.S. Internal Revenue Code of 1986, as amended.

# Legacy Compensation Plan

Prior to the completion of the Company's Business Combination, the Company's subsidiary, Alpha Canada, issued performance shares to certain officers and employees of Alpha Canada in lieu of salaries, with vesting subject to performance milestones, pursuant to Alpha Canada's security compensation plan (the "Legacy Compensation Plan"). Upon completion of the Business Combination each performance share of Alpha Canada issued pursuant to the Legacy Compensation Plan was assumed by the Company and issued as a performance share of the Company (the "Performance Shares") with the same exercise price and term to expiry as the Alpha Canada performance shares so assumed.

On September 2, 2020, Alpha Canada declared the Legacy Compensation Plan closed to new grants. The Performance Shares continue to be governed by the Legacy Compensation Plan, including any vesting terms of the Performance Shares.

The following is a summary of the material terms of the Legacy Compensation Plan and the vesting provisions of the Performance Shares:

Administration. The Legacy Compensation Plan is administered by the board of directors of Alpha Canada, who, subject to the provisions of the Legacy Compensation Plan, may establish from time to time such rules and regulations, make such determinations and to take such steps in connection with the Legacy Compensation Plan as in the opinion of the board of directors of Alpha Canada are necessary or desirable for the proper administration of the Legacy Compensation Plan. No further grants may be made pursuant to the Legacy Compensation Plan.

<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;

- 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

151

# **Table of Contents**

- (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 21,000 Performance Shares remain subject to vesting upon the following criteria having been met:

- 1. filing of a second IND with the FDA, or the filing of a second IND-equivalent in a jurisdiction other than the United States; and
- 2. grant of the first Orphan Drug Designation for ALPHA-602. Orphan Drug Designation is a program that provides orphan status to drugs and biologics which are defined as those intended for the treatment, prevention or diagnosis of a rare disease or condition, which is one that affects less than 200,000 persons in the United States or meets cost recovery provisions of the *Orphan Drug Act* (United States).

Any unvested Performance Shares will vest in the percentages identified in the September 1, 2018, and June 1 2019 Option Grant Scaling formulas in the event the Company experiences a Value Transaction defined as a M&A, financing transaction or alternatively a sale or license of the Company's assets. For example, 100% of the unvested Performance Shares would vest if the actual or implied value of the transaction was \$130 million or greater.

Notwithstanding the above, any unvested Performance Shares will immediately vest in full upon a change of control, being an occurrence when either a person becomes a control person, or a majority of the directors elected at any annual or extraordinary general meeting of shareholders of the Company are not individuals nominated by the Board. In addition, any unvested Performance Shares will immediately vest in full upon termination of the Performance Shares by Alpha Canada without just cause or by the optionee with good reason.

#### **Exchange Controls**

There are no governmental laws, decrees or regulations in Canada that restrict the export or import of capital, including foreign exchange controls, or that affect the remittance of dividends, interest or other payments to non-resident holders of the securities of Alpha Cognition, other than Canadian withholding tax. See "Material Canadian Federal Income Tax Considerations" below.

# **Registration Rights**

Pursuant to the Private Placement Subscription Agreement for Securities pursuant to which we sold the Units, we also granted the investors certain piggy-back registration rights, pursuant to which, for a period of one (1) year following the closing the private placement, if the Company's files a registration statement under the Securities Act registering a public offering of its common shares (including common shares issuable upon conversion or exercise of other securities), the Company shall promptly give written notice of such proposed registration to all holders of common shares issued as part of the Q2 2023 PP or holders of common shares underlying warrants issued in the Q2 2023 PP and offer to include such common shares in the registration statement for resale by such holders. Each holder has ten (10) days from receipt of such notice to request that the Company include their shares in the registration statement for resale.

Upon receipt of a notice to participate from a holder, the Company agreed to use best efforts to cause all such common shares to be registered in the registration statement, to bring such registration statement effective and to maintain the effectiveness of the registration statement for a period of nine months.

152

# Table of Contents

Pursuant to an agreement signed by the selling stockholders in March and April 2024, all selling stockholders named herein agreed to waive their registration rights in relation to the common shares underlying warrants issued in the Q2 2023 PP through March 31, 2025. The Company has agreed that on or prior to March 31, 2025, the Company will file a registration statement registering the resale of the common shares underlying the warrants issued in the Q2 2023 PP.

We have also agreed with Spartan and certain of its affiliates to register certain of the compensation shares granted to them in relation to the Q2 2023 PP. The Company has agreed that on or prior to March 31, 2025, the Company will file a registration statement registering the resale of the remaining compensation shares granted to Spartan and its affiliates in relation to the Q2 2023 PP.

# Pre-Funded Warrants to be Issued as Part of this Offering

The following summary of the material terms and provisions of the pre-funded warrants to be issued as part of this offering is not complete and is subject to, and qualified in its entirety by, the provisions of the pre-funded warrants, the form of which is filed as Exhibit 4.3 to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrants for a complete description of the terms and conditions of the pre-funded warrants.

## **Duration and Exercise Price**

Each pre-funded warrant offered hereby will have an initial exercise price per share equal to US\$0.0001. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. The exercise price and number of common shares issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common shares and the exercise price. The pre-funded warrants will be issued separately from the accompanying warrants, and may be transferred separately immediately thereafter.

## Exercisability

The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of common shares purchased upon such exercise (except in the case of a cashless exercise as discussed below). Purchasers of the pre-funded warrants in this offering may elect to deliver their exercise notice following the pricing of the offering and prior to the issuance of the pre-funded warrants at closing to have their pre-funded warrants exercised immediately upon issuance and receive common shares underlying the pre-funded warrants upon closing of this offering. A holder (together with its affiliates) may not exercise any portion of the pre-funded warrant to the extent that the holder would own more than 4.99% of the outstanding common shares immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's pre-

funded warrants up to 9.99% of the number common shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. Purchasers of pre-funded warrants in this offering may also elect prior to the issuance of the pre-funded warrants to have the initial exercise limitation set at 9.99% of our outstanding common shares. No fractional common shares will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will round up to the next whole share.

# Cashless Exercise

If, at the time a holder exercises its pre-funded warrants, a registration statement registering the issuance of the common shares underlying the pre-funded warrants under the Securities Act is not then effective or available, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of Shares determined according to a formula set forth in the pre-funded warrants.

# **Transferability**

Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer.

153

# **Table of Contents**

# **Exchange Listing**

There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system. We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

# Right as a Stockholder

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of our common shares, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common shares, including any voting rights, until they exercise their pre-funded warrants.

# **Fundamental Transaction**

In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our common shares, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common shares, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common shares, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction.

# Warrants to be Issued as Part of this Offering

The following summary of material terms and provisions of the warrants to be issued as part of this offering is not complete and is subject to, and qualified in its entirety by, the provisions of the warrants, the form of which is filed as Exhibit 4.4 to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of warrants for a complete description of the terms and conditions of the warrants.

# **Duration and Exercise Price**

Each warrant will have an initial exercise price equal to \$[•] per warrant share. The warrants will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The exercise price and number of warrant shares issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common shares and the exercise price. A warrant to purchase one warrant share will accompany each common share and each pre-funded warrant issued in this offering. The warrants will be issued separately from the common shares and the pre-funded warrants.

# Cashless Exercise

If, at the time a holder exercises its warrants, a registration statement registering the issuance of the warrant shares underlying the warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of warrant shares determined according to a formula set forth in the warrants.

#### Exercisability

The warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of warrant shares purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the warrant to the extent that the holder would own more than 4.99% of the outstanding common shares immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's warrants up to 9.99% of the number of

154

#### **Table of Contents**

shares of our common shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. Purchasers of warrants in this offering may also elect prior to the issuance of the warrants to have the initial exercise limitation set at 9.99% of our outstanding common shares.

# **Fractional Shares**

No fractional warrant shares will be issued upon the exercise of the warrants. Rather, the number of warrant shares to be issued will be rounded up, to the nearest whole number, or the Company shall pay a cash adjustment in respect of the fractional share.

#### Redemption by the Company

We may call the warrants for redemption:

- in whole and not in part;
- at a price of \$0.0001 per warrant;
- upon not less than 30 days' prior written notice of redemption given after the warrants become exercisable (the "30-day redemption period") to each warrant holder; and
- if, and only if, the reported last sale price of the common shares equals or exceeds 150% of the per share exercise price of the warrants (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 15 consecutive trading days commencing on any date following the date on which the warrants bare issued and ending three business days before we send the notice of redemption to the warrant holders.

If and when the warrants become redeemable by us, we may not exercise our redemption right if the issuance of common shares upon exercise of the warrants is not registered under the Securities Act.

#### **Table of Contents**

#### UNDERWRITING

We have entered into an underwriting agreement with the A.G.P./Alliance Global Partners and AGP Canada Investments ULC as representatives of the various underwriters named on Schedule I thereto. We refer to the representatives and the various underwriters named on Schedule I to the underwriting agreement as the "underwriters." Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and the underwriters have agreed to purchase from us, common shares and accompanying warrants or pre-funded warrants and accompanying warrants.

Pursuant to the terms and subject to the conditions contained in the underwriting agreement, we have agreed to sell to the underwriters named below, and the underwriters have agreed to purchase from us, the number of common shares set forth opposite its name below:

Name	Number of Common Shares and accompanying Warrants	Number of Pre-Funded Warrants and accompanying Warrants	Total
A.G.P./Alliance Global Partners			
AGP Canada Investments ULC			
Brookline Captial Markets			
Ventum Financial Corp.			
Total			

A.G.P/Alliance Global Partners and Brookline Capital Markets will act as underwriters solely in relation to the offering in the United States and certain other jurisdictions outside of Canada. AGP Canada Investments ULC and Ventum Financial Corp. will act underwriters solely in relation to the offering in Canada and certain other jurisdictions outside of the United States.

The underwriting agreement provides that the obligation of the underwriters to purchase the common shares offered by this prospectus, other than those covered by the option to purchase additional common shares described below, is subject to certain conditions. The underwriters are obligated to purchase all of the common shares offered hereby if any of the shares are purchased.

The underwriters are offering the common shares subject to prior sale, when, as and if issued to and accepted by it, subject to approval of legal matters by its counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

This offering is being made concurrently in the United States and in each of the provinces and territories of Canada. The common shares will be offered in the United States through those underwriters or their U.S. affiliates who are registered to offer the common shares for sale in the United States, and in Canada through those underwriters or their Canadian affiliates who are registered to offer the common shares for sale in applicable Canadian provinces or territories, and such other registered dealers as may be designated by the underwriters. Subject to applicable law, the underwriters may offer the common shares outside of the United States and Canada.

#### **Discounts, Commissions and Expenses**

The underwriters propose to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per common share and accompanying warrant and \$ per pre-funded warrant and accompanying warrant. After this offering, the public

offering price and concession may be changed by the underwriters. No such change shall change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The underwriters and other broker-dealers will receive compensation for sales of the securities offered hereby at a fixed commission rate consisting of: (i) a cash fee equal to 7% of the total gross proceeds of the offering; and (ii) compensation warrants ("underwriters warrants") as described below. The warrants have been deemed compensation by FINRA and are therefore subject to a 180-day lock-up pursuant to Rule 5110(g)(1) of FINRA. The underwriters (or their permitted assignees under the Rule) will not sell, transfer, assign, pledge, or hypothecate these warrants or the securities underlying these warrants, nor will it engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the warrants or the underlying securities for a period of 180 days from effectiveness. We will bear all fees and expenses attendant to registering the securities issuable on exercise of the warrants other than underwriting commissions incurred and payable by the holders. The exercise price and number of shares issuable upon exercise of the warrants may be adjusted in certain circumstances including in the event of a stock dividend, extraordinary cash dividend or our recapitalization, reorganization, merger or consolidation.

156

#### **Table of Contents**

We also have agreed to reimburse the underwriters for up to \$85,000 of its reasonable out-of-pocket accountable expenses in connection with this offering, including fees and disbursements of counsel, plus an additional amount up to \$35,000 for fees and expenses of Canadian legal counsel as well as up to \$25,000 of its non-accountable expenses. We estimate that the total expenses of this Offering, including filing and listing fees, printing fees and legal and accounting expenses, but excluding underwriting discounts and commissions, will be approximately \$350,000.

In addition, we will owe a fee of 1% of the total gross proceeds of the offering to Spartan Capital Securities, LLC ("Spartan Capital") pursuant an investment banking agreement dated May 17, 2023, by and between the Company and Spartan Capital, as amended on June 10, 2024.

Pursuant to the underwriting agreement, we have granted the representative of the underwriters an option to purchase up to 200,223 additional common shares and/or pre-funded warrants and/or up to an additional 200,223 warrants (15% of the common shares and common shares underlying the pre-funded warrants sold in this offering) at the public offering price set forth on the cover page hereto, less the underwriting discounts and commissions. The representative can exercise this option in whole or in part at any time and from time to time within 45 days after the date of this prospectus. The representative may exercise the option solely to cover over-allotments, if any, made in connection with this offering. If any additional common shares, pre-funded warrants and/or accompanying warrants are purchased pursuant to the over-allotment option, the underwriters will offer these common shares, pre-funded warrants and accompanying warrants on the same terms as those on which the other securities are being offered.

The following table shows the total underwriting discounts and commissions payable to the underwriters by us in connection with this offering (assuming both the exercise in full and non-exercise of the overallotment option to purchase additional common shares we have granted to the underwriter):

Common Share and accompanying Warrant	Funded Warrant and accompanying Warrant	Total Without Over-Allotment	Total With Over-Allotment
Per	Per Pre-		

Public offering price

Underwriting discounts and commissions (7.0%)

# Proceeds, before expenses, to us.

If the over-allotment option is exercised in full, the total gross proceeds will be approximately \$\\$million and the total net proceeds, after deducting underwriting discounts and commissions and estimated offering expenses, to us will be approximately \$\\$million.

#### **Underwriters Warrants**

The underwriters warrants are exercisable at a price of \$ for a period beginning 6 months from the closing date of the offering and expiring 5 years from the closing date of the offering to acquire the number of common shares equal to 5% of the common shares and common shares underlying pre-funded warrants sold during this offering, subject to standard anti-dilution adjustments for share splits and similar transactions. The underwriters warrants may be exercised by payment of the cash exercise price or on a cashless exercise basis pursuant to the formula set forth therein. Pursuant to FINRA Rule 5110(e), the underwriters warrants and any shares of common stock issued upon exercise of the underwriters warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of reorganization of the Company; (ii) to any FINRA member firm participating in the offering and the officers, partners, registered persons or affiliates thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the Representative or related persons does not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period; (vi) if we meet the registration requirements of Forms S-3, F-3 or F-10; or (vii) back to us in a transaction exempt from registration with the SEC. The Underwriter's Warrant and the shares of common stock underlying the Underwriter's Warrant are registered in the registration statement of which this prospectus is a part.

157

## **Table of Contents**

#### Indemnification

Pursuant to the underwriting agreement, we have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the underwriters or such other indemnified parties may be required to make in respect of those liabilities.

# Listing

We have applied to list our common stock on Nasdaq under the symbol "ACOG." Our common shares are currently traded on the CSE under the symbol "ACOG" and quoted for trading on the OTCQB in under the symbol "ACOGF".

# **Blackout and Lock-Up Agreements**

We have agreed not to (i) offer, pledge, issue, sell, contract to sell, purchase, contract to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any common shares or any securities convertible into or exercisable or exchangeable for our common shares; (ii) enter into any swap or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of common shares; or (iii) file any registration statement with the SEC relating to the offering of any shares of our common shares or any securities convertible into or exercisable or exchangeable for shares of our common shares, without the prior written consent of the underwriters, for a period of 120 days following the date of this prospectus (the "Lock-up Period"); provided however, if the Company receives approval of the FDA for the NDA for Alpha-1062, then no earlier than August 1, 2024, the Company may file a registration statement with the SEC and conduct one public offering of its equity securities without the prior consent of the underwriters. This consent may be given at any time without public notice. These restrictions on future issuances are subject to exceptions for (i) the issuance of shares of our common shares, (ii) the issuance of shares of our common shares or options to acquire shares of our common shares pursuant to our equity incentive plans and (iii) the filing of one or more registration statements on Form S-8 with respect to shares of our common shares underlying our equity incentive plans from time to time, including the Stock Option Plan.

In addition, each of our directors and executive officers have entered into a lock-up agreement with the underwriters. Under the lock-up agreements, the directors and executive officers may not, subject to certain exceptions, directly or

indirectly, sell, offer to sell, contract to sell, or grant any option for the sale (including any short sale), grant any security interest in, pledge, hypothecate, hedge, establish an open "put equivalent position" (within the meaning of Rule 16a-1(h) under the Exchange Act), or otherwise dispose of, or enter into any transaction which is designed to or could be expected to result in the disposition of, any shares of our common shares or securities convertible into or exchangeable for shares of our common shares, or publicly announce any intention to do any of the foregoing, without the prior written consent of the underwriters for a period of 180 days from the date of this prospectus. This consent may be given at any time without public notice.

# **Electronic Distribution**

This prospectus may be made available in electronic format on websites or through other online services maintained by the underwriters or by its affiliates. In those cases, prospective investors may view offering terms online and prospective investors may be allowed to place orders online. Other than this prospectus in electronic format, the information on the underwriter's website or our website and any information contained in any other websites maintained by the underwriters or by us is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriters in its capacity as underwriters, and should not be relied upon by investors.

# Price Stabilization, Short Positions and Penalty Bids

In connection with the offering the underwriters may engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Sales by the underwriters of securities in excess of the number of securities the underwriters is obligated to purchase creates a syndicate short position. The underwriters may close out any syndicate short position by purchasing shares in the open market.

158

#### **Table of Contents**

- Syndicate covering transactions involve purchases of the common shares in the open market after the distribution has been completed in order to cover syndicate short positions.
- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the common shares originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common shares or preventing or retarding a decline in the market price of the common shares. As a result, the price of our common shares may be higher than the price that might otherwise exist in the open market. These transactions may be discontinued at any time.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common shares. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transaction, if commenced, will not be discontinued without notice.

# Other Relationships

From time to time, the underwriters and their affiliates have provided, and may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. However, except as disclosed in this prospectus, we have no present arrangements with the underwriters for any further services.

# **Pricing of the Offering**

The public offering price will be determined by arm's length negotiations between us and the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the trading price of the common shares on the CSE and the OTCQB and the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this Offering;
- the recent market prices of, and demand for, publicly traded common shares of generally comparable companies; and
- other factors deemed relevant by the representatives of the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for the common shares, or that the shares will trade in the public market at or above the initial public offering price.

#### Offer Restrictions Outside the United States and Canada

Other than in the United States and Canada, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

159

# **Table of Contents**

#### **Selling Restrictions**

# European Economic Area and the United Kingdom

In relation to each Member State of the European Economic Area and the United Kingdom (each, a "*Relevant State*") no common shares have been offered or will be offered to the public in that Relevant State prior to the publication of a prospectus in relation to the common shares that has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State (all in accordance with the Prospectus Regulation), except that an offer to the public of any common shares in that Relevant State may be made at any time under the following exemptions under the Prospectus Regulation:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the underwriters for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation

provided that no such offer of common shares shall result in a requirement for the publication by us or the underwriters of a prospectus pursuant to Article 3 of the Prospectus Regulation, or a supplement to a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to any common shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any common shares to be offered so as to enable an investor to decide to purchase any common shares, and the expression "Prospectus Regulation" means Regulation 2017/1129/EU (as amended).

# **United Kingdom**

The underwriters have represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the "FSMA") received by it in connection with the issue or sale of any common shares in circumstances in which section 21(1) of the FSMA does not apply to us;
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any common shares in, from or otherwise involving the United Kingdom.

In the United Kingdom, this prospectus is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Regulation) who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This prospectus must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this prospectus relates is only available to, and will be engaged in with, relevant persons.

#### Hong Kong

The common shares have not been and may not and will not be offered or sold in Hong Kong, by means of any document, other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32, Laws of Hong Kong) or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement,

160

# **Table of Contents**

invitation or document relating to the common shares has been, may be or will be issued, or has been, may be, or will be in the possession of any person for the purposes of issue (in each case, whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to common shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

The contents of this prospectus have not been reviewed by any Hong Kong regulatory authority. You are advised to exercise caution in relation to the offer. If you are in doubt about any contents of this prospectus, you should obtain independent professional advice.

The information and this prospectus are strictly confidential to the person whom it is addressed and must not be distributed, published, reproduced or disclosed (in whole or in part) by recipient to any other person or used for any purpose in Hong Kong.

#### China

The common shares may not be offered or sold directly or indirectly to the public in the People's Republic of China ("China") and neither this prospectus, which has not been submitted to the Chinese Securities and Regulatory Commission or registered with the Asset Management Association of China, nor any offering material or information contained herein relating to the common shares, may be supplied to the public in China or used in connection with any offer for the subscription or sale of common shares to the public in China. The common shares may only be offered or sold to China-related organizations which are authorized to engage in foreign exchange business and offshore investment from outside of China. Such qualified institutional investors shall be subject to foreign exchange control approval and filing requirements under the relevant Chinese foreign exchange regulations with respect to the subscription and trading of the common shares.

#### Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission ("ASIC"), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

## **Switzerland**

This document is not intended to constitute an offer or solicitation to purchase or invest in the securities. The securities may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act ("FinSA") and no application has or will be made to admit the securities to trading on any trading venue (exchange

161

# Table of Contents

or multilateral trading facility) in Switzerland. Neither this document nor any other offering or marketing material relating to the securities constitutes a prospectus pursuant to the FinSA, and neither this document nor any other offering or marketing material relating to the securities may be publicly distributed or otherwise made publicly available in Switzerland.

# Japan

No registration pursuant to Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) (the "FIEL") has been made or will be made with respect to the solicitation of the application for the acquisition of the shares of common stock.

Accordingly, the shares of common stock have not been, directly or indirectly, offered or sold and will not be, directly or indirectly, offered or sold in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements, and otherwise in compliance with, the FIEL and the other applicable laws and regulations of Japan.

# For Qualified Institutional Investors ("QII")

Please note that the solicitation for newly-issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of common stock constitutes either a "QII only private placement" or a "QII only secondary distribution" (each as described in Paragraph 1, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of common stock. The shares of common stock may only be transferred to QIIs.

# For Non-QII Investors

Please note that the solicitation for newly-issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of common stock constitutes either a "small number private placement" or a "small number private secondary distribution" (each as is described in Paragraph 4, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of common stock. The shares of common stock may only be transferred en bloc without subdivision to a single investor.

# **Dubai International Financial Centre**

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

# Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong), or the Companies (Winding Up and Miscellaneous Provisions) Ordinance, or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong), or the Securities and Futures Ordinance, or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong

(except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

#### Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore, or Regulation 32.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Singapore SFA Product Classification — In connection with Section 309B of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 (the "CMP Regulations 2018"), the Company has determined, and hereby notifies all relevant persons (as defined in the CMP Regulations 2018), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

163

# **Table of Contents**

# MATERIAL CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following summarizes the principal Canadian federal income tax consequences applicable to the holding and disposition of common shares in the capital of the Company by a United States resident, and who holds common shares and accompanying warrants and pre-funded warrants and accompanying warrants solely as capital property, referred to in this summary as a "U.S. Resident". This summary is based on the current provisions of the *Income Tax Act* (Canada) (the "Tax Act"), the regulations thereunder, all amendments thereto publicly proposed by the government of Canada, the published administrative practices of Canada RevenueAgency, and the current provisions of the

Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the "Canada-U.S. Tax Convention"). Except as otherwise expressly provided, this summary does not take into account any provincial, territorial or foreign (including without limitation, any United States) tax law or treaty. It has been assumed that all currently proposed amendments will be enacted substantially as proposed and that there is no other relevant change in any governing law or practice, although no assurance can be given in these respects.

Special rules, which are not discussed in this summary, may apply to a U.S. Resident that is an insurer carrying on business in Canada and elsewhere or is an "authorized foreign bank" (as defined in the Tax Act). Such U.S. Resident holders should consult their own tax advisors.

# Each U.S. Resident is advised to obtain tax and legal advice applicable to such U.S. Resident's particular circumstances.

Every U.S. Resident is liable to pay a Canadian withholding tax on every dividend that is or is deemed to be paid or credited to the U.S. Resident on the U.S. Resident's common shares. The statutory rate of withholding tax is 25% of the gross amount of the dividend paid. The Canada-U.S. Tax Convention reduces the statutory rate with respect to dividends paid to a U.S. Resident, if that U.S. Resident is eligible for benefits under the Canada-U.S. Tax Convention. Where applicable, the general rate of withholding tax under the Canada-U.S. Tax Convention is 15% of the gross amount of the dividend, but if the U.S. Resident is a company that owns at least 10% of the voting stock of the Company and beneficially owns the dividend, the rate of withholding tax is 5% for dividends paid or credited to such corporate U.S. Resident. The Company is required to withhold the applicable tax from the dividend payable to the U.S. Resident, and to remit the tax to the Receiver General of Canada for the account of the U.S. Holder.

A U.S. Resident generally will not be subject to tax under the Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a common share, pre-funded warrant, or warrant unless the common share, pre-funded warrant or warrant constitutes "taxable Canadian property" of the U.S. Resident for purposes of the Tax Act and the gain is not exempt from tax pursuant to the terms of the Canada-U.S. Tax Convention.

Provided that the common shares are listed on a "designated stock exchange" for purposes of the Tax Act (which currently includes the CSE) at the time of disposition, the common shares generally will not constitute "taxable Canadian property" of a U.S. Resident, unless at any time during the 60 month period immediately preceding the disposition:

- (i) the U.S. Resident, persons with whom U.S. Resident did not deal at arm's length, partnerships in which the U.S. Resident or such non-arm's length person hold a membership interest (either directly or indirectly through one or more partnerships), or the U.S. Resident together with all such persons and partnerships, owned 25% or more of the issued shares of any class or series of shares of the Company and;
- (ii) (ii) more than 50% of the fair market value of the common shares was derived directly or indirectly from one or any combination of real or immovable property situated in Canada, "Canadian resource properties" (as defined in the Tax Act), "timber resource properties" (as defined in the Tax Act) or an option in respect of, an interest in, or for civil law, a right in, such properties whether or not such property exists.
- (iii) Notwithstanding the foregoing, a common share, pre-funded warrant, or warrant may otherwise be deemed to be taxable Canadian property to a Non-Resident Holder for purposes of the Tax Act in certain circumstances.

Certain withholding and reporting obligations will also generally apply in connection with the disposition of common shares by a U.S. Resident that constitutes, or are deemed to constitute, "taxable Canadian property" (and are not "treaty-protected property" as defined in the Tax Act).

U.S. Residents who may hold common shares as "taxable Canadian property" should consult their own tax advisors.

# **Table of Contents**

# CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of certain material U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of common shares and warrants (one common share and one warrant acquired together pursuant to this offering is referred to in this summary as a "common share unit"), or pre-funded warrants and warrants (one pre-funded warrant and one warrant acquired together pursuant to this offering is referred to in this summary as a "pre-funded warrant unit"), the acquisition, ownership and disposition of common shares acquired as part of the common share units, the acquisition, ownership and disposition of pre-funded warrants acquired as part of the pre-funded warrant units, the exercise, disposition, and lapse of warrants acquired as part of the common share units or the pre-funded warrant units, the acquisition, ownership, and disposition of pre-funded warrant shares received upon exercise of the pre-funded warrants, and the acquisition, ownership and disposition of warrant shares received upon exercise of the warrants, all as acquired pursuant to this offering. This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from or relating to the acquisition, ownership and disposition of common share units or pre-funded warrant units and their respective components as acquired pursuant to this offering. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including, without limitation, specific tax consequences to a U.S. Holder under an applicable income tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any particular U.S. Holder. This summary does not address the U.S. federal alternative minimum, U.S. federal net investment income, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants warrant shares, and pre-funded warrant shares. In addition, except as specifically set forth below, this summary does not discuss applicable income tax reporting requirements. Each prospective U.S. Holder should consult its own tax advisors regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal net investment income, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, and pre-funded warrant shares.

No ruling from the Internal Revenue Service (the "IRS") has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership and disposition of common share units, prefunded warrant units, common shares, pre-funded warrants, warrants, warrant shares, and pre-funded warrant shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, or contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the conclusions described in this summary.

# Scope of this Summary

## Authorities

This summary is based on the U.S. Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations (whether final, temporary, or proposed) promulgated thereunder, published rulings of the IRS, published administrative positions of the IRS, the current provisions of the Canada-U.S. Tax Convention, and U.S. court decisions that are applicable, and, in each case, as in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis, which could affect the U.S. federal income tax considerations described in this summary. Except as provided herein, this summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

# U.S. Holders

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares as acquired pursuant to this offering, that is for U.S. federal income tax purposes:

- An individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the U.S. and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

165

# **Table of Contents**

## Non-U.S. Holders

For purposes of this summary, a "non-U.S. Holder" is a beneficial owner of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares that is not a U.S. Holder or an entity or arrangement classified as a partnership for U.S. federal income tax purposes. This summary does not address the U.S. federal, state or local tax consequences to non-U.S. Holders arising from or relating to the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares. Accordingly, a non-U.S. Holder should consult its own tax advisors regarding the U.S. federal, state or local and non-U.S. tax consequences (including the potential application of and operation of any income tax treaties) relating to the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, and pre-funded warrant shares.

#### U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including, but not limited to U.S. Holders that: (a) are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) are brokerdealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) have a "functional currency" other than the U.S. dollar; (e) own common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other integrated transaction; (f) acquire common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are subject to the alternative minimum tax; (i) are subject to special tax accounting rules with respect to the common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares; (j) are partnerships or other "pass-through" entities (and partners or other owners thereof); (k) are S corporations (and shareholders thereof); (l) are U.S. expatriates or former long-term residents of the United States subject to Section 877 or 877A of the Code; (m) hold common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares in connection with a trade or business, permanent establishment, or fixed base outside the United States; or (n) own or have owned or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or value of our outstanding shares. U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal net investment income, U.S. federal estate and gift, U.S. state

and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, and pre-funded warrant shares.

If an entity or arrangement that is classified as a partnership (or other "pass-through" entity) for U.S. federal income tax purposes holds common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares, the U.S. federal income tax consequences to such entity or arrangement and the partners (or other owners or participants) of such entity or arrangement generally will depend on the activities of the entity or arrangement and the status of such partners (or owners or participants). This summary does not address the tax consequences to any such partner (or owner or participant). Partners (or other owners or participants) of entities or arrangements that are classified as partnerships or as "pass-through" entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrants shares, and pre-funded warrant shares.

# U.S. Federal Income Tax Consequences of the Acquisition of Common Share Units or Pre-Funded Warrant Units

For U.S. federal income tax purposes, the acquisition by a U.S. Holder of a common share unit will be treated as the acquisition of one common share and one warrant. The purchase price for each common share unit will be allocated between these two components in proportion to their relative fair market values at the time the common share unit is purchased by the U.S. Holder. This allocation of the purchase price for each common share unit will establish a U.S. Holder's initial tax basis for U.S. federal income tax purposes in the one common share and warrant that comprise each common share unit.

For this purpose, we will allocate \$11.19 of the purchase price for the common share unit to the common share and \$0.01 of the purchase price for each common share unit to the warrant. However, the IRS will not be bound by such allocation of the purchase price for the common share units, and therefore, the IRS or a U.S. court may not respect the allocation set forth above. Each U.S. Holder should consult its own tax advisor regarding the allocation of the purchase price for the common share units.

For U.S. federal income tax purposes, the acquisition by a U.S. Holder of a Pre-Funded Warrant Unit will be treated as the acquisition of one Pre-Funded Warrant and one Warrant. The purchase price for each Pre-Funded Warrant Unit will be allocated between these two components in proportion to their relative fair market values at the time the Pre-Funded Warrant Unit is purchased by the U.S. Holder. This allocation of the purchase price for each Pre-Funded Warrant Unit will establish a U.S. Holder's initial tax basis for U.S. federal income tax purposes in the Pre-Funded Warrant and one Warrant that comprise each Pre-Funded Warrant Unit.

For this purpose, we will allocate 11.1899 of the purchase price for the Pre-Funded Warrant Unit to the Pre-Funded Warrant and \$0.01 of the purchase price for each Pre-Funded Warrant Unit to the Warrant. However, the IRS will not be bound by such allocation of the purchase price for the Pre-Funded Warrant Units, and therefore, the IRS or a U.S. court may not respect the allocation set forth above. Each U.S. Holder should consult its own tax advisor regarding the allocation of the purchase price for the Pre-Funded Warrant Units.

## **Treatment of Pre-Funded Warrants**

Although it is not entirely free from doubt, we believe that a pre-funded warrant should be treated as a separate class of our common shares for U.S. federal income tax purposes and a U.S. Holder of pre-funded warrants should generally be taxed in the same manner as a holder of common shares except as described below. Accordingly, no gain or loss should be recognized upon the exercise of a pre-funded warrant and, upon exercise, the holding period of a pre-funded warrant should carry over to the pre-funded warrant shares received. Similarly, the tax basis of the pre-funded warrant should carry over to the pre-funded warrant shares received upon exercise, increased by the exercise price of \$0.001 per pre-funded warrant share. However, such characterization is not binding on the IRS, and the IRS may treat the

pre-funded warrants as warrants to acquire common shares. If so, the amount and character of a U.S. Holder's gain with respect to an investment in pre-funded warrants could change, and a U.S. Holder may not be entitled to make the "QEF Election" described below with respect to the pre-funded warrants to mitigate PFIC consequences in the event that we are classified as a PFIC. A U.S. Holder generally may not make a Mark-to-Market Election with respect to the pre-funded warrants. Accordingly, each U.S. Holder should consult its own tax advisor regarding the risks associated with the acquisition of a pre-funded warrant pursuant to this offering (including potential alternative characterizations). The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes.

# **Passive Foreign Investment Company Rules**

If we were to constitute a "passive foreign investment company" or "PFIC" for any year during a U.S. Holder's holding period, then certain potentially adverse rules would affect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, and pre-funded warrant shares. We believe we were a "passive foreign investment company" (a "PFIC") within the meaning of Section 1297 of the Code for our most recently completed taxable year and based on current business plans and financial expectations, we expect to be a PFIC for our current taxable year and may be a PFIC in subsequent tax years. No opinion of legal counsel or ruling from the IRS concerning our status as a PFIC has been obtained or is currently planned to be requested. The determination of whether any corporation was, or will be, a PFIC for a tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether any corporation will be a PFIC for any tax year depends on the assets and income of such corporation over the course of each such tax year and, as a result, cannot be predicted with certainty as of the date of this document. Accordingly, there can be no assurance that the IRS will not challenge any determination made by us (or any of our non-U.S. subsidiaries) concerning our (or its) PFIC status. Each U.S. Holder should consult its own tax advisors regarding our PFIC status of the PFIC status of each of our non-U.S. subsidiaries.

In any year in which we are classified as a PFIC, a U.S. Holder will be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require. In addition to penalties, a failure to satisfy such reporting requirements may result in an extension of the time period during which the IRS can assess a tax. U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file an IRS Form 8621 annually.

We generally will be a PFIC if, for a tax year, (a) 75% or more of our gross income in such tax year is passive income (the "PFIC income test") or (b) 50% or more of the value of our assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets (the "PFIC asset test"). "Gross income" generally includes all sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and "passive income" generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions. Active business gains arising from the sale of commodities generally are excluded from passive income if substantially all of a foreign corporation's commodities are stock in trade or inventory, depreciable property used in a trade or business, or supplies regularly used or consumed in the ordinary course of its trade or business, and certain other requirements are satisfied.

For purposes of the PFIC income test and PFIC asset test described above, if we own, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, we will be treated as if we (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and PFIC asset test described above, and assuming certain other requirements are met, "passive income" does not include certain interest, dividends, rents, or royalties that are received or accrued by us from certain "related persons" (as defined in Section 954(d)(3) of the Code) also organized in Canada, to the extent such items are properly allocable to the income of such related person that is not passive income.

Under certain attribution rules, if we are a PFIC, U.S. Holders will generally be deemed to own their proportionate share of our direct or indirect equity interest in any company that is also a PFIC (a "Subsidiary PFIC"), and will generally be subject to U.S. federal income tax as described below under "Default PFIC Rules Under Section 1291 of the Code" on their proportionate share of (a) any "excess distributions," as described below, on the stock of a

167

#### **Table of Contents**

to U.S. federal income tax on any indirect gain realized on the stock of a Subsidiary PFIC on the sale or disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares. Accordingly, U.S. Holders should be aware that they could be subject to tax under the PFIC rules even if no distributions are received and no redemptions or other dispositions of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants, warrant shares, or pre-funded warrant shares are made.

# Default PFIC Rules Under Section 1291 of the Code

If we are a PFIC for any tax year during which a U.S. Holder owns common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants shares, or pre-funded warrant shares, the U.S. federal income tax consequences to such U.S. Holder of the acquisition, ownership, and disposition of common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants shares, or pre-funded warrant shares will depend on whether such U.S. Holder makes a "qualified electing fund" or "QEF" election (a "QEF Election") with respect to the common shares, pre-funded warrants, warrant shares, or pre-funded warrant shares or makes a mark-to-market election under Section 1296 of the Code (a "Mark-to-Market Election") with respect to common shares, warrant shares, or pre-funded warrant shares. A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election (a "Non-Electing U.S. Holder") will be taxable as described below.

A Non-Electing U.S. Holder will be subject to the rules of Section 1291 of the Code (described below) with respect to: (a) any gain recognized on the sale or other taxable disposition of common shares, pre-funded warrants, warrants, warrant shares, and pre-funded warrant shares; and (b) any "excess distribution" received on the common shares, pre-funded warrants, warrant shares, and pre-funded warrant shares (including a constructive distribution on the warrants). A distribution generally will be an "excess distribution" to the extent that such distribution (together with all other distributions received in the current tax year) exceeds 125% of the average distributions received during the three preceding tax years (or during a U.S. Holder's holding period for the common shares, pre-funded warrants, warrants, warrants shares, or pre-funded warrant shares, if shorter).

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of common shares, prefunded warrants, warrants, warrant shares, or pre-funded warrant shares of a PFIC (including an indirect disposition of the stock of any Subsidiary PFIC), and any "excess distribution" received on common shares, pre-funded warrants, warrant shares, or pre-funded warrant shares or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder (including a constructive distribution on the warrants), must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the respective common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years before the entity became a PFIC, if any, would be taxed as ordinary income (and not eligible for certain preferential tax rates, as discussed below). The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax rate applicable to ordinary income in each such year, and an interest charge would be imposed on the tax liability for each such year, calculated as if such tax liability had been due in each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as "personal interest," which is not deductible.

If we are a PFIC for any tax year during which a Non-Electing U.S. Holder holds common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares, we will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether we cease to be a PFIC in one or more subsequent tax years. If we cease to be a PFIC, a Non-Electing U.S. Holder may terminate this deemed PFIC status with respect to common shares, pre-funded warrants, warrant shares and pre-funded warrant shares by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code discussed above), but not loss, as if such common shares, pre-funded warrants, warrant shares and pre-funded warrant shares were sold on the last day of the last tax year for which we were a PFIC. No such election, however, may be made with respect to the warrants.

Under proposed Treasury Regulations, if a U.S. Holder has an option, warrant, or other right to acquire stock of a PFIC (such as the warrants), such option, warrant or right is considered to be PFIC stock subject to the default rules of Section 1291 of the Code. Under rules described below, the holding period for the warrant shares will begin on the date a U.S. Holder acquires the warrants. This will impact the availability of the QEF Election and Mark-to-Market Election with respect to the warrant shares. Thus, a U.S. Holder will have to account for warrant shares, common shares, pre-funded warrants, and pre-funded warrant shares under the PFIC rules and the applicable elections differently.

168

#### **Table of Contents**

#### **OEF** Election

A U.S. Holder that makes a timely and effective QEF Election for the first tax year in which the holding period of its common shares, pre-funded warrants or pre-funded warrant shares begins generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to its common shares, pre-funded warrants or pre-funded warrant shares. However, a U.S. Holder that makes a timely and effective QEF Election will be subject to U.S. federal income tax on such U.S. Holder's pro rata share of (a) our net capital gain, which will be taxed as long-term capital gain to such U.S. Holder, and (b) our ordinary earnings, which will be taxed as ordinary income to such U.S. Holder. Generally, "net capital gain" is the excess of (a) net long-term capital gain over (b) net short-term capital loss, and "ordinary earnings" are the excess of (a) "earnings and profits" over (b) net capital gain. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each tax year in which we are a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by us. However, for any tax year in which we are a PFIC and have no net income or gain, U.S. Holders that have made a QEF Election would not have any income inclusions as a result of the QEF Election. If a U.S. Holder that made a QEF Election has an income inclusion, such a U.S. Holder may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as "personal interest," which is not deductible.

A U.S. Holder that makes a timely and effective QEF Election with respect to us generally (a) may receive a tax-free distribution from us to the extent that such distribution represents our "earnings and profits" that were previously included in income by the U.S. Holder because of such QEF Election and (b) will adjust such U.S. Holder's tax basis in the common shares, pre-funded warrants or pre-funded warrant shares to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, a U.S. Holder that makes a QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of common shares, pre-funded warrants or pre-funded warrant shares.

The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as "timely" for purposes of avoiding the default PFIC rules discussed above if such QEF Election is made for the first year in the U.S. Holder's holding period for the common shares, pre-funded warrants or pre-funded warrant shares in which we are a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year.

A QEF Election will apply to the tax year for which such QEF Election is timely made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If a U.S. Holder makes a QEF Election and, in a subsequent tax year, we cease to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which we are not a PFIC. Accordingly, if we become a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during any subsequent tax year in which we qualify as a PFIC.

As discussed above, under proposed Treasury Regulations, if a U.S. Holder has an option, warrant or other right to acquire stock of a PFIC (such as the warrants), such option, warrant or right is considered to be PFIC stock subject to the default rules of Section 1291 of the Code. However, a U.S. Holder of an option, warrant or other right to acquire stock of a PFIC may not make a QEF Election that will apply to the option, warrant or other right to acquire PFIC stock. In addition, under proposed Treasury Regulations, if a U.S. Holder holds an option, warrant or other right to

acquire stock of a PFIC, the holding period with respect to shares of stock of the PFIC acquired upon exercise of such option, warrant or other right will include the period that the option, warrant or other right was held.

Consequently, under the proposed Treasury Regulations, if a U.S. Holder of common shares makes a QEF Election, such election generally will not be treated as a timely QEF Election with respect to warrant shares and the rules of Section 1291 of the Code discussed above will continue to apply with respect to such U.S. Holder's warrant shares. However, a U.S. Holder of warrant shares should be eligible to make a timely QEF Election if such U.S. Holder makes a "purging" or "deemed sale" election to recognize gain (which will be taxed under the default rules of Section 1291 of the Code discussed above) as if such warrant shares were sold for fair market value. As a result of the "purging" or "deemed sale" election, the U.S. Holder will have a new basis and holding period in the warrant shares acquired upon the exercise of the warrants for purposes of the PFIC rules. In addition, gain recognized on the sale or other taxable

169

# **Table of Contents**

disposition (other than by exercise) of the warrants by a U.S. Holder will be subject to the rules of Section 1291 of the Code discussed above. Each U.S. Holder should consult its own tax advisor regarding the application of the PFIC rules to the common share units, pre-funded warrant units, common shares, pre-funded warrants, warrants shares, and pre-funded warrant shares.

U.S. Holders should be aware that there can be no assurances that we will satisfy the record keeping requirements that apply to a QEF, or that we will supply U.S. Holders with information that such U.S. Holders are required to report under the QEF rules, in the event that we are a PFIC. Thus, U.S. Holders may not be able to make a QEF Election with respect to their common shares, pre-funded warrants, warrant shares or pre-funded warrant shares. Each U.S. Holder should consult its own tax advisors regarding the availability of, and procedure for making, a QEF Election with respect to us and any Subsidiary PFIC.

A U.S. Holder makes a QEF Election by attaching a completed IRS Form 8621, including a PFIC Annual Information Statement, to a timely filed United States federal income tax return. However, if we do not provide the required information with regard to us or any of our Subsidiary PFICs, U.S. Holders will not be able to make a QEF Election for such entity and will continue to be subject to the rules of Section 1291 of the Code discussed above that apply to Non-Electing U.S. Holders with respect to the taxation of gains and excess distributions.

#### Mark-to-Market Election

A U.S. Holder may make a Mark-to-Market Election with respect to common shares, warrant shares and pre-funded warrant shares only if the common shares, warrant shares, and pre-funded warrant shares are marketable stock. The common shares, warrant shares and pre-funded warrant shares generally will be "marketable stock" if the common shares, warrant shares and pre-funded warrant shares are regularly traded on (a) a national securities exchange that is registered with the SEC, (b) the national market system established pursuant to section 11A of the Exchange Act, or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such foreign exchange has trading volume, listing, financial disclosure, and surveillance requirements, and meets other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced and (ii) the rules of such foreign exchange effectively promote active trading of listed stocks. If such stock is traded on such a qualified exchange or other market, such stock generally will be "regularly traded" for any calendar year during which such stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. Each U.S. Holder should consult its own tax advisor in this matter.

A U.S. Holder that makes a Mark-to-Market Election with respect to its common shares generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to such common shares. However, if a U.S. Holder does not make a Mark-to-Market Election beginning in the first tax year of such U.S. Holder's holding period for the common shares for which we are a PFIC and such U.S. Holder has not made a timely QEF Election, the rules of Section 1291 of the Code discussed above will apply to certain dispositions of, and distributions on, the common shares.

Any Mark-to-Market Election made by a U.S. Holder for the common shares will also apply to such U.S. Holder's warrant shares. As a result, if a Mark-to-Market Election has been made by a U.S. Holder with respect to common shares, any warrant shares received will automatically be marked-to-market in the year of exercise. Because, under the proposed Treasury Regulations, a U.S. Holder's holding period for warrant shares includes the period during which such U.S. Holder held the warrants, a U.S. Holder will be treated as making a Mark-to-Market Election with respect to its warrant shares after the beginning of such U.S. Holder's holding period for the warrant shares, unless the warrant shares are acquired in the same tax year as the year in which the U.S. Holder acquired its warrants. Consequently, the default rules under Section 1291 of the Code described above generally will apply to the mark-to-market gain realized in the tax year in which warrant shares are received upon the exercise of the warrants. However, the general mark-to-market rules will apply to subsequent tax years.

Any Mark-to-Market Election made by a U.S. Holder for the common shares will also apply to such U.S. Holder's pre-funded warrant shares received upon exercise of a pre-funded warrant. As a result, if a Mark-to-Market Election has been made by a U.S. Holder with respect to common shares, any pre-funded warrant shares received upon exercise of a pre-funded warrant will automatically be marked-to-market in the year of exercise. Because a U.S. Holder's holding period for pre-funded warrant shares received upon exercise of a pre-funded warrant should include the period

170

#### **Table of Contents**

during which such U.S. Holder held the pre-funded warrant, a U.S. Holder will be treated as making a Mark-to-Market Election with respect to such pre-funded warrant shares after the beginning of such U.S. Holder's holding period for such pre-funded warrant shares unless such pre-funded warrant shares are acquired in the same tax year as the year in which the U.S. Holder acquired its pre-funded warrants. Consequently, the default rules under Section 1291 of the Code described above generally will apply to the mark-to-market gain realized in the tax year in which such pre-funded warrant shares are received upon the exercise of the pre-funded warrants. However, the general mark-to-market rules will apply to subsequent tax years.

A U.S. Holder that makes a Mark-to-Market Election will include in ordinary income, for each tax year in which we are a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the common shares and any warrant shares or pre-funded warrant shares, as of the close of such tax year over (b) such U.S. Holder's adjusted tax basis in such common shares and any warrant shares or pre-funded warrant shares. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the excess, if any, of (a) such U.S. Holder's adjusted tax basis in the common shares and any warrant shares or pre-funded warrant shares, over (b) the fair market value of such common shares and any warrant shares or pre-funded warrant shares (but only to the extent of the net amount of previously included income as a result of the Mark-to-Market Election for prior tax years).

A U.S. Holder that makes a Mark-to-Market Election generally also will adjust such U.S. Holder's tax basis in the common shares and any warrant shares or pre-funded warrant shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of common shares and any warrant shares or pre-funded warrant shares, a U.S. Holder that makes a Mark-to-Market Election will recognize ordinary income or ordinary loss (not to exceed the excess, if any, of (a) the amount included in ordinary income because of such Mark-to-Market Election for prior tax years over (b) the amount allowed as a deduction because of such Mark-to-Market Election for prior tax years). Losses that exceed this limitation are subject to the rules generally applicable to losses provided in the Code and Treasury Regulations.

A U.S. Holder makes a Mark-to-Market Election by attaching a completed IRS Form 8621 to a timely filed United States federal income tax return. A Mark-to-Market Election applies to the tax year in which such Mark-to-Market Election is made and to each subsequent tax year, unless the common shares, warrant shares and pre-funded warrant shares cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisors regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark-to-Market Election with respect to the common shares, warrant shares and pre-funded warrant shares, no such election may be made with respect to the stock of any Subsidiary PFIC that a U.S. Holder is treated as owning, because such stock is not marketable. Hence, the Mark-to-Market Election will not be effective to eliminate the interest charge and other income inclusion rules described above

with respect to deemed dispositions of Subsidiary PFIC stock or distributions from a Subsidiary PFIC to its shareholder.

#### Other PFIC Rules

Under Section 1291(f) of the Code, the IRS has issued proposed Treasury Regulations that, subject to certain exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of common shares, pre-funded warrants, warrants, warrant shares and pre-funded warrant shares that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which common shares, pre-funded warrants, warrants shares and pre-funded warrant shares are transferred.

If finalized in their current form, the proposed Treasury Regulations applicable to PFICs would be effective for transactions occurring on or after April 1, 1992. Because the proposed Treasury Regulations have not yet been adopted in final form, they are not currently effective, and there is no assurance that they will be adopted in the form and with the effective date proposed. Nevertheless, the IRS has announced that, in the absence of final Treasury Regulations, taxpayers may apply reasonable interpretations of the Code provisions applicable to PFICs and that it considers the rules set forth in the proposed Treasury Regulations to be reasonable interpretations of those Code provisions. The PFIC rules are complex, and the implementation of certain aspects of the PFIC rules requires the issuance of Treasury Regulations which in many instances have not been promulgated and which, when promulgated, may have retroactive effect. U.S. Holders should consult their own tax advisors about the potential applicability of the proposed Treasury Regulations.

171

# Table of Contents

Certain additional adverse rules may apply with respect to a U.S. Holder if we are a PFIC, regardless of whether such U.S. Holder makes a QEF Election. For example, under Section 1298(b)(6) of the Code, a U.S. Holder that uses common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares.

In addition, a U.S. Holder who acquires common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares from a decedent will not receive a "step up" in tax basis of such common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares to fair market value unless such decedent had a timely and effective QEF Election in place.

Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with its own tax advisors regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisors regarding the PFIC rules (including the availability and advisability of making a QEF Election or Mark-to-Market Election) and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares.

Certain additional adverse rules may apply with respect to a U.S. Holder if we are a PFIC, regardless of whether the U.S. Holder makes a QEF Election. These rules include special rules that apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to these special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. U.S. Holders are urged to consult their own tax advisors regarding the potential application of the PFIC rules to the ownership and disposition of common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares, and the availability of certain U.S. tax elections under the PFIC rules.

# U.S. Federal Income Tax Consequences of the Exercise and Disposition of Warrants

The following discussion describes the general rules applicable to the ownership and disposition of the warrants but is subject in its entirety to the special rules described above under the heading "Passive Foreign Investment Company Rules."

#### **Exercise of Warrants**

A U.S. Holder should not recognize gain or loss on the exercise of a warrant and related receipt of a warrant share (unless cash is received in lieu of the issuance of a fractional warrant share). A U.S. Holder's initial tax basis in the warrant share received on the exercise of a warrant should be equal to the sum of (a) such U.S. Holder's tax basis in such warrant plus (b) the exercise price paid by such U.S. Holder on the exercise of such warrant. It is unclear whether a U.S. Holder's holding period for the warrant share received on the exercise of a warrant would commence on the date of exercise of the warrant or the day following the date of exercise of the warrant. If we are a PFIC, a U.S. Holder's holding period for the warrant share for PFIC purposes will begin on the date on which such U.S. Holder acquired its warrants.

In certain limited circumstances, a U.S. Holder may be permitted to undertake a cashless exercise of warrants into warrant shares. The U.S. federal income tax treatment of a cashless exercise of warrants into warrant shares is unclear, and the tax consequences of a cashless exercise could differ from the consequences upon the exercise of a warrant described in the preceding paragraph. U.S. Holders should consult their own tax advisors regarding the U.S. federal income tax consequences of a cashless exercise of warrants.

172

# Table of Contents

# **Disposition of Warrants**

A U.S. Holder will recognize gain or loss on the sale or other taxable disposition of a warrant in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in the warrant sold or otherwise disposed of. Subject to the PFIC rules discussed above, any such gain or loss generally will be a capital gain or loss, which will be long-term capital gain or loss if the warrant is held for more than one year. Deductions for capital losses are subject to complex limitations under the Code.

#### Expiration of Warrants Without Exercise

Upon the lapse or expiration of a warrant, a U.S. Holder will recognize a loss in an amount equal to such U.S. Holder's tax basis in the warrant. Any such loss generally will be a capital loss and will be long-term capital loss if the warrants are held for more than one year. Deductions for capital losses are subject to complex limitations under the Code.

# Certain Adjustments to the Warrants

Under Section 305 of the Code, an adjustment to the number of warrant shares that will be issued on the exercise of the warrants, or an adjustment to the exercise price of the warrants, may be treated as a constructive distribution to a U.S. Holder of the warrants if, and to the extent that, such adjustment has the effect of increasing such U.S. Holder's proportionate interest in the "earnings and profits" or our assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to the shareholders). Adjustments to the exercise price of warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the warrants should generally not be considered to result in a constructive distribution. Any such constructive distribution would be taxable whether or not there is an actual distribution of cash or other property. (See more detailed discussion of the rules applicable to distributions made by us at "Distributions on Common Shares, Pre-Funded Warrants, Warrant Shares, and Pre-Funded Warrant Shares" below).

# General Rules Applicable to the Ownership and Disposition of Common Shares, Pre-Funded Warrants, Warrant Shares and Pre-Funded Warrant Shares

The following discussion is subject, in its entirety, to the rules described above under the heading "Passive Foreign Investment Company Rules".

# Distributions on Common Shares, Pre-Funded Warrants, Warrant Shares and Pre-Funded Warrant Shares

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a common share, prefunded warrant, warrant share or pre-funded warrant share (as well as any constructive distribution on a warrant) will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of our current or accumulated "earnings and profits", as computed for U.S. federal income tax purposes. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates if we are a PFIC for the tax year of such distribution or were a PFIC for the preceding tax year. To the extent that a distribution exceeds our current and accumulated "earnings and profits", such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the common shares, prefunded warrants, warrant shares or pre-funded warrant shares and thereafter as gain from the sale or exchange of such common shares, pre-funded warrants, warrant shares or pre-funded warrant shares. (See "Sale or Other Taxable Disposition of Common Shares, Pre-Funded Warrants, Warrant Shares and/or Pre-Funded Warrant Shares" below). However, we do not intend to maintain the calculations of our earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder therefore should assume that any distribution by us with respect to common shares, pre-funded warrants, warrant shares or pre-funded warrant shares will constitute ordinary dividend income. Dividends received on common shares, pre-funded warrants, warrant shares or pre-funded warrant shares by corporate U.S. Holders generally will not be eligible for the "dividends received deduction" generally applicable to corporations. Subject to applicable limitations and provided we are eligible for the benefits of the Canada-U.S. Tax Convention or the common shares are readily tradable on a United States securities market, dividends paid by us to non-corporate U.S. Holders, including individuals, in respect of common shares, pre-funded warrants, warrant shares or pre-funded warrant shares generally will be eligible for the preferential tax rates applicable to long-term

173

# **Table of Contents**

capital gains for dividends, provided certain holding period and other conditions are satisfied, including that we not be classified as a PFIC in the tax year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisors regarding the application of such rules.

Sale or Other Taxable Disposition of Common Shares, Pre-Funded Warrants, Warrant Shares and/or Pre-Funded Warrant Shares

Upon the sale or other taxable disposition of common shares, pre-funded warrants, warrant shares or pre-funded warrant shares, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between the U.S. dollar value of cash received plus the fair market value of any property received and such U.S. Holder's tax basis in such common shares, pre-funded warrants, warrant shares or pre-funded warrant shares sold or otherwise disposed of. Gain or loss recognized on such sale or other taxable disposition generally will be long-term capital gain or loss if, at the time of the sale or other taxable disposition, the common shares, pre-funded warrants, warrant shares or pre-funded warrant shares have been held for more than one year.

Preferential tax rates may apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gain of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

#### **Additional Considerations**

# Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange or other taxable disposition of common shares, pre-funded warrants, warrants, warrants shares or pre-funded warrant shares generally

will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). A U.S. Holder will have a tax basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who converts or otherwise disposes of the foreign currency after the date of receipt may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Different rules apply to U.S. Holders who use the accrual method of tax accounting. Each U.S. Holder should consult its own U.S. tax advisors regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

### Foreign Tax Credit

Dividends paid on the common shares, pre-funded warrants, warrant shares or pre-funded warrant shares (or constructive dividends on the warrants) will be treated as foreign-source income, and generally will be treated as "passive category income" or "general category income" for U.S. foreign tax credit purposes. Any gain or loss recognized on a sale or other disposition of common shares, pre-funded warrants, warrants, warrant shares or pre-funded warrant shares generally will be United States source gain or loss. Certain U.S. Holders that are eligible for the benefits of Canada-U.S. Tax Convention may elect to treat such gain or loss as Canadian source gain or loss for U.S. foreign tax credit purposes. The Code applies various complex limitations on the amount of foreign taxes that may be claimed as a credit by U.S. taxpayers. In addition, Treasury Regulations that apply to foreign taxes paid or accrued (the "Foreign Tax Credit Regulations") impose additional requirements for Canadian withholding taxes to be eligible for a foreign tax credit, and there can be no assurance that those requirements will be satisfied. The Treasury Department has recently released guidance temporarily pausing the application of certain of the Foreign Tax Credit Regulations.

Subject to the PFIC rules and the Foreign Tax Credit Regulations, each as discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the common shares, pre-funded warrants, warrant shares or pre-funded warrant shares (or constructive dividends on the warrants) generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income that is subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder

174

# **Table of Contents**

during a year. The foreign tax credit rules are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, each U.S. Holder should consult its own U.S. tax advisor regarding the foreign tax credit rules.

# Backup Withholding and Information Reporting

Under U.S. federal income tax law and Treasury Regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on individuals who are U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a non-U.S. entity. U.S. Holders may be subject to these reporting requirements unless their common shares, pre-funded warrants, warrants, warrant or pre-funded warrant shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult their own tax advisors regarding the requirements of filing information returns, including the requirement to file an IRS Form 8938.

Payments made within the U.S. or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of common shares, pre-funded warrants, warrants, warrant shares or pre-funded

warrant shares will generally be subject to information reporting and backup withholding tax (currently at a rate of 24%) if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons generally are excluded from these information reporting and backup withholding rules. Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner.

The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisors regarding the information reporting and backup withholding rules.

THE ABOVE SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL TAX CONSIDERATIONS APPLICABLE TO U.S. HOLDERS WITH RESPECT TO THE ACQUISITION, OWNERSHIP AND DISPOSITION OF COMMON SHARE UNITS, PRE-FUNDED UNITS, COMMON SHARES, PRE-FUNDED WARRANTS, WARRANTS, WARRANT SHARES AND PRE-FUNDED WARRANT SHARES. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN LIGHT OF THEIR OWN PARTICULAR CIRCUMSTANCES.

175

## **Table of Contents**

## **LEGAL MATTERS**

The validity of the issuance of the common shares offered by this prospectus will be passed upon for us by Morton Law LLP. Certain legal matters in connection with the offering will be passed upon for the Company by Dorsey & Whitney LLP and for the underwriter by Pryor Cashman LLP, New York, New York.

### **EXPERTS**

The financial statements of Alpha Cognition Inc. for the years ended December 31, 2023, and 2022 appearing in this prospectus have been audited by Manning Elliott LLP, independent registered public accounting firm, as set forth in their report included herein.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the Commission under the Securities Act with respect to the common shares offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and our common shares, please see the registration statement and the exhibits and schedules filed with the registration statement. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contracts or other documents filed as an exhibit to the registration statement. The registration statement, including its exhibits and schedules, may be inspected without charge at www.sec.gov, the Commission's Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. We expect to make our periodic reports and other information filed with or furnished to the SEC available, free of charge, through our website at www.alphacognition.com as soon as reasonably practicable after those reports and other information are filed with or furnished to the SEC. Upon effectiveness of the Registration Statement on Form S-1 of which this prospectus form a part, we will become subject to the information and periodic reporting requirements of

the Exchange Act, and, in accordance therewith, will file periodic reports, proxy statements and other information with the Commission. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and on the Commission's website referred to above. The information contained on, or that can be accessed through, our website, is not part of, and is not incorporated into, this prospectus. All website addresses in this prospectus are intended to be inactive textual references only.

176

## Table of Contents

## INDEX TO FINANCIAL STATEMENTS

## ALPHA COGNITION INC.

	Page
CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS	
Condensed Interim Consolidated Balance Sheets	F-2
Condensed Interim Consolidated Statements of Operations and Comprehensive Loss	F-3
Condensed Interim Consolidated Statements of Stockholders' Equity (Deficiency)	F-4
Condensed Interim Consolidated Statements of Cash Flows	F-5
Notes to the Condensed Interim Consolidated Financial Statements	F-6
CONSOLIDATED FINANCIAL STATEMENTS	
Report of Independent Registered Public Accounting Firm	F-29
Consolidated Balance Sheets	F-30
Consolidated Statements of Operations and Comprehensive Loss	F-31
Consolidated Statements of Stockholders' Equity (Deficiency)	F-32
Consolidated Statements of Cash Flows	F-33
Notes to the Consolidated Financial Statements	F-34
F-1	

## Table of Contents

## ALPHA COGNITION INC. CONDENSED INTERIM CONSOLIDATED BALANCE SHEETS

	(	(Unaudited) March 31, 2024	D	December 31, 2023
ASSETS				
Current assets				
Cash and cash equivalents	\$	2,259,384	\$	1,404,160
Restricted cash		163,678		90,413
Prepaid expenses and other current assets		431,183		366,316
Related party note receivable, net				57,550
Total current assets		2,854,245		1,918,439
Other assets		148,572		

Equipment, net	1,484	1,721
Intangible assets, net	472,250	532,010
Total assets	\$ 3,476,551	\$ 2,452,170

## LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)

Current liabilities		
Accounts payable and accrued liabilities	\$ 890,374	\$ 1,394,117
Promissory note – related party	1,211,463	1,211,463
Deferred income	56,634	10,413
Total current liabilities	2,158,471	2,615,993
Warrant liability	1,133,161	4,455,747
Other long-term liabilities	_	84,125
Total liabilities	3,291,632	7,155,865
Stockholders' equity (deficiency)		
Common shares, no par value, unlimited shares authorized, 149,925,536 and 118,208,989 shares issued and outstanding as of March 31, 2024, and December 31, 2023	48,758,033	39,760,287
Class B preferred shares, \$0.25 par value, unlimited shares authorized, 7,916,380 shares issued and outstanding as of March 31, 2024, and December 31, 2023	62	62
Additional paid-in capital	18,182,009	17,288,430
Accumulated other comprehensive loss	(104,301)	(104,301)
Accumulated deficit	(66,650,884)	(61,648,173)
Total stockholders' equity (deficiency)	184,919	(4,703,695)
Total liabilities and stockholders' equity (deficiency)	\$ 3,476,551	\$ 2,452,170

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

F-2

## Table of Contents

## ALPHA COGNITION INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (UNAUDITED)

		For the three months ended March 31,			
		2024		2023	
Operating expenses					
Research and development	\$	916,716	\$	1,097,938	
General and administrative expenses	_	3,494,802		888,409	
Total operating expenses		4,411,518		1,986,347	

Net operating loss	(4,411,518)	(1,986,347)
Other income (expenses)		
Foreign exchange (loss) gain	(14,629)	28,019
Interest income	12,070	172
Grant income	133,779	_
Interest expense	(8,258)	(2,875)
Impairment of intangible assets	(39,166)	_
Change in fair value of warrant liability	(619,989)	55,198
Provision for loan losses	(55,000)	
Total other income (expenses)	(591,193)	80,514
Net loss	(5,002,711)	(1,905,833)
Other comprehensive loss		
Currency translation adjustment	_	(36,239)
Comprehensive loss	\$ (5,002,711)	<b>\$</b> (1,942,072)
Net loss per share, basic and diluted	\$ (0.03)	\$ (0.02)
Weighted-average shares used to compute net loss per share, basic and	142 (15 072	77 940 022
diluted	143,615,972	77,849,023

F-3

## Table of Contents

# ALPHA COGNITION INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIENCY) (UNAUDITED)

For the three months ended March 31, 2024

_		Common Shares		Class A Restricted Share Common Shares s Preferred Share		Shares	_ Additiona		Accumulated Other omprehensiv	Accumulate				
		Shares	Amount	Shares	Amount	Shares	Amoun t	Paid-In Capital		- *****		e Loss	d Deficit	Total
В	alance, December 31, 2023	118,208,98	39,760,28	_	s –	7,916,38 0	\$ 62	17,288,43 \$	3	(104,301)	(61,648,17 \$ 3)	(4,703,69 \$ 5)		
	Units issued for cash	16,965,762	3,732,469	_	_	_	_	_	_	_	_	3,732,469		
	Shares issued for services	10,336,130	2,273,949	_	_	_	_	_	-	_	_	2,273,949		
	Share issuance costs	4,222,155	(987,998)	_	_	_	_	582,24	5	_	_	(405,753)		

Balance, March 31, 2024	149,925,53 6	48,758,03 \$ 3	<u> </u>		7,916,38 0 \$	62 \$	18,182,00 9 \$	(104,301)	(66,650,88 <u>\$</u> 4) <u>\$</u>	184,919
Net loss							_		(5,002,711)	(5,002,71 1)
Reallocation of derivative liability on re-pricing of warrants from CAD to USD exercise price	_	3,942,575	_	_	_	_	_	_	<u> </u>	3,942,575
Share-based compensatio n	_	_	_	_	_	_	348,085	_	_	348,085
Options exercised	192,500	36,751	_	_	_	_	(36,751)	_	_	_

For the three months ended March 31, 2023

		Commo	n Shares		ss A ed Shares	Preferred	l Shares	Additional	Accumulated Other Comprehensiv	Accumulate	
		Shares	Amount	Shares	Amount	Shares	Amoun t	Paid-In Capital	e Loss	d Deficit	Total
В	alance, December 31, 2022	61,023,45	27,956,15 \$ 5	7,000,00	3,103,62 \$ 0	7,916,38 0	\$ 62	15,589,22 \$ 9	\$ (84,728)	(47,884,51 \$ 5)	(1,320,17 \$ 7)
	Units issued for cash	23,747,64	4,506,055	_	_	_	_	_	_	_	4,506,055
	Share issuance costs	2,129,566	(281,704)	_	_	_	_	73,018	_	_	(208,686)
	Share-based compensatio n	_	_	_	_	_	_	239,063	_	_	239,063
	Foreign exchange on translation								(36,239)		(36,239)
	Net loss		_						(30,237)	(1,905,833)	(1,905,83
В	alance, March 31, 2023	86,900,66	32,180,50 \$ 6	7,000,00		7,916,38 0	\$ 62	15,901,31 \$ 0	\$ (120,967)	(49,790,34 \$ 8)	\$1,274,183

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

F-4

## **Table of Contents**

# ALPHA COGNITION INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

		ree months Iarch 31,
	2024	2023
Cash flows used in operating activities		

Net loss	\$ (5,002,711)	\$	(1,905,833)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	20,831		21,120
Accrued expenditures for government grant	(27,044)		_
Reversal of accrued interest income, related party	2,550		_
Change in fair value of warrant liability	619,989		(55,198)
Change in fair value of bonus rights liability	(84,125)		2,888
Impairment of intangible assets	39,166		_
Provision for loan losses	55,000		_
Share-based compensation	348,085		239,063
Shares issued for services	2,273,949		_
Changes in non-cash operating working capital items:			
Prepaid expenses and other current assets	(213,439)		94,973
Accounts payable and accrued liabilities	(503,743)		(865,027)
Net cash used in operating activities	(2,471,492)		(2,468,014)
Cash flows provided by investing activities			
Net cash provided by investing activities	_		<u> </u>
Cash flows provided by financing activities			
Units issued for cash	3,732,469		4,506,055
Proceeds received from restricted government grant	180,000		_
Amounts paid from restricted government grant funds	(106,735)		_
Share issuance costs	(405,753)		(208,686)
Net cash provided by financing activities	3,399,981		(4,297,369)
Effect of foreign exchange on cash			(36,239)
Change in cash and cash equivalents during the period	928,489	,	1,793,116
Cash and cash equivalents, beginning of period	1,494,573		2,083,696
Cash and cash equivalents, end of period	\$ 2,423,062	\$	3,876,812
Cash and cash equivalents consists of:			
Demand deposits	\$ 852,296	\$	3,876,812
Term deposit	1,407,088		_
Restricted cash	163,678		_
	\$ 2,423,062	\$	3,876,812
Supplemental Disclosure			
Cash paid for interest	\$ 16,612	\$	9,574
Supplemental non-cash disclosures			
Reallocation of fair value of share options upon exercise	\$ 36,751	\$	73,018

Reclassification of derivative liability for warrants re-priced from CAD to		
USD exercise price	\$ 3,942,575	\$ _
Common shares issued for share issuance costs	\$ 928,874	\$ 618,004
Warrants issued for share issuance costs	\$ 582,245	\$ 73,018

F-5

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

## NOTE 1 — NATURE OF OPERATIONS AND GOING CONCERN

Alpha Cognition Inc. ("ACI" or the "Company") is a pre-commercial stage biopharmaceutical company dedicated to developing treatments for patients suffering from neurodegenerative diseases, such as Alzheimer's Disease, for which there are limited or no treatment options. The registered and records office of the Company is 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8. As of May 1, 2023, the Company's common shares commenced trading on the Canadian Securities Exchange ("CSE") under the symbol "ACOG", previously the Company's shares were traded on the TSX Venture Exchange ("TSX-V") until April 28, 2023, when the Company had them delisted. The Company's shares also trade on the Over-The-Counter Markets ("OTC") under the trading symbol "ACOGF".

## Going Concern

These unaudited condensed interim consolidated financial statements have been prepared with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business rather than through a process of forced liquidation. The Company has not generated revenues from its operations to date and as of March 31, 2024, had working capital of \$695,774 and an accumulated deficit of \$66,650,884 which has been primarily financed by equity. The Company's continuing operations, as intended, are dependent upon its ability to generate cash flows or obtain additional financing. Management is of the opinion that it does not have sufficient working capital to meet the Company's liabilities and commitments as they become due for the 12 months from the date these financial statements were available to be issued. Management intends to finance operating costs over the next twelve months with private placements and public offerings of the Company's common shares and funds received from the exercise of warrants and options. Additionally, the Company will also consider funding that may arise through partnerships activities and debt. There is a risk that additional financing will not be available on a timely basis or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern.

These unaudited condensed interim 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 unaudited condensed interim consolidated financial statements, adjustments would be necessary to the balance sheet used. Such adjustments could be material.

### NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

**Basis of Presentation** — The conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and the rules of the Securities and Exchange Commission (the "SEC"). The unaudited condensed interim consolidated financial statements as of March 31, 2024, have been derived from the Company's audited consolidated financial statements for the fiscal year December 31, 2023 ("2023 Consolidated Financial Statements"). It is recommended that the unaudited condensed interim consolidated financial statements be read in conjunction with the 2023 Consolidated Financial Statements.

**Principles of Consolidation** — These unaudited condensed interim consolidated financial statements include the accounts of the Company, its wholly owned subsidiary, Alpha Cognition Canada Inc. ("ACI Canada") and ACI Canada's wholly owned subsidiary Alpha Cognition USA Inc. ("ACI USA").

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

Functional and Reporting Currency — The functional currency of an entity is the currency of the primary economic environment in which the entity operates. Effective August 31, 2023, the functional currency of the Company was updated to the United States Dollar ("USD" or U.S. Dollar") as management assessed that the currency of the primary economic environment in which the Company operates changed to USD on that date. The key factor influencing this decision was the change in the Company's primary funding from Canadian dollars ("CAD") to USD, whereas the functional currency of its subsidiaries was unchanged and remain in USD. Prior to USD the functional currency of the Company was CAD, and its subsidiaries was USD. Changes to the Company's functional currency have been

F\_6

## **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

## **NOTE 2** — **SIGNIFICANT ACCOUNTING POLICIES** (cont.)

accounted for on a prospective basis from August 31, 2023. The determination of functional currency was made in accordance with the Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") 830, Foreign Currency Matters.

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

All values presented are in USD unless otherwise denoted.

Use of Estimates and Assumptions — The preparation of these unaudited condensed interim consolidated financial statements in conformity with GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as of the date of the unaudited condensed interim consolidated financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates, to ensure that those estimates effectively reflect changes in the Company's business and new information as it becomes available. Management bases these estimates on historical and anticipated results, trends, and various other assumptions that the Company believes are reasonable under the circumstances, including assumptions as to forecasted amounts and future events. Actual results could differ materially from these estimates under different assumptions or conditions.

Concentrations of Credit Risk — The Company's financial instruments subject to concentrations of credit risk consists primarily of cash and cash equivalents. Cash is deposited with financial institutions with high credit quality which are typically in excess of insured limits. Additionally, as of March 31, 2024, the Company had \$100,427 in cash held at its payment processing company in a demand account to be used to pay accounts payable. During the three months ending March 31, 2024, and 2023, the Company did not experience any loss related to these concentrations.

Cash and Cash Equivalents — The Company considers cash to include currency on hand, demand deposits with banks or other financial institutions, and other kinds of accounts that have the general characteristics of demand deposits in that the Company may deposit additional funds at any time and also effectively may withdraw funds at

any time without prior notice or penalty. The Company considers cash equivalents to include term deposits, certificates of deposit, and all highly liquid instruments with original maturities of three months or less to be cash equivalents.

Equipment — Equipment is stated at historical cost less accumulated depreciation. Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in the consolidated statement of operations. Repairs and maintenance are expensed as incurred. Depreciation is charged over the estimated useful lives using the declining balance method as follows:

Computer equipment 55%

Other equipment 20%

Intangible Assets — The Company accounts for intangible assets in accordance with FASB ASC 350, Intangibles — Goodwill and Other. The Company's intangible assets consist of exclusive licenses that allow the Company to further develop and exploit the ALPHA-1062 and ALPHA-0602 Technology, as defined in Note 11. The licenses are carried at cost and amortized on a straight-line basis over their estimated useful life of 15 years. During the three months ended March 31, 2024, the Company impaired the ALPHA-0602 licenses in the amount of \$39,166 on the unaudited condensed interim consolidated statements of operations and comprehensive loss.

F-7

## **Table of Contents**

## ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Leases — The Company accounts for leases using FASB ASC 842, Leases. The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less. The lease payments associated with these leases are charged directly to the consolidated statement of operations on a straightline basis over the lease term. The Company had no leases outstanding during the three months ended March 31, 2024, or the year ended December 31, 2023.

Impairment of Long-Lived and Non-Financial Assets — The Company reviews long-lived assets, primarily comprised of equipment and definite life intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future net cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the asset and whether any impairment indicators exist. The Company recorded an impairment of intangible assets of \$39,166 and \$nil for the three months ending March 31, 2024, and 2023, respectively.

Income Taxes — The Company uses the asset and liability method to account for income taxes in accordance with ASC 740, Income Taxes. Under this method, deferred tax assets and liabilities are determined based on future tax consequences attributable to differences between the consolidated financial statements carrying amounts of existing assets and liabilities and their respective tax bases, tax loss and credit carry forwards.

Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that include the enactment date. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company recognizes the effect of income tax positions only if those position are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than a 50% likelihood of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

**Research and Development Costs** — The Company expenses all research and development costs incurred in accordance with the Accounting Standard Codifications as promulgated by FASB ASC 730, *Research and Development*.

Advertising and Marketing Costs — The Company expenses advertising and marketing costs when incurred. During the three months ending March 31, 2024, and 2023, the Company incurred advertising and marketing expenses of \$3,001 and \$5,774, respectively, which is included in general and administrative expenses in the unaudited condensed interim consolidated statements of operations and comprehensive loss.

Loss Per Share — Basic loss per share is computed by dividing net loss available to ordinary stockholders by the weighted-average number of common shares outstanding during the reporting period. If applicable, diluted income per share is computed similar to basic income per share except that the weighted average shares outstanding are increased to include potential common shares for the assumed exercise of share options, and warrants, if dilutive. The number of potential common shares is calculated by assuming outstanding share options and warrants were exercised and that the proceeds from such exercises were used to acquire common shares at the average market price during the reporting periods. For the periods presented, this calculation proved to be anti-dilutive.

**Share-Based Compensation** — The Company accounts for share-based compensation in accordance with ASC 718, Compensation — Share-Based Compensation, which requires compensation cost for the grant-date fair value of share-based awards to be recognized over the requisite service period. The Company accounts for forfeitures when they occur. The fair value of share-based awards, granted or modified, is determined on the grant date (or modification

 $F_{-8}$ 

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

## **NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES** (cont.)

or acquisition dates, if applicable) at fair value, using the Black-Scholes option pricing model. This model is affected by the Company's share price as well as assumptions regarding a number of subjective variables. These subjective variables include, but are not limited to, the Company's expected share price volatility over the terms of the awards, and actual and projected employee share option exercise behaviors. The Company records share-based compensation expense for service-based share options on an accelerated attributions method over the requisite service period. The Company records share-based compensation expense for performance-based share options on an accelerated attribution method over the requisite service period, and only if performance-based conditions are considered probable to be satisfied.

The fair value of options is determined using the Black-Scholes option pricing model which incorporates all market vesting conditions. The number of shares and options expected to vest is reviewed and adjusted at the end of each reporting period such that the amount recognized for services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest.

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

**Segment Reporting** — The Company currently operates in researching and developing pharmaceutical treatments for neurological diseases industry. Based on the guidance of ASC 280, *Segment Reporting*, the Company has one operating segment. For the three months ending March 31, 2024, and 2023, the Company operated in two geographical areas; the United States and Canada.

Derivative liability — The Company's debt instruments contain a host liability and an embedded conversion feature. The Company uses the guidance under FASB ASC Topic 815 Derivatives and Hedging ("ASC 815") to determine if the embedded conversion feature must be bifurcated and separately accounted for as a derivative under ASC 815. It also determines whether any embedded conversion features requiring bifurcation qualify for any scope exceptions contained within ASC 815. Generally, contracts issued or held by a reporting entity that are both (i) indexed to its own shares, and (ii) classified in stockholders' equity, would not be considered a derivative for the purposes of applying ASC 815. Any embedded conversion features that do not meet the scope exception noted above are classified as derivative liabilities, initially measured at fair value, and remeasured at fair value each reporting period with change in fair value recognized in the unaudited condensed interim consolidated statements of operations and comprehensive loss. Any embedded conversion features that meet the scope exception under ASC 815 are initially recorded at their relative fair value in paid-in-capital and are not remeasured at fair value in future periods.

The Company uses the Black-Scholes option pricing model to determine the fair value of the conversion feature liability, the warrant liability, share-based options, and stand-alone share purchase warrants issued as noted above. This model requires the input of subjective assumptions including the following:

*Risk-Free Interest Rate* — The risk-free interest rate is based on the U.S. Treasury zero coupon bond issues in effect at the time of grant for periods corresponding with the expected term of option.

*Dividend Yield* — The Company has never paid dividends on its common shares and has no plans to pay dividends on its common shares. Therefore, the Company used an expected dividend yield of zero.

 $F_{-}9$ 

## **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

#### NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Expected Life — The Company's expected term represents the period that the Company's options granted are expected to be outstanding or the remaining contractual life of the conversion period and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term).

*Expected Volatility* — The Company's expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period equal to the expected term of the awards.

Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity.

Fair Value Measurements — FASB ASC 820 — Fair Value Measurements and Disclosures defines fair value, establishes a framework for measuring fair value under U.S. GAAP, and expands disclosures about fair value measurements. In accordance with ASC 820, we have categorized our financial assets and liabilities based on the priority of the inputs to the valuation technique into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument.

Financial assets and liabilities recorded in the accompanying consolidated balance sheets are categorized based on the inputs to the valuation techniques as follows:

- Level 1 Financial instruments whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market which we have the ability to access at the measurement date.
- Level 2 Financial instruments whose values are based on quoted market prices in markets where trading occurs *infrequently* or whose values are based on quoted prices of instruments with similar attributes in active markets.
- Level 3 Financial instruments whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs reflect management's own assumptions about the assumptions a market participant would use in pricing the instrument.

The Company's financial instruments consist of cash, restricted cash, related party note receivable, prepaid and other current assets, accounts payable, warrant liability, other liabilities, and promissory note. The fair value of the prepaid and other current assets, accounts payable, and promissory note approximate their carrying values either due to their current nature or current market rates for similar instruments.

Cash is measured at fair value on a recurring basis using level 1 inputs. Other liabilities consisting of the bonus rights liability and warrant liability are measured at fair value on a recurring basis using level 3 inputs. As of March 31, 2024, and December 31, 2023, the fair value of the bonus rights liability was \$nil and \$84,125, respectively. As of March 31, 2024, and December 31, 2023, the fair value of the warrant liability was \$1,133,161 and \$4,455,747, respectively.

Interest Rate Risk — Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Financial assets and liabilities with variable interest rates expose the Company to interest rate cash flow risk. The Company does not hold any financial liabilities with variable interest rates. Financial assets and liabilities with fixed interest rates expose the Company to interest rate price risk. As of March 31, 2024, and December 31, 2023, the promissory note bears interest of 5.5% 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.

F-10

## Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

## NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Currency Risk — Foreign currency exchange rate risk is the risk that the fair value or future cash flows will fluctuate as a result of changes in foreign exchange rates. The Company's operations are carried out in Canada and the United States. As of March 31, 2024, and December 31, 2023, the Company had net monetary liabilities of approximately \$85,000 and \$36,000, respectively, denominated in Canadian dollars.

These factors expose the Company to foreign currency exchange rate risk, which could have an adverse effect on the profitability of the Company. A 10% change in the exchange rate with the Canadian dollar would change net loss and comprehensive loss by approximately \$6,300. At this time, the Company currently does not have plans to enter into foreign currency future contracts to mitigate this risk; however, it may do so in the future.

**Grant Accounting** — All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of operations and comprehensive loss. When grant proceeds are initially received, they are recorded as deferred income and restricted

cash. Grant proceeds used to pay for study costs and are expensed as incurred, with a corresponding amount of grant revenue recorded along with a reduction of the balance of the deferred income liability. The Company classifies the balance of cash received from grants as restricted cash when the proceeds from the grant have been designated for use in specified research. During the three months ending March 31, 2024, the Company recorded grant income of \$133,779 from its R&D Grant (defined in Note 3) in the unaudited condensed interim consolidated statements of operations and comprehensive loss.

Accounting Pronouncements Adopted in 2024 — In August 2020, FASB issued ASU 2020-06, Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, which is intended to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. There was no material impact of this new guidance on the accompanying unaudited condensed interim consolidated financial statements.

## NOTE 3 — R&D GRANT

On June 5, 2023, the Company was awarded a \$750,000 research and development grant from the Army Medical Research and Material Command for a pre-clinical study on the use of the ALPHA-1062 Intranasal to reduce blast mTBI (mild Traumatic Brain Injury) induced functional deficit and brain abnormalities ("R&D Grant"). The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense.

As of March 31, 2024, the Company has received \$381,500 (December 31, 2023 - \$201,500) for the R&D Grant and has restricted cash of \$163,678 (December 31, 2023 - \$90,413). As at March 31, 2024, the Company has deferred income of \$56,634 (December 31, 2023 - \$10,413) and recognized \$133,779 of grant income on the unaudited condensed interim consolidated statement of comprehensive loss during the three months ended March 31, 2024 (three months ended March 31, 2023 - \$nil). Additionally, during the three months ended March 31, 2024, the Company has incurred \$133,779 (three months ended March 31, 2023 – \$nil) in expenses relating to the R&D Grant. The grant funds are to be used on the following project "Assessment of Functional Recovery and Reduced Tauopathy Following ALPHA-1062 Administration in a Repetitive Blast TBI Model in Rodents." The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense. Funds received from the

F-11

## Table of Contents

ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 3 — R&D GRANT (cont.)

R&D grant are restricted and to be used solely as outlined in the grant. The R&D grant funding will expire for use on September 30, 2028. The award funding is to subsidize the costs for research and development with the following specific aims:

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

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

## NOTE 4 — RELATED PARTY NOTE RECEIVABLE

On July 7, 2023, the Company entered into a loan agreement with Alpha Seven Therapeutics, Inc., ("Alpha Seven") a related party through a common director and officers of the Company, to advance an amount up to \$150,000. The unsecured outstanding balance carries an interest rate of 12% per annum, a term of 12 months, no payments are due until maturity. As of March 31, 2024, and December 31, 2023, the Company had advanced \$55,000 and accrued interest of \$4,195 and \$2,550, respectively.

As of March 31, 2024, management determined the credit risk of the loan to Alpha Seven had increased significantly since initial recognition and the Company recorded a provision for credit losses for the outstanding principal balance of \$55,000 and reversed the accrued interest of \$4,195 in the unaudited condensed interim consolidated statement of operations and comprehensive loss.

		Principal	Interest
Balance as of December 31, 2022	\$		\$ _
Loans advanced		55,000	_
Interest accrued		_	2,550
Balance as of December 31, 2023	\$	55,000	\$ 2,550
Interest accrued		_	1,645
Provision for credit losses		(55,000)	_
Reversal of accrued interest		_	(4,195)
Balance as of March 31, 2024	<u>\$</u>		\$ 
	F-12		

## Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 5 — BALANCE SHEET COMPONENTS

## Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	March 31, 2024	D	ecember 31, 2023
Other receivables	\$ 97,637	\$	100,036
Prepaid expenses	303,896		206,377
Prepaid legal expenses	 29,650		59,903
Prepaid expenses and other assets	\$ 431,183	\$	366,316

## Other assets

Other assets include the long-term prepaid portion of \$148,572 relating to the Spartan Consulting Agreement (defined in Note 11).

## Equipment

Equipment consisted of the following:

	1	March 31, 2024	D	December 31, 2023
Equipment	\$	12,370	\$	12,370
Less: accumulated depreciation		(10,886)		(10,649)
Equipment, net	\$	1,484	\$	1,721

Depreciation expense for the three months ended March 31, 2024, and 2023 was \$237 and \$526, respectively.

## Accounts payable and accrued liabilities

	March 31, 2024	De	ecember 31, 2023
Accounts payable	\$ 525,672	\$	475,553
Other accrued liabilities	115,336		127,284
Accrued payroll and bonuses	 249,366		791,280
Accounts payable and accrued liabilities	\$ 890,374	\$	1,394,117

## NOTE 6 — INTANGIBLE ASSETS

Intangible assets consisted of the following:

March 31, 2024	Gross Amount	Accumulated Amortization		Net Balance	Weighted Average Remaining Useful Life
Licenses	\$ 1,185,633	\$ 713,383	\$	472,250	5.92
December 31, 2023	Gross Amount	Accumulated Amortization		Net Balance	Weighted Average Remaining Useful Life
Licenses	\$ 1,235,633	\$ 703,623	\$	532,010	6.61
	F-13		_		

**Table of Contents** 

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## **NOTE 6** — **INTANGIBLE ASSETS** (cont.)

Amortization expense for the three months ended March 31, 2024, and 2023, was \$20,594 and \$20,594, respectively. During the three months ended March 31, 2024, and 2023, the Company reported an impairment of intangible assets of \$39,166 and \$nil, respectively, from the impairment of one license.

The following table outlines the estimated future annual amortization expense related to intangible assets as of March 31, 2024:

Year Ending December 31,	
2024	\$ 59,282
2025	79,042
2026	79,042
2027	79,042
2028	79,042
Thereafter	96,800
Total	\$ 472,250

## NOTE 7 — PROMISSORY NOTE

In March 2015, the Company issued a promissory note of \$1,400,000 to Neurodyn Life Sciences Inc ("NLS"), a related party through a common director, for the acquisition of the ALPHA-1062 Technology ("NLS Promissory Note") (Note 10).

On March 6, 2023, the Company and NLS agreed to an amendment to the promissory note pursuant to which the interest rate was increased from 2% to 5.5% and the maturity date was extended from December 31, 2022, to July 15, 2024. The amended agreement was effective March 1, 2023, and requires interest only payments until maturity. In addition, the amendment now incorporates both Alpha Cognition Inc. and Alpha Cognition Canada, Inc. under the Memogain Technology License Agreement and added clarity to certain terms and definitions under the license agreement. The Company evaluated the amended agreement under ASC 470 and determined that the amendment should be accounted for as a debt modification prospectively. The Company accounted for this transaction as a debt modification and did not record any gain or loss relating to the modification. The debt modification did not meet the greater than ten percent test and was deemed not substantial.

As of March 31, 2024, and December 31, 2023, the principal balance outstanding on the promissory note was \$1,211,463. During the three months ended March 31, 2024, and 2023, the Company recorded interest expense and amortization of the premium, included in accretion expense, of \$16,612 and \$9,574, respectively.

Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 15, 2024, to July 15, 2025. Additionally, \$300,000 will be due on December 31, 2024, with the remaining principal balance due at maturity.

## NOTE 8 — OTHER LONG-TERM LIABILITIES

The Company adopted a cash bonus policy pursuant to which it may grant bonus rights to certain eligible participants, which include employees, officers, or consultants of the Company, that are payable in cash. These bonus rights are subject to certain vesting provisions and are revalued at each reporting date with the change being included in management fees and salaries on the Company's unaudited condensed interim consolidated statements of operations and comprehensive loss.

During the year ended December 31, 2022, Officers of the Company were granted the ability to earn up to 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

F-14

## Table of Contents

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) March 31, 2024, and 2023

## **NOTE 8 — OTHER LONG-TERM LIABILITIES (cont.)**

multiplied by the number of bonus rights vested. The bonus rights earned vest on the earlier of the date of a change of control or April 15, 2024, and will be payable upon vesting. The bonus rights will be earned in tranches based on the price of the Company's common share exceeding certain thresholds. As of March 31, 2024, and 2023, the Officers had earned 2,376,764 bonus rights.

As of March 31, 2024, and December 31, 2023, the Company recognized a bonus right liability of \$nil and \$84,125, respectively, to recognize the proportionate unvested bonus rights. Total compensation expense (recovery) for the bonus rights recognized within general and administrative expenses for the three months ended March 31, 2024, and 2023, was \$(58,427) and \$2,002, respectively. Total compensation expense (recovery) for the bonus rights recognized within research and development expenses for the three months ended March 31, 2024, and 2023, was \$(25,698) and \$880, respectively. As of March 31, 2024, and December 31, 2023, there was \$nil and \$14,660 of unrecognized compensation expense related to the bonus right awards, respectively.

In accordance with ASC 718, *Share-Based Payments*, the bonus right awards are considered liability-based awards and are revalued at each reporting date. The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the bonus rights liability as of March 31, 2024, and December 31, 2023:

	March 31, 2024	December 31, 2023
Risk-free interest rate	4.98%	5.04%
Expected life (in years)	0.04	0.29
Volatility	64.40%	177.76%
Weighted average fair value per bonus right	0.00	\$ 0.04

The number of bonus right awards granted to each executive is determined based on the business value of the Company at the earlier of (i) the date of a Change in Control or; (ii) the Vesting Date, as defined in the Company's Cash Bonus Policy. The Company estimates the expected number of bonus rights at the end of each reporting period based upon the likelihood of achieving the Business Value threshold, as defined in each executive's agreement. As of March 31, 2024, and December 31, 2023, 2,437,082 bonus right awards are expected to vest, respectively.

On April 16, 2024, the Company amended the bonus rights agreements to extend the vesting date from April 15, 2024, through the earlier of April 28, 2027, a change of control, or attainment of the business value threshold with respect to any tranche. Additionally, the grant price was reduced from \$1.58 to \$1.19.

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY)

## **Authorized Share Capital**

The Company is authorized to issue the following share capital:

- Unlimited common voting shares without par value ("Common 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 Share ("Class B Preferred Share")

F-15

## Table of Contents

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) March 31, 2024, and 2023

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

## **Issued Share Capital**

During the three months ended March 31, 2024, the Company issued the following shares:

- On January 19, 2024, the Company completed the fifth closing of the Q2 2023 PP by issuing 16,965,762 units at a price of \$0.22 for total gross proceeds of \$3,732,469 ("Q2 2023 PP Tranche 5"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until January 19, 2027. In connection with the closing of Q2 2023 PP Tranche 5, the Company paid cash commissions of \$391,178, incurred legal fees of \$14,575, and issued 1,037,330 agents warrants with an estimated fair value of \$582,245. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until January 19, 2027.
- Issued 14,558,285 Common Shares valued at \$3,202,823 in accordance with the Spartan Consulting Agreement (defined in Note 11) of which \$928,874 was included in share issuance costs and \$2,273,949 was included in general and administrative expenses.
- Issued 192,500 Common Shares in connection with the cashless exercise of 80,340 Common Share options with an exercise price of CAD\$0.22 per share and 192,500 Common Share options with an exercise price of \$0.28 per share; 80,340 Common Shares were surrendered. As a result, the Company transferred \$36,751 from additional paid-in capital to share capital.

During the year ended December 31, 2023, the Company issued the following shares:

- Issued 23,747,648 private placement units at a price of CAD\$0.255 for total proceeds of \$4,506,055 (CAD\$6,055,650) with each unit consisting of one Common Share and one warrant exercisable at a price of CAD\$0.39 per warrant for a term of five years from the closing date ("Q1 2023 PP"). The Q1 2023 PP was completed through the closing of two tranches: one in February 2023 and one in March 2023. In connection with the Q1 2023 PP, the Company paid cash commissions of \$172,480, incurred legal fees of \$15,428, and issued 2,129,566 Common Shares and 324,642 agents warrants with an estimated fair value of \$618,004 and \$73,018, respectively. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of CAD\$0.39 for a term of 5 years.
- Issued 2,700,000 Common Shares for the exercise of 2,700,000 ACI Canada legacy performance options at a price of \$0.01 per share for total proceeds of \$27,000. As a result, the Company transferred \$1,344,480 from additional paid-in capital to share capital.
- On May 30, 2023, the Company announced a private placement offering to raise gross proceeds of \$6,500,000 at \$0.22 per unit ("Q2 2023 PP"). Each unit initially consisted of one common share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at \$0.31 per share for a period of three years from the closing date. The aggregate proceeds

may be increased by 30% to accommodate any overallotment. In accordance with the Q2 2023 PP, the Company has agreed to pay the finder ("Spartan") cash commissions of 10% of the gross proceeds, issue finder's warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list, and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list.

• On August 31, 2023, the Company completed an initial closing of the Q2 2023 PP by issuing 6,114,058 units at a price of \$0.22 for total proceeds of \$1,345,093 ("Q2 2023 PP Tranche 1"). Each unit consisted of one Common Share and one half of a warrant with each whole warrant entitling the

F-16

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until August 31, 2026. In connection with the Q2 2023 PP Tranche 1, the Company paid cash commissions of \$180,051, incurred legal fees of \$28,334, and issued 272,803 agents warrants with an estimated fair value of \$44,292. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until August 31, 2026.

- On October 16, 2023, the Company completed the second closing of the Q2 2023 PP by issuing 1,596,830 units at a price of \$0.22 for total gross proceeds of \$351,303 ("Q2 2023 PP Tranche 2"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until October 16, 2026. In connection with the closing of Q2 2023 PP Tranche 2, the Company paid cash commissions of \$51,600, incurred legal fees of \$5,371, and issued 78,181 agents warrants with an estimated fair value of \$10,199. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until October 16, 2026.
- On November 8, 2023, the Company completed the third closing of the Q2 2023 PP by issuing 4,590,903 units at a price of \$0.22 for total gross proceeds of \$1,009,999 ("Q2 2023 PP Tranche 3"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until November 8, 2026. In connection with the closing of Q2 2023 PP Tranche 3, the Company paid cash commissions of \$151,500, incurred legal fees of \$10,501, and issued 229,544 agents warrants with an estimated fair value of \$24,692. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until November 8, 2026.

On December 4, 2023, the Company amended the terms of the Q2 2023 PP. Each unit was amended to consist of one common share and one warrant. Each warrant will entitle the holder to purchase an additional common share of the Company at \$0.31 per share for a period of three years from the closing date.

• On December 22, 2023, the Company completed the fourth closing of the Q2 2023 PP by issuing 9,141,534 units at a price of \$0.22 for total gross proceeds of \$2,011,137 ("Q2 2023 PP Tranche 4"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until December 22, 2026. In connection with the closing of Q2 2023 PP Tranche 4, the Company paid cash commissions of \$238,515 and issued 722,771 agents warrants with an estimated fair value

- of \$249,965. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until December 22, 2026.
- All 7,000,000 previously outstanding Restricted Shares were converted to Common Shares on August 29, 2023, for \$\\$nil \text{ proceeds}.
- 165,000 Common Shares in connection with the cashless exercise of 251,101 Common Share options with an exercise price of CAD\$0.22 per share; 86,101 Common Shares were surrendered. As a result, the Company transferred \$80,039 from additional paid-in capital to share capital.

## Escrow Shares

As of March 31, 2024, and December 31, 2023, the Company had nil and 11,502,874 Common Shares and nil and 2,857,432 Class B Preferred Shares, respectively, held in escrow.

F-17

#### Table of Contents

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

## Warrants

During the three months ended March 31, 2024, the Company issued the following warrants:

- 16,965,762 warrants with an exercise price of CAD\$0.31 and expiry of January 19, 2027, in connection with the Q2 2023 PP Tranche 5.
- 1,037,330 warrants with an exercise price of \$0.31 and an expiry of January 19, 2027, to the agents of the Company's Q2 2023 PP Tranche 5. The warrants were valued at \$582,245 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 101.01%, discount rate of 3.77%, and a dividend yield of \$nil.

The schedule of activity for the warrants is as follows:

	Number of Warrants	Av Exer	eighted verage cise Price onverted)	Remaining Contractual Term (Years)
Balance, December 31, 2022	15,981,290	\$	1.15	0.84
Issued	40,668,011		0.30	_
Expired	(12,919,507)		1.36	_
Balance, December 31, 2023	43,729,794	\$	0.31	3.43
Issued	18,003,092		0.14	_
Balance, March 31, 2024	61,732,886	\$	0.30	2.70

A summary of the warrants outstanding and exercisable as of March 31, 2024, is as follows:

Warrants Outstanding	<b>Exercise Price</b>	Expiry Date
3,061,783	\$ 0.40	August 30, 2024
3,329,828	\$ 0.31	August 31, 2026

876,595	\$ 0.31	October 16, 2026
2,524,993	\$ 0.31	November 8, 2026
9,864,305	\$ 0.31	December 22, 2026
18,003,092	\$ 0.31	January 19, 2027
14,640,221	\$ 0.289	February 16, 2028
2,155,000	\$ 0.29 (CAD\$0.39)	February 16, 2028
719,904	\$ 0.29 (CAD\$0.39)	March 15, 2028
6,557,165	\$ 0.283	March 15, 2028
61,732,886		

## Warrant Liability

Prior to August 31, 2023, the Company's functional currency was the CAD, as such, the Company recorded a warrant liability on the warrants outstanding with USD exercise prices. This derivative liability was being revalued at each reporting period.

The Company revalued its derivative liability upon the change in functional currency, which resulted in a loss on revaluation of \$145,980 for the year ended December 31, 2023.

## **Table of Contents**

## ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

Due to the change in functional currency on August 31, 2023, the derivative liability was measured at fair value using the Black-Scholes Option Pricing Model with a valuation date of August 31, 2023. The derivative liability of the Company on that date was \$351,969, which upon reclassification, was charged to equity as an increase in reserves of \$351,969.

Balance as of December 31, 2022	\$ 205,989
Revaluation of derivative liability	145,980
Reclassification of derivative liability per change in functional currency	(351,969)
Balance as of December 31, 2023	\$ 

A summary of the warrants with USD exercise prices outstanding and exercisable as of August 31, 2023, upon the change in functional currency was as follows:

Warrants Outstanding	Exercis	se Price	Expiry Date
3,061,783	\$	0.40	August 30, 2024
3,057,025	\$	0.31	August 31, 2026
6,118,808			

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the revaluations for the warrants priced in USD as of August 31, 2023:

	•	gust 31, 2023
Risk-free interest rate		5.14%
Dividend yield		_
Expected life (in years)		1.00
Volatility		131%
Weighted average fair value per warrant	\$	0.16

b) On August 31, 2023, the Company's functional currency changed to the USD from the CAD; as such, the Company recorded a derivative liability on the warrants outstanding with previously issued CAD exercises prices. This derivative liability is being revalued at each reporting period.

As of August 31, 2023, the Company charged \$4,541,545 to equity to reclassify the derivative liability for warrants with exercise prices denominated in CAD using the Black-Scholes Option Pricing Model. The initial reclassification resulted in a decrease in share capital \$4,541,545. In December 2023, 11,777,336 warrants were re-priced from CAD to USD denominated exercise price which resulted in \$4,025,102 of the derivative liability being reclassified to equity. During the three months ended March 31, 2024, 9,420,050 warrants were re-priced from CAD to USD denominated exercise price which resulted in \$3,942,575 of the derivative liability being reclassified to equity. As of March 31, 2024, the Company revalued the derivative liability to \$1,133,161 (December 31, 2023 – \$4,455,747) and recorded a loss on revaluation of \$619,989 for the three months ended March 31, 2024 (three months ended March 31, 2023 – \$nil).

F-19

## **Table of Contents**

## ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

Balance as of December 31, 2022	\$ _
Reclassification of derivative liability per change in functional currency	4,541,545
Revaluation of derivative liability	3,939,304
Reclassification of derivative liability per change in exercise price	(4,025,102)
Balance as of December 31, 2023	\$ 4,455,747
Revaluation of derivative liability	619,989
Reclassification of derivative liability per change in exercise price	(3,942,575)
Balance as of March 31, 2024	\$ 1,133,161

A summary of warrants not issued for services with CAD exercise prices outstanding and exercisable as of March 31, 2024, is as follows:

Warrants Outstanding	Exercise Price		Expiry Date
2,155,000	\$	0.29 (CAD\$0.39)	February 16, 2028
395,262	\$	0.29 (CAD\$0.39)	March 15, 2028
2,550,262			

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the revaluations following the change in functional currency to USD as of March 31, 2024, and December 31, 2023:

	March 31, 2024	December 31, 2023
Risk-free interest rate	3.55%	3.38%
Dividend yield	_	_
Expected life (in years)	3.64	4.15
Volatility	85%	87%
Weighted average fair value per warrant	\$ 0.44	\$ 0.37

## **Share Options**

#### Common Share Options

The Company's 2023 Share Option Plan (the "2023 Option Plan") for its officers, directors, employees and consultants was approved by stockholders on June 27, 2023. Pursuant to the 2023 Option Plan, the Company may grant nontransferable share options totaling in aggregate up to 20% of the Company's issued and outstanding Common Shares and Restricted Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price that will not be lower than the greater of the last closing price for the Common Shares as quoted on the CSE: (i) on the trading day prior to the date of grant; and (ii) the date of grant. All options granted pursuant to the 2023 Option Plan will be subject to such vesting requirements as may be imposed by the Board. In the event of a Change of Control, as defined in the 2023 Option Plan, all unvested options will vest immediately.

The 2022 Option Plan was previously adopted by the board and approved by stockholders on July 19, 2022, pursuant to which incentive share options were granted to certain directors, officers, employees and consultants (the "2022 Option Plan"). Under the 2022 Option Plan, the Company could grant non-transferable share options totaling in aggregate up to 10% of the Company's issued and outstanding Common Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price which is not less than that permitted by the TSX-V. In connection with listing of the Common Shares on the CSE, the Company adopted the 2023 Option Plan and determined that the 2022 Option Plan be closed to new grants. The options outstanding under the 2022 Option Plan, issued prior to the adoption of

### Table of Contents

ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) March 31, 2024, and 2023

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

the 2023 Option Plan ("2022 Options") are not included in the maximum number of share options available for grant pursuant to the 2023 Option Plan and are not subject to the terms of the 2023 Option Plan; as such, the 2022 Options will continue to be governed by the 2022 Option Plan.

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

	March 31, 2024	December 31, 2023
Risk-free interest rate	_	3.12%

Expected life (in years)	_	10
Volatility	_	103%
Weighted average fair value per option	— \$	0.13

The following table summarizes the total amount of share-based compensation expense related to service conditions for Common Share options during the three months ended March 31, 2024, and 2023:

	For the three months ended			
	March 31, 2024		March 31, 2023	
Research and development	\$ 87,847	\$	71,008	
General and administrative	260,238		168,055	
Total share-based compensation	\$ 348,085	\$	239,063	

As of March 31, 2024, there was an unrecognized share-based compensation expense relating to service conditions for common share options of \$1,188,800.

Common share option activity is as follows:

insic	Aggreg Intrin Value		Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Options	
_			8.47	0.61	5,506,071	Balance, December 31, 2022
				0.16	16,190,000	Granted
			_	0.68	(772,763)	Expired
				0.17	(251,101)	Exercised <sup>(2)</sup>
,975,524	\$ 9,9	S	9.07	0.18	\$ 20,672,207	Balance, December 31, 2023
				0.19	(272,840)	Exercised <sup>(3)</sup>
,515,536	\$ 8,5	S	8.83	0.17	\$ 20,399,367	Balance, March 31, 2024
,976,561	\$ 3,9	5	8.83	0.17	\$ 9,695,492	Options exercisable, March 31, 2024
	\$ 8	5	8.83	0.68 0.17 <b>0.18</b> 0.19 <b>0.17</b>	\$ (772,763) (251,101) <b>20,672,207</b> (272,840) <b>20,399,367</b>	Expired Exercised <sup>(2)</sup> Balance, December 31, 2023 Exercised <sup>(3)</sup> Balance, March 31, 2024

<sup>(1)</sup> The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share. The calculation excludes options with an exercise price higher than the closing price of the Company's share on the reporting date.

<sup>(2)</sup> In accordance with the Company's 2023 Option Plan, option holders exercised 251,101 Common Share options on a cashless basis (net exercise) for the issuance of 165,000 Common Shares.

<sup>(3)</sup> In accordance with the Company's 2023 Option Plan, option holders exercised 272,840 Common Share options on a cashless basis (net exercise) for the issuance of 192,500 Common Shares.

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) March 31, 2024, and 2023

## NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

## ACI Canada Legacy Performance Options

The Company retained ACI Canada's share option plan whereby ACI Canada could grant share options to directors, officers, employees and consultants enabling them to acquire common shares. Options granted had a maximum term of ten years and the board of directors determined the vesting requirements. From time to time, the Company granted performance-based share options to management and consultants. These options vest based on the Company's achievement of certain performance goals and operational metrics, as applicable, subject to continuous employment by each recipient.

The Company did not recognize any share-based compensation expense relating to service or performance conditions for the ACI Canada legacy performance options during the three months ended March 31, 2024, and 2023. As of March 31, 2024, and December 31, 2023, there was no unrecognized share-based compensation expense relating to service condition awards.

The following table summarizes ACI Canada legacy performance option activity for the Company:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value <sup>(1)</sup>
Balance, December 31, 2022	9,521,057	0.01	5.91	4,609,723
Exercised	(2,700,000)	0.01	_	
Balance, December 31, 2023	6,821,057	\$ 0.01	4.51	\$ 4,441,787
Balance, March 31, 2024	6,821,057	\$ 0.01	4.26	\$ 3,967,041
Options exercisable, December 31, 2023	6,401,057	\$ 0.01	4.26	\$ 3,723,273

<sup>(1)</sup> The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share. The calculation excludes options with an exercise price higher than the closing price of the Company's shares on the reporting date

## NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management personnel include the Company's executive officers and members of its Board of Directors.

In September 2018, the Company signed a management agreement with CMI Cornerstone Management Corp. ("CMI"), a company controlled by Ken Cawkell, former CEO and a director of the Company, which requires monthly payments of \$15,000. In June 2019, the Company amended the agreement to increase the monthly fees to \$18,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$432,000 less any fees previously paid under the agreement between June 1, 2019, and the date of termination or (ii) \$54,000. On September 1, 2022, the Company amended the agreement to decrease the monthly fees to \$9,000. On April 30, 2023, the Company amended the agreement to an hourly fee of \$400 for services rendered. The amendment included a payment of \$54,000 for the termination fee.

In September 2018, the Company signed a management agreement with 9177 – 586 Quebec Inc., later assigned to 102388 P.E.I. Inc. ("PEI Inc."), companies controlled by Denis Kay, Chief Scientific Officer of the Company, which

requires monthly payments of \$13,333 per month for an effective term of two years. In June 2019, the Company amended the agreement to increase the monthly fees to \$15,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$360,000 less any fees previously paid under the agreement between June 1, 2019, and the date of termination or (ii) \$45,000. On August 15, 2022, the Company amended the agreement to decrease the monthly fees to \$7,500.

F-22

#### **Table of Contents**

## ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

In February 2021, the Company signed a consulting agreement with Michael McFadden, CEO of the Company, requiring an annual base compensation of \$500,000. A new employment agreement was signed in March 2022 which included in the agreement is a provision for termination payment without just cause of:

- a) Severance payments for a period of twelve months with the following terms:
  - i) Months 1 through 6: 100% of annual base salary;
  - ii) Months 7 through 9: 50% of annual base salary; and
  - iii) Months 10 through 12: 25% of annual base salary.
- b) Bonus severance equal to the average of bonuses paid of the two most recent full fiscal years prior to termination plus the bonus that would have been paid in the fiscal year of termination.

Also included in the agreement is a provision for termination payment due to a change of control, the CEO will receive:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

In April 2022, Mr. McFadden was granted the ability to earn up to 8,195,740 bonus rights of which 1,639,148 bonus rights had been earned as of March 31, 2024 (Note 8). The value of these bonus rights was determined to be \$nil and \$58,427 as of March 31, 2024, and December 31, 2023, respectively, and is included in other liabilities.

In May 2021, the Company hired Lauren D'Angelo as the Company's Chief Commercial Officer. In 2023 Ms. D'Angelo was promoted to Chief Operating Officer of the Company. The employment agreement signed in May 2021 with Ms. D'Angelo requires an annual base compensation currently at \$420,000 and includes a provision for a termination payment due to a change of control as follows:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

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 as of March 31, 2024 (Note 8). The value of these bonus rights was determined to be \$nil and \$25,698 as of March 31, 2024, and December 31, 2023, respectively, and is included in other liabilities

In November 2021, the Company signed an employment agreement with Cedric O'Gorman, the Chief Medical Officer ("CMO") of the Company, requiring an annual base compensation of \$400,000. Included in the agreement is a

provision for a termination payment without just cause of an amount equal to annual base compensation for a period of six months. If termination is due to a change of control, the CMO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

On January 1, 2023, Cedric O'Gorman resigned as the Chief Medical Officer of the Company.

F-23

#### **Table of Contents**

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) March 31, 2024, and 2023

## NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

In April 2022, the Company signed an employment agreement with Donald Kalkofen, the Chief Financial Officer ("CFO") of the Company, requiring an annual base compensation of \$420,000. Included in the agreement is a provision for termination payment due to a change of control, which if occurs, the CFO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

As of March 31, 2024, and December 31, 2023, \$266,352 and \$672,550, respectively, is owing to directors and officers of the Company and has been included in accounts payable and accrued liabilities. These balances are in relation to fees and management compensation and are non-interest bearing, unsecured and due on demand.

As of March 31, 2024, and December 31, 2023, the Company owed NLS \$1,211,463 for an outstanding promissory note with a carrying amount of \$1,211,463 (Note 7).

As of March 31, 2024, and December 31, 2023, the Company had advanced Alpha Seven \$55,000 and accrued interest of \$4,195 and \$2,550, respectively (Note 4). As at March 31, 2024, the Company set up a provision for loan losses on the outstanding loan balance and reversed the accrued interest.

Summary of key management personnel compensation:

	For the three months ended			
		March 31, 2024		March 31, 2023
Management fees and salaries in research and development	\$	171,057	\$	93,276
Management fees and salaries in general and administrative expenses		325,463		223,613
Share-based compensation in research and development		85,090		67,706
Share-based compensation in general and administrative expenses		260,240		168,054
Total related party transactions	\$	841,850	\$	552,649

## NOTE 11 — COMMITMENTS AND CONTINGENCIES

#### ALPHA-1062 Technology

In March 2015, the Company entered into the Memogain Technology License Agreement ("License Agreement") with NLS for the exclusive right and license to further develop and exploit the ALPHA-1062, formerly Memogain, Technology. The License Agreement set out the consideration as follows:

- The Company assumed all of NLS's obligations under the Memogain Asset Purchase Agreement which consisted of cumulative total payments to Galantos Pharma GmbH of \$10,791,400 (EUR 10,000,000), the cumulative total may be increased to \$16,187,100 (EUR 15,000,000) subject to certain provisions, involving sub-licensing the ALPHA-1062 technology and Company the receiving an upfront out-licensing payment of no less than \$8,633,120 (EUR 8,000,000). Royalty payments, are determined as follows (collectively the "Galantos Royalty Payments"):
  - 3% of the net sales revenue received by the Company from the sale of any products relating to the Alpha-1062 Technology;
  - 10% of any sublicensing revenue; and
  - 25% of an upfront payment or milestone payment paid by a sub-licensee to the Company;

F-24

## **Table of Contents**

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) March 31, 2024, and 2023

## NOTE 11 — COMMITMENTS AND CONTINGENCIES (cont.)

- Upon completion of the Galantos Royalty Payments, a royalty payment to NLS of 1% of the revenue received from the ALPHA-1062 Technology by the Company over \$100 million per annum; and
- The issuance of a promissory note of \$1,400,000 to NLS (Note 7).

The expiration date is twenty years from the Commencement Date (March 15, 2035) or the expiration of the last patent obtained (existing patents extend through 2042) pursuant, whichever event shall last occur, unless earlier terminated pursuant to bankruptcy or insolvency of the licensee; court order against the licensee; or a winding up, liquidation or termination of the existence of the licensee occurs.

No payments have been made to date related to the Galantos Royalty Payments.

On January 1, 2016, the Company assumed NLS's obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consist of cumulative total payments to Galantos Consulting of \$2,158,280 (EUR 2,000,000), the cumulative total may be increased to \$3,237,420 (EUR 3,000,000) subject to certain provisions, which is to be paid as follows (collectively the "Galantos Consulting Payments"):

- 1% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
- 2% of any sublicensing revenue; and
- 2% of an upfront payment or milestone payment paid by a sub-licensee to the Company.

The termination date is set as the date at which no further payments of any nature are due.

No payments have been made to date relating to the Galantos Consulting Payments.

## ALPHA-0602 Technology

In November 2020, the Company entered into a license agreement with NLS for the world-wide exclusive right to the Progranulin ("ALPHA-0602") Technology. In accordance with the agreement, the Company will pay the following:

- \$50,000 to NLS before January 15, 2021 (paid);
- a royalty of 1.5% of the commercial sales, capped at \$2,000,000, to NLS;
- 10% of any Upfront Payments the Company may receive in the future in excess of \$2,000,000.

The ALPHA-0602 Technology license agreement shall terminate 11 years (November 3, 2031) from the Commencement Date, expiration of the last patents, or when full payment has been made, whichever shall first occur.

The total amount payable to NLS under this agreement shall not exceed \$2,000,000. Regarding the ALPHA-602 technology the Company paid \$50,000 in January 2021 as per the license agreement. No payments have been made to date under the above NLS world-wide exclusive rights for the royalties or Upfront Payments the Company may receive.

During the three months ended March 31, 2024, the Company decided to discontinue development of the ALPHA-602 technology.

F-25

## Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
March 31, 2024, and 2023

## **NOTE 11 — COMMITMENTS AND CONTINGENCIES (cont.)**

## Spartan Capital Securities, LLC Agreement

On May 30, 2023, the Company agreed to enter into an ongoing consulting services agreement (the "Spartan Consulting Agreement") for a three-year term with Spartan Capital Securities, LLC ("Spartan"). The services include advising and assisting on potential business development transactions, strategic introductions, assisting management with enhancing corporate and stockholder value, and capital raising advice. The Company will pay Spartan a consulting fee in the aggregate amount of \$480,000, payable in three equal installments with each installment being subject to the Company achieving certain business development and capital raising objectives. Spartan will also be entitled to earn and receive additional Common Shares of the Company which will be issued to Spartan on a rolling basis upon completion of predetermined business development objectives including the closing of certain offering amounts and the completion of material business transactions. As of December 31, 2023, \$160,000 in consulting fees have been paid and no additional common shares had been issued under the consulting services agreement with Spartan.

On January 19, 2024, the Company paid the remaining consulting fee of \$320,000 and issued 14,558,285 Common Shares valued at \$3,202,823 to Spartan and its assignees pursuant to the Spartan Consulting Agreement.

## Legal Proceedings

During the normal course of business, the Company may become involved in legal claims that may or may not be covered by insurance. Management does not believe that any such claims would have a material impact on the Company's unaudited condensed interim consolidated financial statements.

## NOTE 12 — CAPITAL DISCLOSURE AND MANAGEMENT

The Company defines its capital as all components of stockholders' equity (deficiency). The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern.

The Company manages its capital structure to maximize its financial flexibility making adjustments to it in response to changes in economic conditions and the risk characteristics of the underlying assets and business opportunities. The Company does not presently utilize any quantitative measures to monitor its capital. The Company is not subject to externally imposed capital requirements.

## NOTE 13 — LIQUIDITY RISK

Liquidity risk is the risk that the Company will not be able to meet its financial obligations associated with financial liabilities. The Company's ultimate success depends on the outcome of its research and development and collaboration activities. The Company expects to incur additional losses in the future and anticipates the need to raise additional capital to continue to execute its long-range business plan. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

Contractual undiscounted cash flow requirements for financial liabilities as of March 31, 2024, are as follows:

		≤1 Year		>1 Year		Total	
Accounts payable	\$	8 8	390,374	\$	_	\$	890,374
Promissory note		1,2	211,463		_		1,211,463
	5	3 2,1	101,837	\$		\$	2,101,837
	F-26						

## Table of Contents

# ALPHA COGNITION INC. NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 13 — LIQUIDITY RISK (cont.)

Contractual undiscounted cash flow requirements for financial liabilities as of December 31, 2023, are as follows:

	≤1 Year	>1 Year	Total
Accounts payable	\$ 1,394,117 \$	_	\$ 1,394,117
Promissory note	1,211,463	_	1,211,463
	\$ 2,605,580 \$	_	\$ 2,605,580

#### NOTE 14 — SEGMENTED INFORMATION

The Company currently operates in a single reportable operating segment, being the researching and developing pharmaceutical treatments for neurological diseases in the geographical areas of Canada and the United States of America. Geographic information for the United States and Canada as of March 31, 2024, and December 31, 2023, is as follows:

## As of March 31, 2024

	 Canada	United Sta	ates	Total
Non-current assets other than financial instruments	\$ 472,480	\$ 1	1,254	\$ 473,734

## As of December 31, 2023

	Canada	Į	Jnited States	Total
Non-current assets other than financial instruments	\$ 532,276	\$	1,455	\$ 533,731

## NOTE 15 — NET LOSS PER SHARE

Net loss per common share has been computed on the basis of the weighted-average number of common shares outstanding during the three months ended March 31, 2024, and 2023. Since the Company was in a loss position for the three months ended March 31, 2024, and 2023, basic net loss per share was the same as diluted net loss per share for the period presented.

The following table sets forth the computation of (loss) earnings per share:

	For the three months ended				
	N	March 31, 2024		March 31, 2023	
Numerator					
Net loss – basic and diluted	\$ (	(5,002,711)	\$	(1,905,833)	
Denominator					
Weighted average shares used to compute net loss per share, basic and diluted	143,615,972			77,849,023	
Net loss per share – basic and diluted	\$	(0.03)	\$	(0.02)	
F-27					

## **Table of Contents**

ALPHA COGNITION INC.

NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

March 31, 2024, and 2023

## NOTE 15 — NET LOSS PER SHARE (cont.)

The following potentially dilutive outstanding securities for the three months ended March 31, 2024, and 2023 were excluded from the computation of diluted net loss per share because their effect would have been anti-dilutive for the year, see below:

For the three months ended

	March 31, 2024	March 31, 2023
Warrants	61,732,886	37,436,200
Common Share options	20,399,367	5,306,071
ACI Canada legacy performance options	6,821,057	9,521,057
Total anti-dilutive features	88,953,310	52,263,328

#### NOTE 16 — SUBSEQUENT EVENTS

Management has performed an evaluation of subsequent events after the balance sheet date of March 31, 2024, through May 14, 2024, the date that the unaudited condensed interim consolidated financial statements were available to be issued.

- a) Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 2024 to July 2025. Additionally, \$300,000 will be due on December 31, 2024, with the remaining principal balance due at maturity. (Note 7).
- b) On April 16, 2024, the Company amended the bonus rights agreements to extend the vesting date from April 15, 2024, through the earlier of April 28, 2027, a change of control, or attainment of the business value threshold with respect to any tranche. Additionally, the grant price was reduced from \$1.58 to \$1.19. (Note 8).
- c) Subsequent to March 31, 2024, the Company issued 300,000 Common Shares for total proceeds of \$120,000 from the exercise of 300,000 warrants with an exercise price \$0.40 per Common Shares.

F-28

## Table of Contents



17th floor, 1030 West Georgia St., Vancouver, BC, Canada V6E 2Y3

Tel: 604.714.3600 Fax: 604.714.3669 Web: manningelliott.com

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors Alpha Cognition Inc.

#### **Opinion on the Consolidated Financial Statements**

We have audited the accompanying consolidated balance sheets of Alpha Cognition Inc. and its subsidiaries (the "Company") as of December 31, 2023 and 2022, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficiency) and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

## **Explanatory Paragraph** — Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 1, as of December 31, 2023, the Company has not generated revenues since inception, and has an accumulated deficit of \$61,648,173 and a working capital deficiency of \$697,554. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management's evaluation of the

events and conditions and plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

## **Basis for Opinion**

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

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

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

/s/ Manning Elliott LLP

CHARTERED PROFESSIONAL ACCOUNTANTS Vancouver, Canada April 3, 2024

We have served as the Company's auditor since 2019

F-29

## **Table of Contents**

## ALPHA COGNITION INC. CONSOLIDATED BALANCE SHEETS (Expressed in United States Dollars)

	December 31, 2023	December 31, 2022
ASSETS		
Current assets		
Cash	\$ 1,404,160	\$ 2,083,696
Restricted cash	90,413	_
Prepaid expenses and other current assets	366,316	249,045
Related party note receivable	57,550	_
Total current assets	1,918,439	2,332,741
Equipment, net	1,721	3,824
Intangible assets, net	532,010	614,386

Total assets	\$ 2,452,170	\$	2,950,951
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities			
Accounts payable and accrued liabilities	\$ 1,394,117	\$	2,845,381
Promissory note – related party	1,211,463		1,211,463
Deferred income	10,413		
Total current liabilities	2,615,993		4,056,844
Warrant liability	4,455,747		205,989
Other long-term liabilities	 84,125		8,295
Total liabilities	7,155,865		4,271,128
Stockholders' (deficiency) equity			
Common shares, no par value, unlimited shares authorized, 118,208,989 and 61,023,450 shares issued and outstanding as of December 31, 2023, and December 31, 2022	39,760,287		27,956,155
Class A restricted common shares, no par value, unlimited shares	37,700,207		27,730,133
authorized, nil and 7,000,000 shares issued and outstanding as of December 31, 2023, and December 31, 2022	_		3,103,620
Class B preferred shares, \$0.25 par value, unlimited shares authorized, 7,916,380 shares issued and outstanding as of December 31, 2023, and December 31, 2022	62		62
Additional paid-in capital	17,288,430		15,589,229
Accumulated other comprehensive loss	(104,301)		(84,728)
Accumulated deficit	(61,648,173)		(47,884,515)
Total stockholders' (deficiency) equity	(4,703,695)	_	(1,320,177)
Total liabilities and Stockholders' (deficiency) equity	\$ 2,452,170	\$	2,950,951

F-30

## Table of Contents

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

	For the Dece	 
	 2023	2022
Operating expenses		
Research and development	\$ 4,833,973	\$ 8,717,945
General and administrative expenses	 5,054,120	 4,841,884
Total operating expenses	9,938,093	13,559,829

Net operating loss	(9,938,093)	(13,559,829)
Other income (expenses)		
Foreign exchange gain (loss)	9,928	(296,057)
Interest income	6,804	1,925
Grant income	191,087	_
Federal wage tax credits	69,416	
Interest expense	(17,516)	(37,237)
Write-off of equipment		(5,506)
Change in fair value of warrant liability	(4,085,284)	1,823,444
Total other income (expenses)	(3,825,565)	1,486,569
Net loss	(13,763,658)	(12,073,260)
Other comprehensive loss		
Currency translation adjustment	(19,573)	16,806
Comprehensive loss	\$ (13,783,231)	\$ (12,056,454)
Net loss per share, basic and diluted:	\$ (0.15)	\$ (0.18)
Weighted-average shares used to compute net loss per share, basic and	04.255.454	CE 053 101
diluted	94,355,476	67,972,194

F-31

## Table of Contents

## ALPHA COGNITION INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIENCY) (Expressed in United States Dollars)

		Common Shares		Class A Common Shares Restricted Shares				Additional Paid-In	Accumulated Other Comprehensi ve	Accumulate d	
		Shares	Amount	Shares	Amount	Shares	Amoun t	Capital	Loss	Deficit	Total
В	alance, December 31, 2021	60,606,931	27,708,98 \$ 8	7,000,000	\$3,103,620	7,916,38 0	\$ 62	14,018,34 \$ 0	\$ (101,534)	(35,811,25 \$ 5)	\$ 8,918,221
	Options exercised	416,519	247,167	_	_	_	_	(206,382)	_	_	40,785
	Share-based compensati on	_	_	_	_	_	_	1,777,271	_	_	1,777,271
	Foreign exchange on translation	_	_	_	_	_	_	_	16,806	_	16,806

Net loss	_	_	_	_	_	_	_	_	(12,073,26 0)	(12,073,26 0)
Balance, December 31, 2022	61,023,450	27,956,15 5	7,000,000	3,103,620	7,916,38	62	15,589,22	(84,728)	(47,884,51 5)	(1,320,177)
Units issued for cash	45,190,973	9,223,587	_	_	_	_	_	_	_	9,223,587
Share issuance costs	2,129,566	(1,458,15 1)	_	_	_	_	402,166	_	_	(1,055,985)
Conversion of restricted shares to common shares	7,000,000	3,103,620	(7,000,00 0)	(3,103,62	_	_	_	_	_	_
Options exercised	2,865,000	1,451,519	_	_	_	_	(1,424,51 9)	_	_	27,000
Share-based compensati on	_	_	_	_	_	_	2,369,585	_	_	2,369,585
Effect on change in functional currency	_	(4,541,54 5)	_	_	_	_	351,969	_	_	(4,189,576)
Reallocation of derivative liability on re-pricing of warrants from CAD to USD exercise price	_	4,025,102	_	_	_	_	_	_	_	4,025,102
Foreign exchange on										
translation	_	_	_	_	_	_	_	(19,573)	(13,763,65	(19,573) (13,763,65
Net loss									8)	8)
Balance, December 31, 2023	118,208,98	39,760,28 \$ 7		<u>s                                     </u>	7,916,38	6 62	17,288,43 \$ 0	<u>\$ (104,301)</u>	(61,648,17 \$ 3)	\$(4,703,695)

F-32

## Table of Contents

## ALPHA COGNITION INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (Expressed in United States Dollars)

	For the Dece	
	2023	2022
Cash flows used in operating activities		
Net loss	\$ (13,763,658)	\$ (12,073,260)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	84,479	90,923

Accretion of discount on promissory note	_	24,273
Accrued expenditures for government grant	(80,000)	_
Accrued interest	_	8,230
Accrued interest income, related party	(2,550)	_
Change in fair value of warrant liability	4,085,284	(1,823,444)
Change in fair value of bonus rights liability	75,830	8,295
Share-based compensation	2,369,585	1,777,271
Loss on write-off of equipment	_	5,506
Changes in non-cash operating working capital items:		
Prepaid expenses and other current assets	(117,271)	619,787
Accounts payable and accrued liabilities	(1,451,264)	2,110,301
Net cash used in operating activities	(8,799,565)	(9,252,118)
		_
Cash flows provided by (used in) investing activities		
Acquisition of equipment	_	(4,876)
Net cash provided by (used in) investing activities		(4,876)
Cash flows provided by financing activities		
Units issued for cash	9,223,587	_
Exercise of options	27,000	40,785
Proceeds received less expenses from government grant	201,500	_
Amounts paid from restricted government grant funds	(111,087)	_
Share issuance costs	(1,055,985)	_
Issuance of related party note	(55,000)	_
Net cash provided by financing activities	8,230,015	40,785
Effect of foreign exchange on cash	(19,573)	(1,888)
Change in cash during the year	(589,123)	(9,218,097)
Cash, beginning of year	2,083,696	11,301,793
Cash, end of year	\$ 1,494,573 <b>\$</b>	
/ /	<u> </u>	, ,
Cash consists of:		
Cash	\$ 1,404,160 \$	2,083,696
Restricted Cash	90,413	2,003,070
Resultive Cush	\$ 1,494,573 \$	2,083,696
	ψ 1,77,373 <b>ψ</b>	2,003,070
Supplemental Disalegure		
Supplemental Disclosure  Cash paid for interest	¢ 50.777 0	17.000
Cash pard 101 illicrest	<u>\$ 59,777</u> <u>\$</u>	16,000
Supplemental non-cash disclosures	a 4.44.540 a	A0 < 202
Reallocation of fair value of share options upon exercise	<u>\$ 1,424,519</u> <u>\$</u>	206,382

Reclassification of derivative liability for warrants priced with USD per change in functional currency	\$ 351,969	\$ 
Reclassification of derivative liability of warrants priced with CAD per change in functional currency	\$ 4,541,545	\$ _
Reclassification of derivative liability for warrants re-priced from CAD to USD exercise price	\$ 4,025,102	\$ 
Common shares issued for share issuance costs	\$ 618,004	\$ _
Warrants issued for share issuance costs	\$ 402,166	\$ 

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

F-33

#### **Table of Contents**

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 1 — NATURE OF OPERATIONS AND GOING CONCERN

Alpha Cognition Inc. ("ACI" or the "Company") is in the business of researching and developing pharmaceutical treatments for neurological diseases. The registered and records office of the Company is 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8. As of May 1, 2023, the Company's common shares commenced trading on the Canadian Securities Exchange ("CSE") under the symbol "ACOG", previously the Company's shares were traded on the TSX Venture Exchange ("TSX-V") until April 28, 2023, when the Company had them delisted. The Company's shares also trade on the Over-The-Counter Markets ("OTC") under the trading symbol "ACOGF".

#### Going Concern

These consolidated financial statements have been prepared with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business rather than through a process of forced liquidation. The Company has not generated revenues from its operations to date and as of December 31, 2023, had a working capital deficiency of \$697,554 and an accumulated deficit of \$61,648,173 which has been primarily financed by equity. The Company's continuing operations, as intended, are dependent upon its ability to generate cash flows or obtain additional financing. Management is of the opinion that it does not have sufficient working capital to meet the Company's liabilities and commitments as they become due for the 12 months from the date these financial statements were available to be issued. Management intends to finance operating costs over the next twelve months with private placements and public offerings of the Company's common shares and funds received from the exercise of warrants and share options. Additionally, the Company will also consider funding that may arise through partnerships activities and debt. There is a risk that additional financing will not be available on a timely basis or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern.

These consolidated financial statements do not reflect adjustments that would be necessary if the going concern assumption was not appropriate. If the going concern assumption was not appropriate for these consolidated financial statements, adjustments would be necessary to the balance sheet used. Such adjustments could be material.

#### NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

**Basis of Presentation** — The accompanying consolidated financial statements of the Company have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP" or "GAAP").

**Principles of Consolidation** — These consolidated financial statements include the accounts of the Company, its wholly owned subsidiary, Alpha Cognition Canada Inc. ("ACI Canada") and ACI Canada's wholly owned subsidiary Alpha Cognition USA Inc. ("ACI USA").

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

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

F-34

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### **NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)**

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

Use of Estimates and Assumptions — The preparation of these consolidated financial statements in conformity with GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as of the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates, to ensure that those estimates effectively reflect changes in the Company's business and new information as it becomes available. Management bases these estimates on historical and anticipated results, trends, and various other assumptions that the Company believes are reasonable under the circumstances, including assumptions as to forecasted amounts and future events. Actual results could differ materially from these estimates under different assumptions or conditions.

Cash and Cash Equivalents — The Company considers cash to include currency on hand, demand deposits with banks or other financial institutions, and other kinds of accounts that have the general characteristics of demand deposits in that the Company may deposit additional funds at any time and also effectively may withdraw funds at any time without prior notice or penalty. The Company considers cash equivalents to include term deposits, certificates of deposit, and all highly liquid instruments with original maturities of three months or less to be cash equivalents.

Concentrations of Credit Risk — The Company's financial instruments subject to concentrations of credit risk consists primarily of cash and cash equivalents. Cash is deposited with financial institutions with high credit quality which are typically in excess of insured limits. Additionally, as of December 31, 2023, the Company had \$475,567 in cash held at its payment processing company in a demand account to be used to pay accounts payable. During the years ending December 31, 2023, and 2022, the Company did not experience any loss related to these concentrations.

**Equipment** — Equipment is stated at historical cost less accumulated depreciation. Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in the consolidated statement of operations. Repairs and maintenance are expensed as incurred. Depreciation is charged over the estimated useful lives using the declining balance method as follows:

Computer equipment 55%

Other equipment 20%

*Intangible Assets* — The Company accounts for intangible assets in accordance with FASB ASC 350, *Intangibles* — *Goodwill and Other*. The Company's intangible assets consist of exclusive licenses that allow the Company to further develop and exploit the ALPHA-1062 and ALPHA-602 Technology, as defined in Note 11. The licenses are carried at cost and amortized on a straight-line basis over their estimated useful life of 15 years.

Leases — The Company accounts for leases using FASB ASC 842, Leases. The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less. The lease payments associated with these leases are charged directly to the consolidated statement of operations on a straight-line basis over the lease term. During the year ended December 31, 2022, all of the Company's leases were considered short-term leases with a term of 12 months or less and are charged directly to the consolidated statement of operations on a straight-line basis over the lease term. The Company had no leases outstanding during the year ended December 31, 2023.

F-35

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### **NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)**

Impairment of Long-Lived and Non-Financial Assets — The Company reviews long-lived assets, primarily comprised of equipment and definite life intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future net cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the asset and whether any impairment indicators exist. No impairment losses were recognized for the years ending December 31, 2023 and 2022.

*Income Taxes* — The Company uses the asset and liability method to account for income taxes in accordance with ASC 740, *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on future tax consequences attributable to differences between the consolidated financial statements carrying amounts of existing assets and liabilities and their respective tax bases, tax loss and credit carry forwards.

Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that include the enactment date. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company recognizes the effect of income tax positions only if those position are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than a 50% likelihood of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

**Research and Development Costs** — The Company expenses all research and development costs incurred in accordance with the Accounting Standard Codifications as promulgated by FASB ASC 730, *Research and Development*.

Advertising and Marketing Costs — The Company expenses advertising and marketing costs when incurred. During the years ending December 31, 2023, and 2022, the Company incurred advertising and marketing expenses of \$19,791 and \$31,733, respectively, which is included in general and administrative expenses in the consolidated statements of operations and comprehensive loss.

Loss Per Share — Basic loss per share is computed by dividing net loss available to ordinary stockholders by the weighted-average number of common shares outstanding during the reporting period. If applicable, diluted income per share is computed similar to basic income per share except that the weighted average shares outstanding are increased to include potential common shares for the assumed exercise of share options, and warrants, if dilutive. The number of potential common shares is calculated by assuming outstanding share options and warrants were exercised and that the proceeds from such exercises were used to acquire common shares at the average market price during the reporting periods. For the periods presented, this calculation proved to be anti-dilutive.

Share-Based Compensation — The Company accounts for share-based compensation in accordance with ASC 718, Compensation — Share-Based Compensation, which requires compensation cost for the grant-date fair value of share-based awards to be recognized over the requisite service period. The Company accounts for forfeitures when they occur. The fair value of share-based awards, granted or modified, is determined on the grant date (or modification or acquisition dates, if applicable) at fair value, using the Black-Scholes option pricing model. This model is affected by the Company's share price as well as assumptions regarding a number of subjective variables. These subjective variables include, but are not limited to, the Company's expected share price volatility over the terms of the awards, and actual and projected employee share option exercise behaviors. The Company records share-based compensation expense for service-based share options on an accelerated attributions method over the requisite service period.

F-36

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### **NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES** (cont.)

The Company records share-based compensation expense for performance-based share options on an accelerated attribution method over the requisite service period, and only if performance-based conditions are considered probable to be satisfied.

The fair value of options is determined using the Black-Scholes option pricing model which incorporates all market vesting conditions. The number of shares and options expected to vest is reviewed and adjusted at the end of each reporting period such that the amount recognized for services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest.

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

**Segment Reporting** — The Company currently operates in researching and developing pharmaceutical treatments for neurological diseases industry. Based on the guidance of ASC 280, *Segment Reporting*, the Company has one

operating segment. For the years ending December 31, 2023 and 2022, the Company operated in two geographical areas; the United States and Canada.

Derivative liability — The Company's debt instruments contain a host liability and an embedded conversion feature. The Company uses the guidance under FASB ASC Topic 815 Derivatives and Hedging ("ASC 815") to determine if the embedded conversion feature must be bifurcated and separately accounted for as a derivative under ASC 815. It also determines whether any embedded conversion features requiring bifurcation qualify for any scope exceptions contained within ASC 815. Generally, contracts issued or held by a reporting entity that are both (i) indexed to its own shares, and (ii) classified in stockholders' equity, would not be considered a derivative for the purposes of applying ASC 815. Any embedded conversion features that do not meet the scope exception noted above are classified as derivative liabilities, initially measured at fair value, and remeasured at fair value each reporting period with change in fair value recognized in the consolidated statements of operations and comprehensive loss. Any embedded conversion features that meet the scope exception under ASC 815 are initially recorded at their relative fair value in paid-in-capital and are not remeasured at fair value in future periods.

The Company uses the Black-Scholes option pricing model to determine the fair value of the conversion feature liability, the warrant liability, share-based options, and stand-alone share purchase warrants issued as noted above. This model requires the input of subjective assumptions including the following:

*Risk-Free Interest Rate* — The risk-free interest rate is based on the U.S. Treasury zero coupon bond issues in effect at the time of grant for periods corresponding with the expected term of option.

Dividend Yield — The Company has never paid dividends on its common shares and has no plans to pay dividends on its common shares. Therefore, the Company used an expected dividend yield of zero.

Expected Life — The Company's expected term represents the period that the Company's options granted are expected to be outstanding or the remaining contractual life of the conversion period and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term).

*Expected Volatility* — The Company's expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period equal to the expected term of the awards.

Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings (loss) and equity.

F-37

#### Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### **NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)**

Fair Value Measurements — FASB ASC 820 — Fair Value Measurements and Disclosures defines fair value, establishes a framework for measuring fair value under U.S. GAAP, and expands disclosures about fair value measurements. In accordance with ASC 820, we have categorized our financial assets and liabilities based on the priority of the inputs to the valuation technique into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument.

Financial assets and liabilities recorded in the accompanying consolidated balance sheets are categorized based on the inputs to the valuation techniques as follows:

Level 1 — Financial instruments whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market which we have the ability to access at the measurement date.

- Level 2 Financial instruments whose values are based on quoted market prices in markets where trading occurs *infrequently* or whose values are based on quoted prices of instruments with similar attributes in active markets.
- Level 3 Financial instruments whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs reflect management's own assumptions about the assumptions a market participant would use in pricing the instrument.

The Company's financial instruments consist of cash, restricted cash, related party note receivable, prepaid and other current assets, accounts payable, warrant liability, other liabilities, and promissory note. The fair value of the prepaid and other current assets, accounts payable, and promissory note approximate their carrying values either due to their current nature or current market rates for similar instruments.

Cash is measured at fair value on a recurring basis using level 1 inputs. Other liabilities consisting of the bonus rights liability and warrant liability are measured at fair value on a recurring basis using level 3 inputs. As of December 31, 2023 and 2022, the fair value of the bonus rights liability was \$84,125 and \$8,295, respectively. As of December 31, 2023 and 2022, the fair value of the warrant liability was \$4,455,747 and \$205,989, respectively.

Interest Rate Risk — Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Financial assets and liabilities with variable interest rates expose the Company to interest rate cash flow risk. The Company does not hold any financial liabilities with variable interest rates. Financial assets and liabilities with fixed interest rates expose the Company to interest rate price risk. As of December 31, 2023, and 2022, the promissory note bears interest of 5.5% and 2% per annum, respectively, and is subject to interest rate price risk. The Company maintains bank accounts which earn interest at variable rates, but it does not believe it is currently subject to any significant interest rate risk.

Currency Risk — Foreign currency exchange rate risk is the risk that the fair value or future cash flows will fluctuate as a result of changes in foreign exchange rates. The Company's operations are carried out in Canada and the United States. As of December 31, 2023, and 2022, the Company had net monetary assets (liabilities) of approximately (\$36,000) and \$690,000, respectively, denominated in Canadian dollars.

These factors expose the Company to foreign currency exchange rate risk, which could have an adverse effect on the profitability of the Company. A 10% change in the exchange rate with the Canadian dollar would change net loss and comprehensive loss by approximately \$14,500. At this time, the Company currently does not have plans to enter into foreign currency future contracts to mitigate this risk; however, it may do so in the future.

F-38

#### Table of Contents

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### **NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)**

Grant Accounting — All funds relating to government grants are being recorded under the gross method of accounting for government grants whereby any income received and associated expenses incurred will be reported as grant income and included in research and development expenses, respectively on the statement of operations and comprehensive loss. When grant proceeds are initially received, they are recorded as deferred income and restricted cash. Grant proceeds used to pay for study costs and are expensed as incurred, with a corresponding amount of grant revenue recorded along with a reduction of the balance of the deferred income liability. The Company classifies the balance of cash received from grants as restricted cash, when the proceeds from the grant have been designated for use in specified research. During the year ended December 31, 2023, the Company recorded grant income of \$191,087 from its R&D Grant (defined in Note 3) in the consolidated statements of operations and comprehensive loss.

Accounting Pronouncements Not Yet Adopted — In August 2020, FASB issued ASU 2020-06, Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, which is intended to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. ASU 2020-06 is effective for the Company for the fiscal year beginning after December 15, 2023. The Company is currently evaluating the impact of this new guidance on its consolidated financial statements.

On January 1, 2023, the Company adopted Accounting Standards Update ("ASU") No. 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"). ASU 2016-13 requires an entity to utilize a new impairment model that requires measurement and recognition of expected credit losses for most financial assets and certain other instruments, including but not limited to available-for-sale debt securities. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down to the security. The new guidance also modifies the impairment models for purchased financial assets with credit deterioration since their origination. There was no impact on the accompanying consolidated financial statements as of the adoption date.

#### NOTE 3 — R&D GRANT

On June 5, 2023, the Company was awarded a \$750,000 research and development grant from the Army Medical Research and Material Command for a pre-clinical study on the use of the ALPHA-1062 Intranasal to reduce blast mTBI (mild Traumatic Brain Injury) induced functional deficit and brain abnormalities ("R&D Grant"). The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense.

As of December 31, 2023, the Company has received \$201,500 for the R&D Grant and has restricted cash of \$90,413. As at December 31, 2023, the Company has deferred income of \$10,413 after the recognition of \$191,087 of grant income on the consolidated statement of comprehensive loss during the year ended December 31, 2023. Additionally, during the year ended December 31, 2023, the Company has incurred \$191,087 in expenses relating to the R&D Grant. The grant funds are to be used on the following project "Assessment of Functional Recovery and Reduced Tauopathy Following ALPHA-1062 Administration in a Repetitive Blast TBI Model in Rodents." The R&D Grant is issued in collaboration with the Seattle Institute of Biomedical and Clinical Research and endorsed by the Department of Defense. Funds received from the R&D grant are restricted and to be used solely as outlined in the grant. The R&D grant funding will expire for use on September 30, 2028. The award funding is to subsidized the costs for research and development with the following specific Aims:

• Specific Aim 1: Quantify the ability of ALPHA-1062 to reduce brain-wide tauopathy and pathology in blast-mTBI;

F-39

#### **Table of Contents**

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 3 — R&D GRANT (cont.)

- Specific Aim 2: Characterize and quantify changes in the inter-cellular associations between diseaseassociated microglia and cells of the basal forebrain induced by repetitive blast-mTBI and altered by ALPHA-1062 treatment;
- Specific Aim 3: Determine the efficacy of ALPHA-1062 to improve the adverse cognitive and behavioral outcomes consequent to repetitive blast-mTBI.

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

#### NOTE 4 — RELATED PARTY NOTE RECEIVABLE

On July 7, 2023, the Company entered into a loan agreement with Alpha Seven Therapeutics, Inc., ("Alpha Seven") a related party through a common director and officers of the Company, to advance an amount up to \$150,000. The unsecured outstanding balance carries an interest rate of 12% per annum, a term of 12 months, no payments are due until maturity. As of December 31, 2023, the Company has advanced \$55,000 and accrued interest of \$2,550.

#### NOTE 5 — BALANCE SHEET COMPONENTS

#### Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

		December 31,			
		2023		2022	
Other receivables	\$	100,036	\$	25,079	
Prepaid expenses		206,377		205,784	
Prepaid legal expenses	_	59,902		18,182	
Prepaid expenses and other assets	\$	366,316	\$	249,045	

#### Equipment

Equipment consisted of the following:

	 December 31,			
	2023		2022	
Equipment	\$ 12,370	\$	12,370	
Less: accumulated depreciation	(10,649)		(8,546)	
Equipment, net	\$ 1,721	\$	3,824	

Depreciation expense for the years ended December 31, 2023, and 2022 was \$2,103 and \$8,547, respectively.

#### Accounts payable and accrued liabilities

	Dec	ember 31,
	2023	2022
Accounts payable	\$ 475,55	3 \$ 2,016,057
Other accrued liabilities	127,28	278,664
Accrued payroll and bonuses	791,28	550,660
Accounts payable and accrued liabilities	\$ 1,394,11	2,845,381
F-40		

#### **Table of Contents**

#### ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 6 — INTANGIBLE ASSETS

Intangible assets consisted of the following:

December 31, 2023	Gross Amount	Accumulated Amortization	Net Balance	Weighted Average Remaining Useful Life
Licenses	\$ 1,235,633	\$ 703,623	\$ 532,010	6.61
December 31, 2022	Gross Amount	Accumulated Amortization	Net Balance	Weighted Average Remaining Useful Life
Licenses	\$ 1,235,633	\$ 621,247	\$ 614,386	7.58

Amortization expense for the years ended December 31, 2023, and 2022 was \$82,376 and \$82,376, respectively.

The following table outlines the estimated future annual amortization expense related to intangible assets as of December 31, 2023:

Years ended December 31,	
2024	\$ 82,376
2025	82,376
2026	82,376
2027	82,376
2028	82,376
Thereafter	 120,130
Total	\$ 532,010

#### NOTE 7 — PROMISSORY NOTE

In March 2015, the Company issued a promissory note of \$1,400,000 to Neurodyn Life Sciences Inc ("NLS"), a related party through a common director, for the acquisition of the ALPHA-1062 Technology ("NLS Promissory Note") (Note 10).

On March 6, 2023, the Company and NLS agreed to an amendment to the promissory note pursuant to which the interest rate was increased from 2% to 5.5% and the maturity date was extended from December 31, 2022 to July 15, 2024. The amended agreement was effective March 1, 2023, and requires interest only payments until maturity. In addition, the amendment now incorporates both Alpha Cognition Inc. and Alpha Cognition Canada, Inc. under the Memogain Technology License Agreement and added clarity to certain terms and definitions under the license agreement. The Company evaluated the amended agreement under ASC 470 and determined that the amendment should be accounted for as a debt modification prospectively. The Company accounted for this transaction as a debt modification and did not record any gain or loss relating to the modification. The debt modification did not meet the greater than ten percent test and was deemed not substantial.

As at December 31, 2023 and 2022, the principal balance outstanding on the promissory note was \$1,211,463. During the years ended December 31, 2023 and 2022, the Company recorded interest expense and amortization of the premium, included in accretion expense, of \$59,777 and \$48,502, respectively.

Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 15, 2024 to July 15, 2025.

F-41

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 8 — OTHER LONG-TERM LIABILITIES

The Company adopted a cash bonus policy pursuant to which it may grant bonus rights to certain eligible participants, which include employees, officers, or consultants of the Company, that are payable in cash. These bonus rights are subject to certain vesting provisions and are revalued at each reporting date with the change being included in management fees and salaries on the Company's consolidated statement of loss and comprehensive loss.

During the year ended December 31, 2022, Officers of the Company were granted the ability to earn up to 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 vest on the earlier of the date of a change of control or April 15, 2024, and will be payable upon vesting. The bonus rights will be earned in tranches based on the price of the Company's common share exceeding certain thresholds. As of December 31, 2023 and 2022, the Officers had earned 2,376,764 and 2,376,764, respectively, bonus rights.

On initial recognition, the Company recorded an expense of \$56,988 to recognize the proportionate unvested bonus rights. As at December 31, 2023 and 2022, the Company recognized a bonus right liability of \$84,125 and \$8,295, respectively. Total compensation expense for the bonus rights for the years ended December 31, 2023 and 2022, of \$75,830 and \$8,295 was recognized within general and administrative expenses, respectively. As of December 31, 2023 and 2022, there was \$14,660 and \$125,725 of unrecognized compensation expense in related to the bonus right awards, respectively.

In accordance with ASC 718, *Share-Based Payments*, the bonus right awards are considered liability-based awards and are revalued at each reporting date. The following weighted average assumptions were used in the Black-Scholes option-pricing model for the valuation of the bonus rights liability as of December 31, 2023, and 2022:

	December 31, 2023	December 31, 2022
Risk-free interest rate	5.04%	4.51%
Expected life (in years)	0.29	1.29
Volatility	177.76%	94%
Weighted average fair value per bonus right	\$ 0.04	\$ 0.01

The number of bonus right awards granted to each executive is determined based on the business value of the Company at the earlier of (i) the date of a Change in Control or; (ii) the Vesting Date, as defined in the Company's Cash Bonus Policy. The Company estimates the expected number of bonus rights at the end of each reporting period based upon the likelihood of achieving the Business Value threshold, as defined in each executive's agreement. As of December 31, 2023 and 2022, 2,437,082 and 2,444,625 bonus right awards are expected to vest, respectively.

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY)

#### **Authorized Share Capital**

The Company is authorized to issue the following share capital:

- Unlimited common voting shares without par value ("Common Shares")
- Unlimited Class A restricted voting shares without par value ("Restricted Shares")
- Unlimited Class B Preferred Series A voting shares with a par value of \$0.25 per share, convertible on a 1:1 basis into Common Share ("Class B Preferred Share")

F-42

#### **Table of Contents**

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

#### **Issued Share Capital**

During the year ended December 31, 2023, the Company issued the following shares:

- Issued 23,747,648 private placement units at a price of CAD\$0.255 for total proceeds of \$4,506,055 (CAD\$6,055,650) with each unit consisting of one Common Share and one warrant exercisable at a price of CAD\$0.39 per warrant for a term of five years from the closing date ("Q1 2023 PP"). The Q1 2023 PP was completed through the closing of two tranches: one in February 2023 and one in March 2023. In connection with the Q1 2023 PP, the Company paid cash commissions of \$172,480, incurred legal fees of \$15,428, and issued 2,129,566 Common Shares and 324,642 agents warrants with an estimated fair value of \$618,004 and \$73,018, respectively. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of CAD\$0.39 for a term of 5 years.
- Issued 2,700,000 Common Shares for the exercise of 2,700,000 ACI Canada legacy performance options at a price of \$0.01 per share for total proceeds of \$27,000. As a result, the Company transferred \$1,344,480 from additional paid-in capital to share capital.
- On May 30, 2023, the Company announced a private placement offering to raise gross proceeds of \$6,500,000 at \$0.22 per unit ("Q2 2023 PP"). Each unit initially consisted of one common share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at \$0.31 per share for a period of three years from the closing date. The aggregate proceeds may be increased by 30% to accommodate any overallotment. In accordance with the Q2 2023 PP, the Company has agreed to pay the finder ("Spartan") cash commissions of 10% of the gross proceeds, issue finder's warrants equal to 10% of the number of the warrants issued to investors, in each case excluding investors on the Company's president's list, and pay Spartan a non-accountable expense fee equal to 5% of the gross proceeds of the Q2 2023 PP excluding the president's list. The Q2 2023 PP capital raising activities were completed subsequent to December 31, 2023 (see Note 17(a)).
  - On August 31, 2023, the Company completed an initial closing of the Q2 2023 PP by issuing 6,114,058 units at a price of \$0.22 for total proceeds of \$1,345,093 ("Q2 2023 PP Tranche 1"). Each unit consisted of one Common Share and one half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until August 31, 2026. In connection with the Q2 2023 PP Tranche 1, the Company paid cash commissions of \$180,051, incurred legal fees of \$28,334, and issued 272,803 agents warrants

with an estimated fair value of \$44,292. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until August 31, 2026.

- On October 16, 2023, the Company completed the second closing of the Q2 2023 PP by issuing 1,596,830 units at a price of \$0.22 for total gross proceeds of \$351,303 ("Q2 2023 PP Tranche 2"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until October 16, 2026. In connection with the closing of Q2 2023 PP Tranche 2, the Company paid cash commissions of \$51,600, incurred legal fees of \$5,371, and issued 78,181 agents warrants with an estimated fair value of \$10,199. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until October 16, 2026.
- On November 8, 2023, the Company completed the third closing of the Q2 2023 PP by issuing 4,590,903 units at a price of \$0.22 for total gross proceeds of \$1,009,999 ("Q2 2023 PP Tranche 3"). Each unit consists of one Common Share and one-half of a warrant with each whole warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until November 8, 2026. In connection with the closing of Q2 2023 PP Tranche 3, the

F-43

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

Company paid cash commissions of \$151,500, incurred legal fees of \$10,501, and issued 229,544 agents warrants with an estimated fair value of \$24,692. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until November 8, 2026. The Company also paid a consulting fee of US\$160,000 pursuant to the Spartan Consulting Agreement.

On December 4, 2023, the Company amended the terms of the Q2 2023 PP. Each unit was amended to consist of one common share and one warrant. Each warrant will entitle the holder to purchase an additional common share of the Company at \$0.31 per share for a period of three years from the closing date.

- On December 22, 2023, the Company completed the fourth closing of the Q2 2023 PP by issuing 9,141,534 units at a price of \$0.22 for total gross proceeds of \$2,011,137 ("Q2 2023 PP Tranche 4"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until December 22, 2026. In connection with the closing of Q2 2023 PP Tranche 4, the Company paid cash commissions of \$238,515 and issued 722,771 agents warrants with an estimated fair value of \$249,965. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until December 22, 2026.
- All 7,000,000 previously outstanding Restricted Shares were converted to Common Shares on August 29, 2023, for \$\\$\\$nil\$ proceeds.
- 165,000 Common Shares in connection with the cashless exercise of 251,101 Common Share options with an exercise price of CAD\$0.22 per share; 86,101 Common Shares were surrendered. As a result, the Company transferred \$80,039 from additional paid-in capital to share capital.

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

- 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 additional paid-in capital to common shares.
- 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 additional paid-in capital to common shares.

#### Escrow Shares

As of December 31, 2023 and 2022, the Company had 11,502,874 and 19,754,347 Common Shares, nil and 3,116,518 Restricted Shares, and 2,857,432 and 5,099,866 Class B Preferred Shares, respectively, held in escrow.

#### Warrants

During the year ended December 31, 2023, the Company issued the following warrants:

- 16,795,221 warrants with an exercise price of CAD\$0.39 and expiry of February 16, 2028, in connection with the first tranche of the Q1 2023 PP.
- 6,952,427 warrants with an exercise price of CAD\$0.39 and expiry of March 15, 2028, in connection with the second tranche of the Q1 2023 PP.

F-44

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

- 324,642 warrants with an exercise price of CAD\$0.39 and an expiry of March 15, 2028, to the agents of the Company's Q1 2023 PP. The warrants were valued at \$73,018 using the Black Scholes option-pricing model with the following assumptions: expected life of 5 years, volatility of 108.71%, discount rate of 3.05%, and a dividend yield of \$0.
- 3,057,025 warrants with an exercise price of \$0.31 and an expiry of August 31, 2026, in connection with the Company's Q2 2023 PP Tranche 1.
- 272,803 warrants with an exercise price of \$0.31 and an expiry of August 31, 2026, to the agents of the Company's Q2 2023 PP Tranche 1. The warrants were valued at \$44,292 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 91.24%, discount rate of 4.40%, and a dividend yield of \$0.
- 798,414 warrants with an exercise price of \$0.31 and an expiry of October 16, 2026, in connection with the Company's Q2 2023 PP Tranche 2.
- 78,181 warrants with an exercise price of \$0.31 and an expiry of October 16, 2026, to the agents of the Company's Q2 2023 PP Tranche 2. The warrants were valued at \$10,199 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 90.98%, discount rate of 4.60%, and a dividend yield of \$nil.
- 2,295,449 warrants with an exercise price of \$0.31 and an expiry of November 8, 2026, in connection with the Company's Q2 2023 PP Tranche 3.

- 229,544 warrants with an exercise price of \$0.31 and an expiry of November 8, 2026, to the agents of the Company's Q2 2023 PP Tranche 3. The warrants were valued at \$24,692 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 91.31%, discount rate of 4.00%, and a dividend yield of \$nil.
- 9,141,534 warrants with an exercise price of \$0.31 and an expiry of December 22, 2026, in connection with the Company's Q2 2023 PP Tranche 4.
- 722,771 warrants with an exercise price of \$0.31 and an expiry of December 22, 2026, to the agents of the Company's Q2 2023 PP Tranche 4. The warrants were valued at \$249,965 using the Black Scholes option-pricing model with the following assumptions: expected life of 3 years, volatility of 91.75%, discount rate of 3.70%, and a dividend yield of \$nil.

During the year ending December 31, 2023, 3,277,007 warrants with an aggregate fair value of \$1,394,858 expired resulting in \$1,394,858 being reallocated from reserves to Common Shares.

In December 2023, 11,317,750 warrants originally issued on February 16, 2023, had their exercise price modified from CAD\$0.39 to \$0.283 and 459,586 warrants originally issued on March 15, 2023, had their exercise price modified from CAD\$0.39 to \$0.289, no change was made to any expiry dates (See Note 9(b)).

F-45

#### Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

The schedule of activity for the warrants is as follows:

	Number of Warrants	Av Ex P	ighted erage ercise rice nverted)	Remaining Contractual Term (Years)	
Balance, December 31, 2021	15,981,290	\$	1.15	1.84	
Balance, December 31, 2022	15,981,290		1.15	0.84	
Issued	40,668,011		0.30	_	
Expired	(12,919,507)		1.36	_	
Balance, December 31, 2023	43,729,794	\$	0.31	3.43	

A summary of the warrants outstanding and exercisable as of December 31, 2023, is as follows:

Warrants Outstanding	Exercise Price	Expiry Date
3,061,783	\$ 0.40	August 30, 2024
3,329,828	\$ 0.31	August 31, 2026
876,595	\$ 0.31	October 16, 2026
2,524,993	\$ 0.31	November 8, 2026
9,864,305	\$ 0.31	December 22, 2026
11,317,750	\$ 0.283	February 16, 2028
5,477,471	\$ 0.29 (CAD\$0.39)	February 16, 2028

6,817,483	\$ 0.29 (CAD\$0.39)	March 15, 2028
459,586	\$ 0.289	March 15, 2028
43,729,794		

#### Warrant Liability

a) Prior to August 31, 2023, the Company's functional currency was the CAD, as such, the Company recorded a warrant liability on the warrants outstanding with USD exercise prices. This derivative liability was being revalued at each reporting period.

The Company revalued its derivative liability upon the change in functional currency, which resulted in a loss on revaluation of \$145,980 and a gain of \$1,658,486 for the years ended December 31, 2023, and 2022, respectively.

Due to the change in functional currency on August 31, 2023, the derivative liability was measured at fair value using the Black-Scholes Option Pricing Model with a valuation date of August 31, 2023. The derivative liability of the Company on that date was \$351,969, which upon reclassification, was charged to equity as an increase in reserves of \$351,969.

Balance as of December 31, 2021	\$ 2,048,127
Revaluation of derivative liability	(1,842,138)
Balance as of December 31, 2022	205,989
Revaluation of derivative liability	145,980
Reclassification of derivative liability per change in functional currency	 (351,969)
Balance as of December 31, 2023	\$ _
F 46	

#### **Table of Contents**

# ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

A summary of the warrants with USD exercise prices outstanding and exercisable as of August 31, 2023, upon the change in functional currency was as follows:

Warrants Outstanding	Exer	cise Price	<b>Expiry Date</b>
3,061,783	\$	0.40	August 30, 2024
3,057,025	\$	0.31	August 31, 2026
6,118,808			

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the revaluations for the warrants priced in USD as of August 31, 2023, and December 31, 2022:

	August 31, 2023	December 31, 2022
Risk-free interest rate	5.14%	4.03%
Dividend yield	_	_

Expected life (in years)	1.00	1.65
Volatility	131%	93%
Weighted average fair value per warrant	\$ 0.16 \$	0.07

b) On August 31, 2023, the Company's functional currency changed to the USD from the CAD; as such, the Company recorded a derivative liability on the warrants outstanding with previously issued CAD exercises prices. This derivative liability is being revalued at each reporting period.

As at August 31, 2023, the Company charged \$4,541,545 to equity to reclassify the derivative liability for warrants with exercise prices denominated in CAD using the Black-Scholes Option Pricing Model. The initial reclassification resulted in a decrease in share capital \$4,541,545. In December 2023, 11,777,336 warrants were re-priced from CAD to USD denominated exercise price which resulted in \$4,025,102 of the derivative liability being reclassified to equity. As of December 31, 2023, the Company revalued the derivative liability to \$4,455,747 and recorded a loss on revaluation of \$3,939,304.

Balance as of December 31, 2021 and 2022	\$ _
Reclassification of derivative liability per change in functional currency	4,541,545
Revaluation of derivative liability	3,939,304
Reclassification of derivative liability per change in exercise price	(4,025,102)
Balance as of December 31, 2023	\$ 4,455,747

A summary of warrants not issued for services with CAD exercise prices outstanding and exercisable as of December 31, 2023, is as follows:

Warrants Outstanding	<b>Exercise Price</b>		Expiry Date
5,477,471	\$	0.29 (CAD\$0.39)	February 16, 2028
6,492,841	\$	0.29 (CAD\$0.39)	March 15, 2028
11,970,312			

F-47

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

The following weighted average assumptions were used in the Black-Scholes option-pricing model for the initial valuation and re-valuations following the change in functional currency to USD, as at and December 31, 2023 and August 31, 2023:

	December 31, 2023	August 31, 2023
Risk-free interest rate	3.38%	6.31%
Dividend yield	_	
Expected life (in years)	4.15	3.22
Volatility	87%	110%
Weighted average fair value per warrant	\$ 0.37 \$	0.14

#### **Share Options**

#### Common Share Options

The Company's 2023 Share Option Plan (the "2023 Option Plan") for its officers, directors, employees and consultants was approved by stockholders on June 27, 2023. Pursuant to the 2023 Option Plan, the Company may grant non-transferable share options totaling in aggregate up to 20% of the Company's issued and outstanding Common Shares and Restricted Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price that will not be lower than the greater of the last closing price for the Common Shares as quoted on the CSE: (i) on the trading day prior to the date of grant; and (ii) the date of grant. All options granted pursuant to the 2023 Option Plan will be subject to such vesting requirements as may be imposed by the Board. In the event of a Change of Control, as defined in the 2023 Option Plan, all unvested options will vest immediately.

The 2022 Option Plan was previously adopted by the board and approved by stockholders on July 19, 2022, pursuant to which incentive share options were granted to certain directors, officers, employees and consultants (the "2022 Option Plan").

Under the 2022 Option Plan, the Company could grant non-transferable share options totaling in aggregate up to 10% of the Company's issued and outstanding Common Shares, exercisable for a period of up to ten years from the date of grant, and at an exercise price which is not less than that permitted by the TSX-V. In connection with listing of the Common Shares on the CSE, the Company adopted the 2023 Option Plan and determined that the 2022 Option Plan be closed to new grants. The options outstanding under the 2022 Option Plan, issued prior to the adoption of the 2023 Option Plan ("2022 Options") are not included in the maximum number of share options available for grant pursuant to the 2023 Option Plan and are not subject to the terms of the 2023 Option Plan; as such, the 2022 Options will continue to be governed by the 2022 Option Plan.

For accounting purposes, the cancellation and subsequent reissuance of these share options was treated as a modification. The incremental fair value is the difference between the fair value of the modified share-based payment and that of the original share-based payment both measured at the date of the modification.

The incremental fair value of \$98,017 resulting from the share option modifications is being recognized over the new vesting terms and the balance of the original grant-date fair value is being recognized over the remaining original vesting period.

F-48

#### Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

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

	December 31, 2023	December 31, 2022
Risk-free interest rate	3.12%	2.62%
Expected life (in years)	10	10
Volatility	103%	84%
Weighted average fair value per option	\$ 0.13	\$ 0.56

The following table summarizes the total amount of share-based compensation expense related to service conditions for Common Share options during the years ended December 31, 2023 and 2022:

		For the Years Ended			
	December 31, 2023			December 31, 2022	
Research and development	\$	540,076	\$	519,140	
General and administrative		1,645,265		1,148,580	
Total share-based compensation	\$	2,185,341	\$	1,667,720	

As of December 31, 2023, there was an unrecognized share-based compensation expense relating to service conditions for common share options of \$1,188,800.

Common share option activity is as follows:

	Number of Options	Weig Aver Exercise	age	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value <sup>(1)</sup>
Balance, December 31, 2021	5,297,597	\$	0.81	9.22	\$ 1,472,041
Granted	1,170,000		0.61	_	
Expired	(895,007)		0.97	_	
Exercised	(66,519)		0.53	_	
Balance, December 31, 2022	5,506,071		0.61	8.47	_
Granted	16,190,000		0.16		
Expired	(772,763)		0.68	_	
Exercised <sup>(2)</sup>	(251,101)		0.17	_	
Balance, December 31, 2023	20,672,207	\$	0.18	9.07	\$ 9,975,524
Options exercisable, December 31, 2023	8,050,870	\$	0.18	9.07	\$ 3,815,397

<sup>(1)</sup> The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share on December 31, 2023, and 2022. The calculation excludes options with an exercise price higher than the closing price of the Company's share on December 31, 2023 and 2022.

<sup>(2)</sup> In accordance with the Company's 2023 Option Plan, option holders exercised 251,101 Common Share options on a cashless basis (net exercise) for the issuance of 165,000 Common Shares.

## ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 9 — STOCKHOLDERS' EQUITY (DEFICIENCY) (cont.)

#### ACI Canada Legacy Performance Options

The Company retained ACI Canada's share option plan whereby ACI Canada could grant share options to directors, officers, employees and consultants enabling them to acquire common shares. Options granted had a maximum term of ten years and the board of directors determined the vesting requirements. From time to time, the Company granted performance-based share options to management and consultants. These options vest based on the Company's achievement of certain performance goals and operational metrics, as applicable, subject to continuous employment by each recipient.

The following table summarizes total amount of share-based compensation expense related to performance conditions for the ACI Canada legacy performance options during the years ended December 31, 2023 and 2022:

		For the Years Ended				
	Dec	December 31, 2022				
Research and development	\$	184,244	\$	109,551		
General and administrative		_		_		
Total share-based compensation	\$	184,244	\$	109,551		

As of December 31, 2023 and 2022, there was no unrecognized share-based compensation expense relating to service condition awards.

The following table summarizes ACI Canada legacy performance option activity for the Company:

	Number of Options	A	eighted verage cise Price	Weighted Average Remaining Contractual Life (Years)	Ii	ggregate ntrinsic Value <sup>(1)</sup>
Balance, December 31, 2021	9,941,057	\$	0.01	6.68	\$	10,645,031
Cancelled	(70,000)		0.01	_		
Exercised	(350,000)		0.01	_		_
Balance, December 31, 2022	9,521,057		0.01	5.91		4,609,723
Exercised	(2,700,000)		0.01	_		
Balance, December 31, 2023	6,821,057	\$	0.01	4.51	\$	4,441,787
Options exercisable, December 31, 2023	6,401,057	\$	0.01	4.47	\$	4,168,787

<sup>(1)</sup> The aggregate intrinsic values were calculated as the difference between the exercise price of the options and the closing price of the Company's common share on December 31, 2023 and 2022. The calculation excludes options with an exercise price higher than the closing price of the Company's share on December 31, 2023, and 2022.

#### NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management personnel include the Company's executive officers and members of its Board of Directors.

In September 2018, the Company signed a management agreement with CMI Cornerstone Management Corp. ("CMI"), a company controlled by Ken Cawkell, former CEO and a director of the Company, which requires monthly payments of \$15,000. In June 2019, the Company amended the agreement to increase the monthly fees to \$18,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$432,000 less any fees previously paid under the agreement between June 1, 2019 and the date of termination or (ii) \$54,000. On September 1, 2022, the

F-50

#### Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

Company amended the agreement to decrease the monthly fees to \$9,000. On April 30, 2023, the Company amended the agreement to an hourly fee of \$400 for services rendered. The amendment included a payment of \$54,000 for the termination fee.

In September 2018, the Company signed a management agreement with 9177 – 586 Quebec Inc., later assigned to 102388 P.E.I. Inc. ("PEI Inc."), companies controlled by Denis Kay, Chief Scientific Officer of the Company, which requires monthly payments of \$13,333 per month for an effective term of two years. In June 2019, the Company amended the agreement to increase the monthly fees to \$15,000. Included in the agreement is a provision for a termination payment equal to the greater of (i) \$360,000 less any fees previously paid under the agreement between June 1, 2019 and the date of termination or (ii) \$45,000. On August 15, 2022, the Company amended the agreement to decrease the monthly fees to \$7,500.

In August 2020, the Company signed a management agreement with Seatrend Strategy Group, ("Seatrend"), a company controlled by Jeremy Wright, the Chief Financial Officer of the Company, which required monthly payments of \$6,000. In October 2020, the Company amended the agreement to increase the monthly fees to \$15,000. Included in the agreement was a provision for a termination payment of six's month's fees. On April 12, 2022, Jeremy Wright resigned as the CFO of the Company and was paid a termination payment of \$90,000.

In February 2021, the Company signed a consulting agreement with Michael McFadden, CEO of the Company, requiring an annual base compensation of \$500,000. A new employment agreement was signed in March 2022 which included in the agreement is a provision for termination payment without just cause of:

- a) Severance payments for a period of twelve months with the following terms:
  - i) Months 1 through 6: 100% of annual base salary;
  - ii) Months 7 through 9: 50% of annual base salary; and
  - iii) Months 10 through 12: 25% of annual base salary.
- b) Bonus severance equal to the average of bonuses paid of the two most recent full fiscal years prior to termination plus the bonus that would have been paid in the fiscal year of termination.

Also included in the agreement is a provision for termination payment due to a change of control, the CEO will receive:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

In April 2022, Mr. McFadden was granted the ability to earn up to 8,195,740 bonus rights of which 1,639,148 bonus rights had been earned as of December 31, 2023 (Note 8). The value of these bonus rights was determined to be \$58,427 and \$5,819 as of December 31, 2023 and 2022, respectively, and is included in other liabilities.

In May 2021, the Company hired Lauren D'Angelo as the Company's Chief Commercial Officer. In 2023 Ms. D'Angelo was promoted to Chief Operating Officer of the Company. The employment agreement signed in May 2021 with Ms. D'Angelo requires an annual base compensation currently at \$420,000 and includes a provision for a termination payment due to a change of control as follows:

- a) a cash payment equal to the annual base salary;
- b) a full bonus payable in cash immediately, irrespective of whether targets have been met; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

F-51

#### Table of Contents

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 10 — RELATED PARTY TRANSACTIONS AND BALANCES (cont.)

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 as of December 31, 2023 (Note 8). The value of these bonus rights was determined to be \$25,698 and \$2,476 as of December 31, 2023 and 2022, respectively, and is included in other liabilities.

In November 2021, the Company signed an employment agreement with Cedric O'Gorman, the Chief Medical Officer ("CMO") of the Company, requiring an annual base compensation of \$400,000. Included in the agreement is a provision for a termination payment without just cause of an amount equal to annual base compensation for a period of six months. If termination is due to a change of control, the CMO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

On January 1, 2023, Cedric O'Gorman resigned as the Chief Medical Officer of the Company.

In April 2022, the Company signed an employment agreement with Donald Kalkofen, the Chief Financial Officer ("CFO") of the Company, requiring an annual base compensation of \$420,000. Included in the agreement is a provision for termination payment due to a change of control, which if occurs, the CFO will receive:

- a) a cash payment equal to the annual base salary;
- b) a cash bonus equal to 50% of the annual base salary; and
- c) continuation of healthcare benefits for twelve months from date of change of control event.

As of December 31, 2023, and 2022, \$672,550 and \$619,361, respectively, is owing to directors and officers of the Company and has been included in accounts payable and accrued liabilities. These balances are in relation to fees and management compensation and are non-interest bearing, unsecured and due on demand.

As of December 31, 2023, the Company owed NLS \$1,211,463 for an outstanding promissory note with a carrying amount of \$1,220,372 (Note 7).

As of December 31, 2023, the Company has advanced Alpha Seven \$55,000 and accrued interest of \$2,550 (Note 4).

Summary of key management personnel compensation:

	F	For the Years Ended			
	Decemb 202	,	Decembe 2022	- /	
Other general and administrative	\$		\$	9,555	
Other research and development		_		10,500	
Management fees and salaries	1,4	190,459	1,1	66,371	
Research and development – management fees and salaries	7	703,453	9	39,712	
Share-based compensation	2,3	351,281	1,5	76,235	
Total related party transactions	\$ 4,5	545,193	3,7	02,373	
F-52					

#### Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 11 — COMMITMENTS AND CONTINGENCIES

#### ALPHA-1062 Technology

In March 2015, the Company entered into the Memogain Technology License Agreement ("License Agreement") with NLS for the exclusive right and license to further develop and exploit the ALPHA-1062, formerly Memogain, Technology. The License Agreement set out the consideration as follows:

- The Company assumed all of NLS's obligations under the Memogain Asset Purchase Agreement which consisted of cumulative total payments to Galantos Pharma GmbH of \$10,675,000 (€10,000,000), the cumulative total may be increased to \$16,013,000 (€15,000,000) subject to certain provisions, involving sub-licensing the ALPHA-1062 technology and Company the receiving an upfront out-licensing payment of no less than \$8,540,000 (€8,000,000). Royalty payments, are determined as follows (collectively the "Galantos Royalty Payments"):
  - 3% of the net sales revenue received by the Company from the sale of any products relating to the Alpha-1062 Technology;
  - 10% of any sublicensing revenue; and
  - 25% of an upfront payment or milestone payment paid by a sub-licensee to the Company;
- Upon completion of the Galantos Royalty Payments, a royalty payment to NLS of 1% of the revenue received from the ALPHA-1062 Technology by the Company over \$100 million per annum and
- The issuance of a promissory note of \$1,400,000 to NLS (Note 7).

The expiration date is twenty years from the Commencement Date (March 15, 2035) or the expiration of the last patent obtained (existing patents extend through 2042) pursuant, whichever event shall last occur, unless earlier terminated pursuant to bankruptcy or insolvency of the licensee; court order against the licensee; or a winding up, liquidation or termination of the existence of the licensee occurs.

No payments have been made to date related to the Galantos Royalty Payments.

On January 1, 2016, the Company assumed NLS's obligations under a Royalty Agreement with Galantos Consulting dated August 31, 2013, which consiste of cumulative total payments to Galantos Consulting of \$2,135,000 ( $\epsilon$ 2,000,000), the cumulative total may be increased to \$3,203,000 ( $\epsilon$ 3,000,000) subject to certain provisions, which is to be paid as follows (collectively the "Galantos Consulting Payments"):

- 1% of the net sales revenue received by the Company from the sale of any products relating to the ALPHA-1062 Technology;
- 2% of any sublicensing revenue; and
- 2% of an upfront payment or milestone payment paid by a sub-licensee to the Company.

The termination date is set as the date at which no further payments of any nature are due.

No payments have been made to date relating to the Galantos Consulting Payments.

#### ALPHA-602 Technology

In November 2020, the Company entered into a license agreement with NLS for the world-wide exclusive right to the Progranulin ("ALPHA-602") Technology. In accordance with the agreement, the Company will pay the following:

- \$50,000 to NLS before January 15, 2021 (paid);
- a royalty of 1.5% of the commercial sales, capped at \$2,000,000, to NLS;
- 10% of any Upfront Payments the Company may receive in the future in excess of \$2,000,000.

F-53

#### **Table of Contents**

ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### **NOTE 11 — COMMITMENTS AND CONTINGENCIES** (cont.)

The Alpha 602 Technology license agreement shall terminate 11 years (November 3, 2031) from the Commencement Date, expiration of the last patents, or when full payment has been made, whichever shall first occur.

The total amount payable to NLS under this agreement shall not exceed \$2,000,000. Regarding the ALPHA-602 technology the Company paid \$50,000 in January 2021 as per the license agreement. No payments have been made to date under the above NLS world-wide exclusive rights for the royalties or Upfront Payments the Company may receive.

#### Spartan Capital Securities, LLC Agreement

On May 30, 2023, the Company agreed to enter into an ongoing consulting services agreement (the "Spartan Consulting Agreement") for a three-year term with Spartan Capital Securities, LLC ("Spartan"). The services include advising and assisting on potential business development transactions, strategic introductions, assisting management with enhancing corporate and stockholder value, and capital raising advice. The Company will pay Spartan a consulting fee in the aggregate amount of \$480,000, payable in three equal installments with each installment being subject to the Company achieving certain business development and capital raising objectives. Spartan will also be

entitled to earn and receive additional Common Shares of the Company which will be issued to Spartan on a rolling basis upon completion of predetermined business development objectives including the closing of certain offering amounts and the completion of material business transactions. As of December 31, 2023, \$160,000 in consulting fees have been paid and no additional common shares had been issued under the consulting services agreement with Spartan.

Subsequent to December 31, 2023, the Company paid the remaining consulting fee of \$320,000 and issued 14,558,285 common shares to Spartan and its assignees pursuant to the Spartan Consulting Agreement.

#### Leases

ACI USA, a subsidiary of the Company, leased office space in Stuart, Florida, under a non-cancelable operating lease which commenced on September 1, 2021, for a term of one year. Rent expense was \$8,000 for the year ended December 31, 2022.

The Company did not extend this lease agreement and it is not necessary to document the potential consideration for lease renewal. As of December 31, 2023 and 2022, the Company has no outstanding leases.

#### Legal Proceedings

During the normal course of business, the Company may become involved in legal claims that may or may not be covered by insurance. Management does not believe that any such claims would have a material impact on the Company's consolidated financial statements.

#### NOTE 12 — CAPITAL DISCLOSURE AND MANAGEMENT

The Company defines its capital as all components of stockholders' equity (deficiency). The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern.

The Company manages its capital structure to maximize its financial flexibility making adjustments to it in response to changes in economic conditions and the risk characteristics of the underlying assets and business opportunities. The Company does not presently utilize any quantitative measures to monitor its capital. The Company is not subject to externally imposed capital requirements.

F-54

#### **Table of Contents**

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### NOTE 13 — LIQUIDITY RISK

Liquidity risk is the risk that the Company will not be able to meet its financial obligations associated with financial liabilities. The Company's ultimate success depends on the outcome of its research and development and collaboration activities. The Company expects to incur additional losses in the future and anticipates the need to raise additional capital to continue to execute its long-range business plan. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

Contractual undiscounted cash flow requirements for financial liabilities as of December 31, 2023, are as follows:

	≤1 Year	>1 Year	Total
Accounts payable	\$ 1,394,117 \$	_	\$ 1,394,117

Promissory note	1,211,463	_	1,211,463
	\$ 2,605,580	\$ —	\$ 2,605,580

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

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

#### **NOTE 14 — SEGMENTED INFORMATION**

The Company currently operates in a single reportable operating segment, being the researching and developing pharmaceutical treatments for neurological diseases in the geographical areas of Canada and the United States of America. Geographic information for the United States and Canada as of December 31, 2023 and 2022 is as follows:

	As at December 31, 2023				
		Canada	United	States	Total
Non-current assets other than financial instruments	\$	532,276	\$	1,455 \$	533,731

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

#### NOTE 15 — NET LOSS PER SHARE

Net loss per common share has been computed on the basis of the weighted-average number of common shares outstanding during the years ended December 31, 2023 and 2022. Since the Company was in a loss position for the years ended December 31, 2023 and 2022, basic net loss per share was the same as diluted net loss per share for the years presented.

The following table sets forth the computation of (loss) earnings per share:

	Years Ended December 31,			
		2023		2022
Numerator	,			
Net loss – basic and diluted	\$ (1	3,763,658)	\$	(12,073,260)
Denominator				
Weighted average shares used to compute net loss per share, basic and diluted	9	94,355,476		67,972,194
Net loss per share – basic and diluted	\$	(0.15)	\$	(0.18)
F-55				

#### **Table of Contents**

#### ALPHA COGNITION INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States Dollars) December 31, 2023 and 2022

#### NOTE 15 — NET LOSS PER SHARE (cont.)

The following potentially dilutive outstanding securities for the years ended December 31, 2023 and 2022 were excluded from the computation of diluted net loss per share because their effect would have been anti-dilutive for the year, see below:

	For the Ye	For the Years Ended		
	December 31, 2023	December 31, 2022		
Warrants	43,729,794	15,981,290		
Common Share options	20,672,207	5,506,071		
ACI Canada legacy performance options	6,821,057	9,521,057		
Total anti-dilutive features	71,223,058	31,008,418		

#### NOTE 16 — INCOME TAXES

No income tax expense was recorded by the Company for the years ended December 31, 2023, and 2022. The Company's federal statutory rate and state and provisional statutory rate was 15% and 12%, respectively. A reconciliation of the provision for income taxes to the income taxes at that statutory rate is as follows:

	For the Years Ended			
		December 31, 2023		December 31, 2022
Federal tax benefit at statutory rate	\$	(2,065,000)	\$	(1,811,000)
State and provisional tax benefit at statutory rate		(1,652,000)		(1,449,000)
Tax effect of:				
Permanent differences and others		1,299,000		214,000
Change in valuation allowance	_	2,418,000		3,046,000
Income tax recovery	\$		\$	

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

	For the Y	ears Ended
	December 31, 2023	December 31, 2022
Deferred income tax assets:		
Non-capital losses carried forward	\$ 11,055,000	\$ 8,823,000
Depreciation and amortization	157,000	135,000
Share issuance costs	357,000	194,000

Property and equipment	1,000	<u> </u>
Total deferred tax assets	11,570,000	9,152,000
Valuation allowance	(11,570,000)	(9,152,000)
Net deferred tax asset	<u> </u>	<u> </u>

Realization of deferred tax assets is dependent upon future taxable income, if any. The Company established a valuation allowance to offset deferred tax assets as of December 31, 2023, and 2022 due to the uncertainty in the amount and timing of the realization of future tax benefits from its net operating loss carryforwards and other deferred tax assets.

Federal and state laws impose substantial restrictions on the utilization of net operating loss and tax credit carryforwards in the event of an ownership change for tax purposes, as defined in Section 382 of the Internal Revenue Code. As a result of such ownership changes, the annual limitation may result in the expiration of net operating losses and credits

F-56

#### Table of Contents

ALPHA COGNITION INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Expressed in United States Dollars)
December 31, 2023 and 2022

#### **NOTE 16 — INCOME TAXES** (cont.)

before utilization. The Company performed a Section 382 analysis through December 31, 2023. The Company has experienced ownership changes in the current year. The ownership change will not result in a limitation that will materially reduce the total amount of net operating loss carryforwards and credits that can be utilized. Subsequent ownership changes may affect the limitation in future years.

At December 31, 2023, the Company had, for Canadian tax purposes, non-capital losses aggregating approximately \$40,184,000. These losses are available to reduce taxable income earned by ACI and ACI Canada in future years and expire between 2035 and 2043. Additionally, as of December 31, 2022, the Company had, for United States of America tax purposes, non-capital losses aggregating approximately \$974,000. These losses are available to reduce taxable income earned by the ACI USA in future years and expire in 2043.

The Company files income tax returns in the United States federal jurisdiction, the State of Florida, and Canada. The Company is not currently under examination by income tax authorities in federal, state, or other jurisdictions. The Company's tax returns remain open for examination for all years.

#### **NOTE 17 — SUBSEQUENT EVENTS**

Management has performed an evaluation of subsequent events after the balance sheet date of December 31, 2023 through April 3, 2024, the date that the consolidated financial statements were available to be issued.

a) On January 19, 2024, the Company completed the fifth and final closing of the Q2 2023 PP by issuing 16,965,762 units at a price of \$0.22 for total gross proceeds of \$3,732,467 ("Q2 2023 PP Tranche 5"). Each unit consists of one Common Share and one warrant with each warrant entitling the holder to purchase an additional Common Share of the Company at the initial pricing of \$0.31 per share until January 19, 2027. In connection with the closing of Q2 2023 PP Tranche 2, the Company paid cash commissions of \$342,320 and issued 1,037,330 agents warrants. Each agent warrant is exercisable into one Common Share of the Company at an exercise price of \$0.31 until January 19, 2027. The Company also paid to certain finder's aggregate cash commission of \$48,858, being 6% of the gross proceeds raised under the offering from investors introduced to the Company by such finders.

- b) In January 2024, the Company paid Spartan the remaining consulting fee of \$320,000 and issued 14,558,285 common shares to Spartan and its assignees pursuant to the Spartan Consulting Agreement.
- c) In January 2024, 272,840 Common Share options with an exercise price of CAD\$0.22 per share were exercised on a cashless basis resulting in the issuance of 192,500 Common Shares.
- d) Effective April 1, 2024, the Company and NLS agreed to another amendment to the promissory note pursuant to which the interest rate was increased from 5.5% to 7% and the maturity date was extended from July 2024 to July 2025. Additionally, \$300,000 is now due on December 31, 2024 with the remaining principal balance due at maturity. (Note 7).
- e) Subsequent to the year ended December 31, 2023, 3,322,471 warrants originally issued on February 16, 2023, had their exercise price modified from CAD\$0.39 to \$0.283 and 6,097,579 warrants originally issued on March 15, 2023, had their exercise price modified from CAD\$0.39 to \$0.289. No change was made to any expiry dates.

F-57

**Table of Contents** 

#### **Shares**



### ALPHA COGNITION INC.

#### Up to 1,334,821 Common Shares

Up to 1,334,821 Pre-Funded Warrants to Purchase 1,334,821 Common Shares
Up to 1,334,821 Warrants to Purchase 1,334,821 Common Shares
Up to 1,334,821 Common Shares underlying such Pre-Funded Warrants
Up to 1,334,821 Common Shares underlying such Warrants

PROSPECTUS

Sole Book-Running Manager

A.G.P.

Co-Manager

**Brookline Capital Markets** 

a division of Arcadia Securities, LLC

, 2024

Until and including , 2024 (25 days after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

#### [ADDITIONAL CANADIAN PAGE]

A copy of this preliminary prospectus has been filed with the securities regulatory authorities in each of the provinces and territories of Canada, other than Québec, but has not yet become final for the purpose of the sale of securities. Information contained in this preliminary prospectus may not be complete and may have to be amended. The securities may not be sold until a receipt for the final prospectus is obtained from the securities regulatory authorities.

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise. This preliminary prospectus constitutes a public offering of these securities only in those jurisdictions where they may be legally offered for sale and only by persons permitted to sell such securities.

Alpha Cognition Inc. has filed a Registration Statement on Form S-1 with the U.S. Securities and Exchange Commission, under the United States Securities Act of 1933, as amended, with respect to these securities.

#### PRELIMINARY PROSPECTUS

New Issue
June 14,
2024



#### ALPHA COGNITION INC.

#### US\$♦

Up to ♦ Common Shares

Up to ♦ Pre-Funded Warrants to Purchase ♦ Common Shares
Up to ♦ Warrants to Purchase ♦ Common Shares
Up to ♦ Common Share underlying such Pre-Funded Warrants
Up to ♦ Common Shares underlying such Warrants

This preliminary prospectus (the "Canadian Prospectus") of Alpha Cognition Inc. (the "Company", "Alpha", "we" or "our"), qualifies the distribution (the "Offering") of up to ♦ common shares, no par value (the "Common Shares") together with warrants to purchase up to ♦ common shares (the "Warrants") pursuant to this Canadian Prospectus at an assumed combined offering price of \$\,\Phi\ per Share and accompanying Warrant (the "Offering Price"). Each Warrant is exercisable to purchase one common share (each, a "Warrant Share") at an assumed exercise price of \$ ♦ (which represents 135% of the assumed Offering Price per Common Share and accompanying Warrant), will be exercisable upon issuance and will expire five years from the Closing Date (as defined below), subject to the Company's option to call the Warrants for redemption, in whole or in part, at a price of \$0.0001 per Warrant, upon not less than 30 days' prior written notice to the holder of the redemption, if, and only if, the reported closing price of the Common Shares equals or exceeds 150% of the exercise price of the Warrants for any 15 consecutive trading days commencing on the date upon which the Warrants are issued and ending three trading days before the Company sends the notice of redemption. The Common Shares and/or Pre-funded Warrants (as defined below) and accompanying Warrants will be issued separately and will be immediately separable upon issuance but will be purchased together in this Offering. This Canadian Prospectus also qualifies the distribution of the Warrant Shares issuable upon exercise of the Warrants. In connection with the Offering, the Company will complete a reverse stock split with a stock split ratio of 1-for-20 (the "Reverse Stock Split"). References in this Canadian Prospectus to securities of the Company

and pricing thereof, including the Common Shares being offered pursuant the Offering and the Offering Price, are presented assuming completion of the Reverse Stock Split.

In addition, the Canadian Prospectus also qualifies the distribution to certain purchasers whose purchase of Common Shares in this Offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares immediately following the consummation of this Offering, the opportunity to purchase, if any such purchaser so chooses, up to ♦ pre-funded warrants ("Pre-Funded Warrants") to purchase up to ♦ Common Shares, in lieu of Common Shares that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of the Company's outstanding common shares. Each Pre-Funded Warrant will be exercisable for one Common Share (each, a "Pre-Funded Warrant Share"). The exercise price of each Pre-Funded Warrant will be US\$0.0001 per Pre-Funded Warrant Share. The Pre-Funded Warrants will be immediately exercisable and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. The combined offering price per Pre-Funded Warrant and accompanying Warrant is equal to \$♠, which is equal to the combined offering price per common share and accompanying warrants less \$0.0001. For each Pre-Funded Warrant we sell, the number of Common Shares we are offering will be decreased on a one-for-one basis. This Canadian Prospectus also qualifies the distribution the Pre-Funded Warrant Shares issuable upon exercise of any Pre-Funded Warrants sold in this Offering.

See "Description of the Securities Being Distributed" and "Plan of Distribution" herein for additional information on the securities being qualified by this Canadian Prospectus.

### Unless otherwise specified, all monetary amounts in this Canadian Prospectus, including the Offering Price listed above, are in U.S. dollars.

We are offering the Common Shares and/or Pre-Funded Warrants and accompanying Warrants for sale concurrently in Canada under the terms of this Canadian Prospectus and in the United States under the terms of a registration statement on Form S-1 (the "Registration Statement") filed with the U.S. Securities and Exchange Commission (the "SEC") under the United States Securities Act of 1933, as amended. The Registration Statement contains a form of U.S. preliminary prospectus (the "U.S. Prospectus"), a copy of which is attached to, forms part of and is incorporated into, this Canadian Prospectus.

The Common Shares, Pre-Funded Warrants and accompanying Warrants (collectively, the "Securities") are being offered in Canada by A.G.P. Canada Investments ULC ("A.G.P Canada") and Ventum Financial Corp. (together with A.G.P. Canada, the "Canadian Underwriters") and in the United States by A.G.P./Alliance Global Partners ("A.G.P.", and together with A.G.P. Canada, the "Representatives") and Brookline Capital Markets, a division of Acadia Securities, LLC (together with A.G.P., the "U.S. Underwriters" and together with the Canadian Underwriters, the "Underwriters"). The U.S. Underwriters will not be distributing the Securities in Canada. The Securities will be issued in accordance with the terms of the underwriting agreement dated ◆, 2024 among the Company and the Representatives, as representatives of the Underwriters (the "Underwriting Agreement"). The Offering Price was determined following arm's length negotiations between the Company and the Underwriters.

We have applied to list our Common Shares on the Nasdaq Capital Market ("Nasdaq") under the trading symbol "ACOG". Our Common Shares are currently listed and posted for trading on the Canadian Securities Exchange (the "CSE") under the symbol "ACOG" and quoted for trading on the OTCQB® Venture Market by OTC Markets Group (the "OTC") under the symbol "ACOGF". On June ◆, 2024, the last trading day prior to the filing of this Canadian Prospectus, the closing price of the Common Shares on the CSE was C\$16 and on the OTC was \$11.20. There is no established public trading market for the Warrants or Pre-Funded Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Warrants or Pre-Funded Warrants on any national securities exchange. Without an active trading market, the liquidity of the Warrants or Pre-Funded Warrants will be limited.

We have applied to list the Common Shares, Warrant Shares and the Pre-Funded Warrant Shares on the CSE. Listing is subject to the Company fulfilling all listing requirements of the CSE.

#### **Table of Contents**

#### [ADDITIONAL CANADIAN PAGE]

Although not yet effective, on June 10, 2024, the Company's board of directors (the "Board") approved the Reverse Stock Split. We anticipate the Reverse Stock Split will be effective on, or just before, the date our Common Shares are listed on the Nasdaq. The Reverse Stock Split is intended to allow us to meet the minimum share price requirement of the Nasdaq. Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our Common Shares, share data, per share data and related information depict the Reverse Stock Split as if it was effective and as if it had occurred at the beginning of the earliest period presented.

Securities of the Company other than the Common Shares are not and will not be listed on any securities exchange. There is currently no market through which the securities of the Company, other than the Common Shares, may be sold. This may affect the pricing of the securities of the Company, other than the Common Shares, in the secondary market, the transparency and availability of trading prices, the liquidity of these securities and the extent of issuer regulation. See "RISK FACTORS" in the U.S. Prospectus.

There is no assurance that Nasdaq will approve our listing application, and any such listing of our Common Shares will be conditional upon Alpha fulfilling all of the listing requirements and conditions of Nasdaq. Investing in our Common Shares involves a high degree of risk. See "RISK FACTORS" in the U.S. Prospectus.

## Price: US\$♦ per Common Share and accompanying Warrant<sup>(1)</sup>

		Cash	Net Proceeds to
	Price to the Public	Commission <sup>(2)</sup>	the Company <sup>(3)</sup>
Per Common Share and	\$♦	\$♦	\$♦
accompanying Warrant			
Total <sup>(4)</sup>	\$♦	\$◆	\$♦

#### **Notes:**

- (1) Purchaser of Pre-Funded Warrants will receive a Pre-Funded Warrant in place of a Common Share, which will result in the Offering Price and net proceeds per Common Share to the Company being reduced by \$0.0001 to \$♠ and \$♠, respectively.
- (2) Pursuant to the Underwriting Agreement, the Underwriters will receive a cash commission equal to 7% of the gross proceeds of the Offering (including any gross proceeds of the Over-Allotment Option) (the "Cash Commission"). In addition, on the Closing Date (as defined below), the Company will issue Underwriters' Warrants (as defined below) to the Underwriters. See "UNDERWRITING" in the U.S. Prospectus for a description of compensation payable to the Underwriters and other fees payable in connection with this Offering.
- (3) Assumes no exercise of the Over-Allotment Option. After deducting the Cash Commission, but before deducting expenses of the Offering which are estimated to be \$♦ and will be paid from the proceeds of the Offering. See "Plan of Distribution".
- (4) The Company has granted to the Representatives of the Underwriters an option (the "Over-Allotment Option"), exercisable in whole or in part in the sole discretion of the Representatives at any time and from time to time until the date which is 45 days following the Closing Date (as defined below), to purchase up to an additional ◆ common shares ("Additional Shares") and/or Pre-Funded Warrants ("Pre-Funded Warrants") and ◆ accompanying Warrants ("Additional Warrants", collectively with Additional Shares and/or Pre-Funded Warrants, the "Additional Securities") from us to cover over-allotments, if any, at the Offering Price (\$♦ per Common Share, \$♦ per Pre-Funded Warrant and \$♦ per Warrant), less the underwriting discounts and commissions. If the Underwriters exercise the Over-Allotment Option in full, the total underwriting discounts and commissions payable by us will be \$♦, and the total proceeds to us, before expenses, will be \$♦. The Representatives can exercise this option in whole or in part at any time and from time to time within 45 days after the date of this Canadian Prospectus. This Canadian Prospectus also qualifies the grant of the Over-Allotment Option and the distribution of the Additional Securities upon exercise of the Over-Allotment Option. Any purchaser who acquires Additional Securities forming part of the over-allotment position of the Underwriters pursuant to the Over-Allotment Option acquires such securities under this Canadian Prospectus, regardless of whether the over-allocation position is ultimately filled through the exercise of the Over-Allotment Option or secondary market purchases. See "Plan of Distribution".

Unless the context otherwise requires, when used in this Canadian Prospectus, all references to the "Offering" include the exercise of the Over-Allotment Option, all references to "Common Shares" include the Additional Common Shares, all references to "Warrants" include the Additional Warrants, all references to "Warrant Shares" include the Common Shares issuable upon exercise of the Additional Warrants, all references to "Pre-Funded Warrants" include the Additional Pre-Funded Warrants, and all references to "Pre-Funded Warrant Shares" include the common shares issuable upon exercise of the Additional Pre-Funded Warrants.

The Company has agreed to issue to the Underwriters upon closing of the Offering, warrants to purchase such number of Common Shares equal to 5% of the Common Shares and Pre-Funded Warrant Shares sold under the Offering (the "Underwriters' Warrants"). The Underwriters' Warrants will be exercisable beginning six months from the effective date of the Registration Statement registered under the Registration Statement of which this Canadian Prospectus is a part and will expire five years following the commencement of sales of the Common Shares. The exercise price of the Underwriters' Warrants will be ♠, being 130% of the Offering Price. See "UNDERWRITING" of the U.S. Prospectus for a description of compensation payable to the Underwriters and other fees payable in connection with this Offering. See also "Plan of Distribution".

Subscriptions for the Securities will be received subject to rejection or allotment in whole or in part and the right is reserved to close the subscription books at any time without notice. Closing is expected to take place on or about ◆, 2024 or such other date as may be agreed between the Company and the Underwriters (the "Closing Date"). See "Plan of Distribution".

C-ii

#### **Table of Contents**

#### [ADDITIONAL CANADIAN PAGE]

At the closing of the Offering, the Company will arrange for an instant deposit of the Common Shares under the book-based system of registration to be registered to CDS Clearing and Depository Services Inc. ("CDS") and deposited with CDS on the Closing Date. Except as otherwise set forth in this Canadian Prospectus, each purchaser of Common Shares will receive only a customer confirmation from the registered dealer who is a CDS participant (a "CDS Participant") from or through whom Common Shares are purchased. Physical certificates or Direct Registration Statements evidencing Common Shares will not be issued except in limited circumstances. Physical certificates will be used for the Warrants and Pre-Funded Warrants and physical certificates or Direct Registration Statements evidencing Common Shares will not be issued except in limited circumstances.

This Canadian Prospectus also qualifies the distribution of the Common Shares issuable upon exercise of the Underwriters' Warrants. The following table sets forth the number of Additional Securities issuable under the Over-Allotment Option and the Underwriters' Warrants issuable to the Underwriters in connection with the Offering:

Underwriters' Position	Maximum Number of Available Securities	<b>Exercise Period</b>	Exercise Price or Acquisition Price
Over-Allotment	♦ Additional Shares	Up to 45 days from the	\$♦ per Additional Share
Option	♦ Additional Pre-	Closing Date	\$♦ per Additional Pre-
	Funded Warrants		Funded Warrant
	♦ Additional Warrants		\$♦ per Additional
			Warrant
Underwriters'	Up to ♦ Common	Exercisable	\$♦ per Common Share
Warrants	Shares <sup>(1)</sup>	commencing six	underlying each
		months after the	Underwriters' Warrant
		effective date of the	
		Registration Statement	
		filed in the United	
		States related to the	
		Offering, and	
		exercisable within five	
		years following the	
		commencement of	
		sales of the Common	
		Shares	

#### **Notes:**

(1) Assuming the exercise in full of the Over-Allotment Option.

The Canadian Underwriters, as principal, conditionally offers the Securities, subject to prior sale, if, as and when issued by us and accepted by the Underwriters in accordance with the conditions contained in the Underwriting Agreement referred to under "UNDERWRITING" in the U.S. Prospectus, and subject to the approval of certain legal matters for the Company by Dorsey & Whitney LLP, with respect to U.S. law, and Morton Law LLP, with respect to Canadian law, and for the Underwriters by Pryor Cashman LLP, with respect to U.S. law, and Tingle Merrett LLP, with respect to Canadian law.

The Offering is subject to the terms of the Underwriting Agreement which provides for the obligations of the Underwriters to pay for and accept delivery of the full number of Units offered by this Canadian Prospectus, subject to prior sale. However, the Underwriters are not required to take or pay for the Additional Securities covered by the Over-Allotment Option.

Certain directors and officers of the Company reside outside of Canada. These persons have appointed the following agents for service of process:

Name of Person or Company	Name and Address of Agent
Michael McFadden	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Lauren D'Angelo	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Len Mertz	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
John Havens	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Phillip Mertz	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8
Don Kalkofen	Morton Law LLP, 1200 - 750 West Pender Street, Vancouver, BC, V6C 2T8

Purchasers are advised that it may not be possible for investors to enforce judgments obtained in Canada against any person or company that is incorporated, continued or otherwise organized under the laws of a foreign jurisdiction or who resides outside of Canada, even if the party has appointed an agent for service of process.

The Company's head office is located at c/o 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8, and its registered office is located at 1200 – 750 West Pender Street, Vancouver, BC, V6C 2T8.

C-iii

#### Table of Contents

#### [ADDITIONAL CANADIAN PAGE]

#### **TABLE OF CONTENTS**

Page
C-1
C-4
C-5
C-6
C-7
C-8
C-8
C-9
C-12
C-13
C-13
C-13
C-14
C-14
C-15
C-18
C-18
C-18
C-18
C-19
C-20
C-21

#### Table of Contents

#### [ADDITIONAL CANADIAN PAGE]

#### **USE OF PROCEEDS**

The estimated net proceeds received by the Company from the Offering (assuming no exercise of the Over-Allotment Option) will be approximately \$• (determined after deducting the Cash Commission of \$• and estimated expenses of the Offering of •). See "*Plan of Distribution*".

The Company intends to use the net proceeds of the Offering as set forth in the U.S. Prospectus under "USE OF PROCEEDS", as summarized in the following table:

Principal Uses	Approxii of Net Pr Offe	oceeds of
Fund Support of non-drug application filing with the FDA <sup>(1)</sup>	\$	•
Commercialization and launch of Alpha-1061 in Alzheimer's disease	\$	•
Research and Development of pipeline products	\$	•
Chemistry, Manufacturing and Controls activities	\$	•
General corporate and working capital purposes <sup>(1)</sup>	\$	•
TOTAL	\$	•

#### Notes:

(1) FDA refers to the U.S. Food and Drug Administration

If the Over-Allotment Option is exercised in full, the estimated net proceeds received by the Company from the Offering will be \$• (determined after deducting the Cash Commission of \$• and estimated expenses of the Offering of \$•). The Company expects to use any proceeds received from the exercise of the Over-Allotment Option for further research and development, commercialization preparations, and general corporate and working capital purposes.

## **Business Objectives and Milestones**

The Company's principal business objectives are described in the U.S. Prospectus under "PROSPECTUS SUMMARY — OUR STRATEGY", which are summarized below.

- Obtain FDA approval for its New Drug Application ("NDA") for ALPHA-1062 in mild-to-moderate Alzheimer's disease. The Company has been granted a Prescription Drug User Fee Act ("PDUFA") date of July 27, 2024, which is a drug approval date in the U.S. However, there is no assurance or guarantee of receiving this approval at this date or at all.
- Continue to advance its development and commercialization activities for ALPHA-1062 in mild-to-moderate Alzheimer's disease, including the commercial manufacturing for ALPHA-1062.
- Pursue the out-licensing of its traumatic brain injury ("TBI") indication to Alpha Seven Therapeutics, Inc. ("Alpha Seven"), where the TBI indication can be further developed through a complete Investigational New Drug ("IND") application submission following the completion of an additional toxicity study and formulation work. The NDA has been granted a PDUFA goal date of July 27, 2024. However, there is no assurance or guarantee of receiving this approval at this date or at all. Alpha Seven is a newly formed private entity which will develop ALPHA-1062IN for applications in TBI.

C-1

#### **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

The Company expects to accomplish the following business objectives and milestones using the net proceeds of the Offering (prior to the exercise of the Over-Allotment Option):

Milestone that must occur for Business Objective to be Business Objective Accomplished		Anticipated Timing to achieve Business Objective	Estimated Cost <sup>(1)</sup>		
Obtain FDA approval for its	The Company will need to respond	Q3 2024	\$707,000		
NDA for ALPHA-1062 in	to regulatory questions and inquiries				

<sup>(2)</sup> Funds set aside for working capital may be allocated to corporate expenses, business development, potential future acquisitions, working capital, general administrative expenses and other purposes.

mild-to-moderate Alzheimer's disease

from FDA in a satisfactory manner and negotiate the commercial label and approval of the product with FDA, which is anticipated in Q3 2024. If approved, ALPHA-1062 would be the second oral therapy available for Alzheimer's patients in the past decade. The approval would represent a next generation oral treatment for disease that address cognitive symptoms Alzheimer's disease.

development commercialization activities commercialization moderate disease, including commercial for ALPHA-1062

Continue to advance its The Company plans to continue its 2Q 2024 – Q2 2025 and development activities preparations for ALPHA-1062 in mild-to- around ALPHA-1062. Chemistry. Alzheimer's Manufacturing and Control the ("CMC") activities may involve manufacturing continuing to refine and define manufacturing practices product specifications followed and met to ensure product safety and consistency between batches. This will include further CMC activities specifically to target commercial batches. The Company refine will also commercialization marketing plan which includes the long term care ("LTC") target market, prioritization of LTC customers. commercialization positioning, marketing messages, operational plans.

\$9,355,000

C-2

## **Table of Contents**

#### Milestone that must occur **Anticipated Timing** for Business Objective to be to achieve Business Accomplished Estimated Cost<sup>(1)</sup> **Business Objective Objective** Pursue the out-licensing of its The Company plans to complete the O3 - O42024\$20,000 TBI indication to Alpha out-license of the TBI asset into TBI Alpha Seven where Alpha Seven where the indication can be further plans to raise the additional capital developed through a complete to advance the TBI program. The IND application submission Company expects to include the following the completion of following in the TBI out-license an additional toxicity study agreement with the Alpha Seven: and formulation work • intellectual property specific to TBI, implementation of a data sharing agreement, and supply and comprehensive manufacturing agreements for

technology advancements in the product.

The Company also intends to utilize its existing management and new consultants experienced in TBI research and development to staff Alpha Seven. Data will be shared from pre-clinical, clinical, and manufacturing work to Alpha Seven to help the company advance the asset.

.....

#### Note:

(1) Excluding working capital and general corporate purposes.

While the Company believes that it has the skills and resources necessary to accomplish these business objectives, there is no guarantee that the Company will be able to do so within the timeframes indicated above, or at all. New or revised directives of various levels of the Canadian and U.S. government and public health authorities in such jurisdictions, the status of labour or equipment availability and the ability to staff facilities, are all factors that could have an adverse impact on the Company's plans.

The Company does not currently have sufficient funds to accomplish these business objectives, and achieving all or a significant part of these business objectives is contingent on the Company completing the Offering or otherwise raising additional funds. The Company intends to spend the funds available to it from the Offering as stated above. However, there may be circumstances where, for sound business reasons, a reallocation of the net proceeds may be necessary. The actual amount that the Company spends in connection with each of the intended uses of proceeds will depend on a number of factors, including those referred to under "RISK FACTORS" in the U.S. Prospectus.

C-3

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

# DESCRIPTION OF THE SECURITIES BEING DISTRIBUTED

The Offering consists of up to ♦ Common Shares and/or Pre-Funded Warrants and up to ♦ accompanying Warrants (including exercise of the Over-Allotment Option). The Common Shares and accompanying Warrants will be issued at the Offering Price, and in the case of the Pre-Funded Warrants the allocation will be \$0.0001 and the purchase price will be the Offering Price less \$0.0001. Pursuant to the Offering, the Company has agreed to issue Underwriters' Warrants to the Underwriters.

## Common Shares, Pre-Funded Warrant Shares and Warrant Shares

The Common Shares, the Pre-Funded Warrant Shares and the Warrant Shares issued pursuant to the Offering will have all of the characteristics, rights and restrictions of our Common Shares. See "DESCRIPTION OF CAPITAL STOCK – COMMON SHARES" in the U.S. Prospectus for a description of the material attributes and characteristics of the Common Shares.

## Warrants

Each Warrant or Pre-Funded Warrant will be transferable and will entitle the holder thereof to acquire one Warrant Share or Pre-Funded Warrant Share at an exercise price of \$♦ per Warrant Share or \$♦ per Pre-Funded Warrant Share,

respectively. The Warrants shall expire on the date that is five years following the Closing Date. The Pre-Funded Warrants may be exercised at any time until all of the Pre-Funded Warrants are exercised in full.

## **Underwriters' Warrants**

The Company has agreed to issue Underwriters' Warrants, the distribution of which are qualified by this Canadian Prospectus.

The Underwriters' Warrants will entitle the Underwriters to purchase Common Shares equal to 5% of the number of Common Shares and Pre-Funded Warrant Shares sold in the Offering (including any Additional Shares and/or common share underlying Additional Pre-Funded Warrants issued upon the exercise of the Over-Allotment Option). The Underwriters' Warrants will have an exercise price equal to \$♠ on the Registration Statement and will expire five years following the commencement of sales of the Common Shares.

The Common Shares issuable upon exercise of the Underwriters' Warrants are identical to those offered by this Canadian Prospectus to investors. See "DESCRIPTION OF CAPITAL STOCK – COMMON SHARES" in the U.S. Prospectus for a description of the material attributes and characteristics of the Common Shares.

C-4

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

#### CONSOLIDATED CAPITALIZATION

Other than as described under the heading "*Prior Sales*" below, there have been no material changes to the Company's share capitalization since March 31, 2024, being the date of the Company's most recently filed interim consolidated financial statements, which are attached to the U.S. Prospectus (the "Interim Financial Statements").

The following table sets forth the capitalization of the Company as at March 31, 2024, as at the dates indicated and adjusted to give effect to the completion of the Offering. The table should be read in conjunction with the Interim Financial Statements and accompanying interim management's discussion and analysis.

Although not yet effective, on June 10, 2024, our Board of Directors approved the Reverse Stock Split with a stock split ratio of 1-for-20. We anticipate affecting the Reverse Stock Split immediately prior to the listing of our Common Shares on the Nasdaq and such Reverse Stock Split being effective on, or just before, the date our Common Shares are listed on the Nasdaq. The Reverse Stock Split is intended to allow us to meet the minimum share price requirement of the Nasdaq.

Except as otherwise indicated and except in our financial statements and the notes thereto, all references to our Common Shares, share data, per share data and related information depict the Reverse Stock Split as if it was effective and as if it had occurred at the beginning of the earliest period presented. The Reverse Stock Split, when effective, will adjust, among other things, the number of Common Shares issuable upon exercise of outstanding options and warrants and the exercise price of such options and warrants. No fractional Common Shares will be issued in connection with the Reverse Stock Split, and any fractional shares resulting from the Reverse Stock Split will be rounded to the nearest whole share.

	As at March 31, 2024 before giving effect to the Offering <sup>(1)</sup>	As at March 31, 2024 after giving effect to the Offering <sup>(2)(3)(4)</sup>
Common Shares	7,496,277	<b>♦</b>
Class A Restricted Shares	Nil	Nil
Class B Preferred Series A Shares	395,819	395,819
Performance Options	$320,053^{(5)}$	<b>♦</b>
Warrants	$3,086,644^{(6)}$	<b>•</b>

## **Notes:**

- (1) Amounts have been adjusted to give effect to the Reverse Stock Split as if it was effective as at the date of this Canadian Prospectus.
- (2) Takes into account adjustments referred to in Notes (4), (6), and (7) below.
- (3) Assuming no exercise of the Over-Allotment Option. See "Plan of Distribution".
- (4) In the event the Over-Allotment Option is exercised in full a further ♦ Additional Common Shares and/or Pre-Funded Warrants and/or ♦ Additional Warrants, and ♦ additional Underwriters' Warrants will be issued.
- (5) Performance Options are exercisable at a price of \$0.20 per share subject to certain performance based vesting requirements being met and continued involvement with the Company and expire between February 1, 2026 and May 31, 2029.
- (6) Warrants are exercisable to acquire Common Shares at prices ranging from \$5.66 to \$8.00 per share and expire between August 30, 2024 and March 15, 2028.
- (7) Stock options are exercisable to acquire Common Shares at prices ranging from \$3.20 to \$8.00 per share and expire between June 1, 2029 and June 8, 2033.

C-5

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

#### **PRIOR SALES**

During the 12 months preceding the date of this Canadian Prospectus, the Company issued the following Common Shares and securities convertible or exchangeable for Common Shares. All securities and pricing information in the table have been adjusted to give effect to the Reverse Stock Split as if it was effective as at each date of issue or grant.

				ue or ercise	
Date of issue or grant	Type of Securities	Number of Securities	Pri	ce of urity	Description of Transaction
January 19, 2024	Common Shares	848,288	\$	4.40	Private placement
January 19, 2024	Warrants	$900,155^{(1)}$	\$	6.20	Private placement
December 22, 2023	Common Shares	457,077	\$	4.40	Private placement
December 22, 2023	Warrants	493,215 <sup>(2)</sup>	\$	6.20	Private placement
November 8, 2023	Common Shares	229,545	\$	4.40	Private placement
November 8, 2023	Warrants	$126,250^{(3)}$	\$	6.20	Private placement
October 16, 2023	Common Shares	79,842	\$	4.40	Private placement
October 16, 2023	Warrants	43,830 <sup>(4)</sup>	\$	6.20	Private placement
August 31, 2023	Common Shares	305,703	\$	4.40	Private placement
August 31, 2023	Warrants	166,491 <sup>(5)</sup>	\$	6.20	Private placement
June 8, 2023	Options	792,928(6)	C\$	4.40	Incentive Stock Options

## **Notes**:

- (1) These warrants expire on January 19, 2027.
- (2) These warrants expire on December 22, 2026.
- (3) These warrants expire on November 8, 2026.
- (4) These warrants expire on October 16, 2026.
- (5) These warrants expire on August 31, 2026.
- (6) Each stock option is exercisable into one common share at a price of C\$4.40 per share until June 8, 2033. 12.5% of these stock options vested immediately upon grant with the balance of the stock options vesting monthly over the following

32 months, with first full vesting June 30, 2023 and final vesting January 30, 2026. On December 19, 2023, 12,555 stock options were exercised with 4,305 stock options being net settled, resulting in the issuance of 8,250 common shares pursuant to the exercise. On February 5, 2024, 4,017 stock options were net settled for the exercise of 9,6250 stock options, governed by the 10% rolling stock option plan.

C-6

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

#### TRADING PRICE AND VOLUME

The Common Shares currently trade on the CSE under the symbol "ACOG" and on the OTC under the symbol "ACOGF". On April 27, 2023, the Company announced that it received conditional approval to list its Common Shares and its listed warrants on the CSE. In connection with the CSE listing, the Company voluntarily delisted its Common Shares and listed warrants from the TSX Venture Exchange (the "TSXV") and the listing on the CSE begun on May 1, 2023. Prior to May 1, 2023, the Common Shares were traded on the TSXV under the symbol "ACOG". The following table shows the high and low trading prices and total trading volume of the Common Shares on the CSE on a monthly basis for the 12 months prior to this Canadian Prospectus, as adjusted to give effect to the Reverse Stock Split as if it was effective for each monthly period:

Month	High (C\$)	Low (C\$)	Volume
May 2024	16.40	12.80	40,512
April 2024	15.20	12.00	37,669
March 2024	18.20	14.20	10,759
February 2024	16.40	12.20	13,244
January 2024	19.80	13.20	20,864
December 2023	19.80	6.00	24,077
November 2023	7.80	4.60	5,136
October 2023	9.20	6.00	9,335
September 2023	8.80	6.80	12,330
August 2023	9.60	6.40	50,153
July 2023	8.80	4.80	34,907
June 2023	5.80	3.80	15,057
C-7	,		

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

## PRINCIPAL SECURITYHOLDERS

To the knowledge of the directors and officers of the Company, as of the date of this Canadian Prospectus, the Company does not have any persons who beneficially own, or exercise control or direction over, directly or indirectly, Common Shares carrying more than 10% of the votes attached to Common Shares. See "*Principal Stockholders*" in the U.S. Prospectus for a list of persons who beneficially own, or exercise control or direction over, directly or indirectly, Common Shares carrying more than 5% of the votes attached to Common Shares.

## INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS

None of the directors, executive officers, employees of the Company or associates or affiliates of such persons, or any of its subsidiaries, is, as at the date of this Canadian Prospectus, or has been at any time during the most recently completed financial year, indebted to the Company or any of its subsidiaries.

C-8

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

## AUDIT COMMITTEES AND CORPORATE GOVERNANCE

For a description of the Company's Board and committees of the Board, see "MANAGEMENT" in the U.S. Prospectus. The following disclosure is provided in this Canadian Prospectus to supplement the matters described under the section entitled "MANAGEMENT" in the U.S. Prospectus.

#### **Audit Committee Information**

Pursuant to the provisions of the *Business Corporations Act* (British Columbia) and NI 52-110 *Audit Committees* of the Canadian Securities Administrators ("NI 52-110"), the Company is required to have an audit committee (the "Audit Committee") and to disclose certain information concerning the constitution of its Audit Committee and its relationship with the Company's independent auditor. The general function of the Audit Committee is to review the overall audit plan and the Company's system of internal controls, to review the results of the external audit, and to resolve any potential dispute with the Company's auditor.

Prior to the completion of this Offering, we will be an SEC issuer within the meaning of National Instrument 52-107 — *Acceptable Accounting Principles and Auditing Standards* ("NI 52-107") and will be required to comply with the listing rules of the Nasdaq with respect to our Audit Committee, including its composition and other requirements. The Board has determined that the Audit Committee also satisfies the independence and financial literacy requirements of NI 52-110.

## Composition of the Audit Committee

The Company's current Audit Committee consists of Len Mertz (independent), Rajeev 'Rob' Bakshi (independent) and John Havens (independent).

NI 52-110 provides that a member of an audit committee is "independent" if the member has no direct or indirect material relationship with the Company, that could, in the view of the Board, reasonably interfere with the exercise of the member's independent judgment.

NI 52-110 provides that an individual is "financially literate" if he or she has 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 reasonably be expected to be raised by the Company's financial statements. All of the members of the Audit Committee are "financially literate" as that term is defined in NI 52-110. The Audit Committee members' education and experience that is relevant to the performance of each of their responsibilities as an audit committee member is set out in the U.S Prospectus under the section entitled see "MANAGEMENT — Audit Committee — Relevant Education and Experience."

#### Reliance on Certain Exemptions

Since the effective date of NI 52-110, the Company has not relied on the exemptions contained in sections 2.4 (De Minimis Non-Audit Services), subsection 6.1.1(4) (Circumstance Affecting the Business or Operations of the Venture Issuer), subsection 6.1.1(5) (Events Outside Control of Member), subsection 6.1.1(6) (Death, Incapacity or Resignation), or under Part 8 (Exemption) of NI 52-110.

# Pre-Approval Policies and Procedures

The Audit Committee has not adopted any specific policies and procedures for the engagement of non-audit services.

C-9

#### **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

#### External Auditor Service Fees

The aggregate fees billed to the Company for the last two (2) fiscal years noted below by Manning Elliott LLP, the Company's auditor, are as follows:

		A	Audit Related		
Financial Year Ending	A	udit Fees <sup>(1)</sup>	Fees <sup>(2)</sup>	Tax Fees(3)	All Other Fees <sup>(4)</sup>
December 31, 2023	\$	175,000 \$	92,500	Nil	Nil
December 31, 2022	\$	110,000 \$	124,975	Nil	Nil

#### **Notes:**

- (1) "Audit Fees" include fees necessary to perform the annual audit and quarterly reviews of the Company's financial statements. Audit Fees include fees for review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit Fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits.
- (2) "Audit-Related Fees" include services that are traditionally performed by the auditor. These audit-related services include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation. Above Audit Related Fees primarily related to review and audit of Financial Statements prepared under Generally Accepted Accounting Principles and fees related to reviewing financials included in drafted US SEC filings.
- (3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.
- (4) "All Other Fees" include all other non-audit services.

## **Exemption**

The Company is relying on the exemption provided by section 6.1 of NI 52-110 which provides that the Company, as a venture issuer, is not required to comply with Part 3 (*Composition of the Audit Committee*) and Part 5 (*Reporting Obligations*) of NI 52-110.

#### **Board of Directors**

## **Board Mandate**

The Board is responsible for managing or supervising the management of our business and affairs. This includes appointing our Chief Executive Officer, advising management on strategic issues, approving our business and other plans and monitoring our performance against those plans and against our operating and capital budgets. In addition, we expect that the Board will also receive and consider recommendations from our various committees with respect to matters such as the following:

- the compensation of our directors;
- criteria for board and committee membership;
- persons to be nominated for election as directors and to each of the Board's committees; and
- matters relating to our code of business conduct and ethics and corporate governance guidelines.

The Board does not have a written mandate.

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 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.

C-10

# **Table of Contents**

# [ADDITIONAL CANADIAN PAGE]

The Company has adopted written corporate governance guidelines to support continuing education opportunities for all directors. The Company's governance and nominating committee (the "Governance and Nominating Committee") is comprised of two directors of the Company, John Havens (Chair) and Len Mertz, and is also 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 Nominating Committee Charter;
- Audit Committee Charter; and
- Compensation Committee Charter.

Copies of the Code of Business Conduct and Ethics, Governance and Nomination Committee Charter, Audit Committee Charter, Disclosure Policy and Compensation Committee Charter are available on the Company's website.

## **Board Committees**

The Company has no other committees, other than the Audit Committee, the Compensation Committee and the Governance and Nominating Committee. Being a venture issuer with limited administration resources, the Board works closely with management, and each other, and as a consequence are in a position to assess the performance of the Board, its committees and individual directors on an ongoing basis.

#### **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.

C-11

## **Table of Contents**

## PLAN OF DISTRIBUTION

The following discussion supplements the discussion in the U.S. Prospectus under "UNDERWRITING".

The Securities will be offered in each of the provinces and territories of Canada, except Québec, and subject to applicable law and the Underwriting Agreement, certain jurisdictions outside of Canada, not including the United States. Pursuant to the Underwriting Agreement, the Company has agreed to issue and sell, and the Underwriters have agreed to purchase, as principal, on the Closing Date, a total of up to ♦ Common Shares and/or Pre-Funded Warrants and up to ♦ accompanying Warrants at the Offering Price of \$♦ per Common Share or Pre-Funded Warrant and Warrant , payable in cash to the Company against delivery, subject to the terms and conditions of the Underwriting Agreement.

The Offering Price and certain other terms of the Offering have been determined by arm's length negotiations between the Company and the Underwriters.

Pursuant to the Underwriting Agreement, the Company has granted to the Representatives of the Underwriters the Over-Allotment Option exercisable in whole or in part in the sole discretion of the Underwriters at any time and from time to time until the date which is 45 days following the Closing Date, to purchase up to an additional ♦ Common Shares and/or Pre-Funded Warrants and/or ♦ accompanying Warrants, at a price equal to the Offering Price, solely to cover over-allotments, if any, and for market stabilization purposes. The Over-Allotment Option may be exercised to purchase: (a) up to ♦ Additional Common Shares at the Offering Price per Additional Shares, (b) up to ♦ Additional Pre-Funded Warrants at \$♦ per Additional Warrants; (c) up to ♦ Additional Warrants at \$♦ per Additional Warrants, provided that the number of Additional Shares and/or the number of Additional Pre-Funded Warrants does not exceed ♦, and the number of Additional Warrants does not exceed ♦ (assuming completion of the Offering in full). This Canadian Prospectus also qualifies the grant of the Over-Allotment Option and the distribution of the Additional Securities upon exercise of the Over-Allotment Option. Any purchaser who acquires Additional Securities forming part of the over-allotment position of the Underwriters pursuant to the Over-Allotment Option acquires such securities under this Canadian Prospectus, regardless of whether the over-allotment position is ultimately filled through the exercise of the Over-Allotment Option or secondary market purchases.

See "UNDERWRITING – DISCOUNTS, COMMISSIONS AND EXPENSES" in the U.S. Prospectus for a description of compensation payable to the Underwriters and other fees and expenses payable in connection with this Offering.

The Company intends to complete the necessary filings with the CSE for the listing of the Common Shares, Pre-Funded Warrant Shares and the Warrant Shares issued pursuant to the Offering on the CSE. In addition, the Company is applying to list all of its Common Shares on Nasdaq under the trading symbol "ACOG". Listing will be subject CSE and Nasdaq approval and the Company fulfilling all listing requirements of both the CSE and Nasdaq.

The Offering is expected to close on or about ♠, 2024, or such other date as may be agreed upon between the Company and the Underwriters.

The Summary of the terms of the Underwriting Agreement herein and in the U.S. Prospectus under "UNDERWRITING" does not purport to be complete, and is qualified in its entirety by reference to the provisions of the Underwriting Agreement, a copy of which has been filed with the securities commissions in Canada and is available on SEDAR+ at www.sedarplus.com.

Pursuant to the policies of certain Canadian securities regulators, the Underwriters may not, throughout the period of distribution under this Canadian Prospectus, bid for or purchase Common Shares. The foregoing restriction is subject to certain exceptions, including: (a) a bid or purchase permitted under the bylaws and rules of applicable regulatory authorities and stock exchanges, including the Universal Market Integrity Rules for Canadian Marketplaces administered by the Canadian Investment Regulatory Organization, relating to market stabilization and passive market-making activities; (b) a bid or purchase made for and on behalf of a customer where the order was not solicited during the period of distribution; (c) a bid or purchase to cover a short position entered into prior to the distribution;

and (d) transactions in compliance with U.S. federal securities laws. Any such trades are permitted only on the condition that the bid or purchase is not engaged in for the purpose of creating actual or apparent active trading in or raising the price of the Common Shares.

C-12

## Table of Contents

## [ADDITIONAL CANADIAN PAGE]

## INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as may be described in this Canadian Prospectus, there are no material interests, direct or indirect, of any of our directors or executive officers, any shareholder that beneficially owns, or controls or directs (directly or indirectly), more than 10% of any class or series of our outstanding voting securities, or any associate or affiliate of any of the foregoing persons, in any transaction within the three years before the date hereof that has materially affected or is reasonably expected to materially affect us or any of our subsidiaries.

## AUDITOR, TRANSFER AGENT AND REGISTRAR

The Company's auditors are Manning Elliott LLP, Chartered Accountants ("Manning Elliott") located at 1030 W. Georgia Street, Suite 1700, Vancouver, BC, V6E 2Y3. Manning Elliott is independent with respect to the Company within the meaning of the Code of Professional Conduct of the Chartered Professional Accountants of British Columbia.

## **MATERIAL CONTRACTS**

The following are our only material contracts that will be in effect on the closing of this Offering, other than certain agreements entered into in the ordinary course of business:

- 1. ALPHA-1062 Agreement dated March 23, 2015, as amended effective April 1, 2015.
- 2. ALPHA-1062 Royalty Agreement dated January 1, 2016.
- 3. ALPHA-0602 Agreement dated January 1, 2020, as amended November 4, 2020.
- 4. ALPHA-0602 Royalty Agreement dated November 3, 2020.
- 5. A Second Amended License Agreement dated March 1, 2023, between the Company and Neurodyn Life Sciences Inc. for the exclusive world-wide license ALPHA 1062 technology.
- 6. Consulting Agreement between the Company and Spartan Capital Securities, LLC dated May 17, 2023.
- 7. Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated May 17, 2023.
- 8. Amendment No. 1 to the Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated December 4, 2023.
- 9. A Third Amended License Agreement effective dated April 1, 2024, between the Company and Neurodyn Life Sciences Inc. for the exclusive world-wide license ALPHA 1062 technology.
- 10. Agreement and Waiver to the Investment Banking Agreement between the Company and Spartan Capital Securities, LLC dated June 10, 2024.

Copies of the foregoing documents are available on SEDAR+ at www.sedarplus.com.

## [ADDITIONAL CANADIAN PAGE]

#### **EXPERTS**

Certain legal matters in connection with the Offering will be passed upon on behalf of the Company by Morton Law LLP, as to Canadian legal matters, Dorsey & Whitney LLP, as to U.S. legal matters, and Legacy Tax + Trust Lawyers, with respect to matters of tax law. Certain legal matters in connection with the Offering will be passed upon on behalf of the Underwriters by Tingle Merrett LLP, as to Canadian legal matters, and Pryor Cashman LLP, as to U.S. legal matters.

As of the date of this Canadian Prospectus, the partners and associates of Morton Law LLP, Dorsey & Whitney LLP, Tingle Merrett LLP, and Pryor Cashman LLP, beneficially own, directly or indirectly, in the aggregate less than 1% of the issued and outstanding Common Shares, and the directors and shareholders of Legacy Tax + Trust Lawyers, each as a group, beneficially own, directly or indirectly, less than 1% of the outstanding Common Shares.

## **ELIGIBILITY FOR INVESTMENT**

In the opinion of ♠, our Canadian counsel, based on the current provisions of the *Income Tax Act* (Canada) and the regulations thereunder (the "Tax Act"), the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares Warrants and Warrant Shares, if issued on the date of this Offering, would be "qualified investments" under the Tax Act at a particular time for a trust governed by a registered retirement savings plan ("RRSP"), a registered retirement income fund ("RRIF"), a registered education savings plan ("RESP"), a registered disability savings plan ("RDSP"), a first home savings account ("FHSA"), a tax-free savings account ("TFSA") (each, a "Defined Plan") or a deferred profit sharing plan (a "DPSP"), provided that at such time in the case of the Common Shares, the Pre-Funded Warrant Shares and Warrant Shares, such shares are listed on a "designated stock exchange" as defined in the Tax Act (which currently includes the CSE) or the Company otherwise qualifies as a "public corporation" other than a "mortgage investment corporation" (each as defined in the Tax Act).

Notwithstanding that the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares may be qualified investments for a trust governed by a Defined Plan, the annuitant under an RRSP or RRIF, the holder of an RDSP, a TFSA or a FHSA or a subscriber of an RESP, as applicable, will be subject to a penalty tax if such Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares are "prohibited investments" (as defined in the Tax Act) for the relevant Defined Plan. The Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares will generally not be a "prohibited investment" provided that the annuitant under the RRSP or RRIF, the holder of the RDSP, TFSA or FHSA or subscriber of the RESP, as applicable, deals at arm's length with the Company for purposes of the Tax Act and does not have a "significant interest" (as defined in the Tax Act) in the Company. Prospective purchasers who intend to hold the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares in a Defined Plan should consult their own tax advisors regarding whether the Common Shares, Pre-Funded Warrants, Pre-Funded Warrants Shares will be a prohibited investment in their particular circumstances.

C-14

**Table of Contents** 

# [ADDITIONAL CANADIAN PAGE]

## CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

In the opinion of ♠, our Canadian counsel, the following is a general summary, as of the date hereof, of the principal Canadian federal income tax considerations under the Tax Act generally applicable to a holder who acquires, as beneficial owner, Common Shares, Pre-Funded Warrants and Warrants comprising the Securities pursuant to this Offering. This summary applies only to a holder who, for the purposes of the Tax Act and at all relevant times: (i) is or is deemed to be, a resident of Canada, (ii) deals at arm's length with the Company and the Underwriters and is not affiliated with the Company or the Underwriters, and (iii) acquires and holds the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares as capital property (a "Resident Holder").

Generally, the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares will be considered to be capital property to a Resident Holder unless they are held in the course of carrying on a business or were acquired in one or more transactions considered to be an adventure or concern in the nature of trade. A Resident Holder whose Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares might not otherwise qualify as capital property may, in certain circumstances, be entitled to make the irrevocable election provided by subsection 39(4) of the Tax Act to have its Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares and every other "Canadian security" (as defined in the Tax Act) owned by such Resident Holder in the taxation year of the election and in all subsequent taxation years deemed to be capital property. Such Resident Holders should consult their own tax advisors as to whether an election under subsection 39(4) of the Tax Act is available and/or advisable in their particular circumstances.

This summary is not applicable to a Resident Holder: (i) that is a "financial institution" within the meaning of the Tax Act (including for the purposes of the mark-to-market rules in the Tax Act); (ii) that is a "specified financial institution" within the meaning of the Tax Act; (iii) that reports its "Canadian tax results" within the meaning of the Tax Act in a currency other than Canadian currency; (iv) an interest in which is, or for whom the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares would be, a "tax shelter investment" within the meaning of the Tax Act; (v) that enters into or has entered into, with respect to the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares, a "derivative forward agreement" or "synthetic disposition arrangement" as those terms are defined in the Tax Act; (vi) that is exempt from tax under Part I of the Tax Act; or (vii) that receives dividends on the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares under or as part of a "dividend rental arrangement" as defined in the Tax Act. Such Resident Holders should consult their own tax advisors.

Additional considerations, not discussed herein, may be applicable to a Resident Holder that is a corporation resident in Canada, and is or becomes (or does not deal at arm's length, for purposes of the Tax Act, with a corporation resident in Canada that is or becomes), as part of a transaction or event or series of transactions or events that includes the acquisition of the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares, controlled by a non-resident person, or group of non-resident persons not dealing with each other at arm's length, for purposes of the "foreign affiliate dumping" rules in section 212.3 of the Tax Act. Such Resident Holders should consult their tax advisors with respect to the consequences of acquiring the Units.

This summary does not address the deductibility of interest by a Resident Holder who has borrowed money or otherwise incurred debt in connection with the acquisition of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares.

This summary is based upon: (i) the current provisions of the Tax Act in force as of the date hereof; (ii) all specific proposals (the "Tax Proposals") to amend the Tax Act that have been publicly announced by, or on behalf of, the Minister of Finance (Canada) prior to the date hereof; and (iii) counsel's understanding of the current published administrative policies and assessing practices of the Canada Revenue Agency (the "CRA") made publicly available in writing prior to the date hereof. This summary assumes that all such Tax Proposals will be enacted in the form currently proposed but no assurance can be given that they will be enacted in the form proposed or at all. This summary does not otherwise take into account or anticipate any changes in law, administrative policy or assessing practice, whether by legislative, regulatory, administrative, governmental or judicial interpretation, decision or action, nor does it take into account the tax laws of any province or territory of Canada or of any jurisdiction outside of Canada, which may differ from the Canadian federal income tax considerations described herein.

Generally, for purposes of the Tax Act, all amounts relating to the acquisition, holding or disposition of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares must be expressed in Canadian currency. Amounts denominated in another currency must be converted into Canadian currency using the applicable rate of exchange (pursuant to the Tax Act) quoted by the Bank of Canada on the date such amounts arose, or such other rate of exchange as is acceptable to the CRA. The amount of dividends required to be included in the income of, and capital gains or capital losses realized by, a Resident Holder may be affected by fluctuations in the Canadian / U.S. dollar exchange rate.

## Table of Contents

## [ADDITIONAL CANADIAN PAGE]

This summary is not exhaustive of all possible Canadian federal income tax considerations of purchasing, holding or disposing of the Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares. Moreover, this summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any particular Resident Holder and no representation with respect to the income tax consequences to any particular Resident Holder is made. Accordingly, Resident Holders are urged to consult their own tax advisors about the specific tax consequences to them of acquiring, holding and disposing of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares in their particular circumstances.

## Allocation of Offering Price

Resident Holders will be required to allocate the Offering Price between the Common Share and/or Pre-Funded Warrant and accompanying Warrant on a reasonable basis in order to determine their respective costs for the purposes of the Tax Act. The Company intends to allocate \$♠ of the Offering Price to each Common Share and \$♠ of the Offering Price to each Warrant, provided in the case of the Pre-Funded Warrants the allocation will be \$0.0001 and the purchase price will be the Offering Price less \$0.0001 . As of the date of this Prospectus, the Company believes that such allocation is reasonable, but such allocation will not be binding on the CRA or a Resident Holder, and counsel express no opinion with respect to such allocation. The adjusted cost base to a Resident Holder of a Common Share will be determined by averaging the cost of such Common Share with the adjusted cost base of all other Common Shares of the Company held by the Resident Holder as capital property immediately before such acquisition.

## Exercise of Warrants

The exercise of a Warrant to acquire a Warrant Share will not constitute a disposition of property for the purposes of the Tax Act and, consequently, no gain or loss will be realized by a Resident Holder on the exercise of a Warrant to acquire a Warrant Share. When a Warrant is exercised, the Resident Holder's cost of the Warrant Share acquired thereby will be equal to the aggregate of the Resident Holder's adjusted cost base of such Warrant and the exercise price paid for the Warrant Share. The Resident Holder's adjusted cost base of the Warrant Share so acquired will be determined by averaging the cost of the Warrant Share with the adjusted cost base to the Resident Holder of all other Common Shares of the Company held by the Resident Holder as capital property immediately before such acquisition.

## **Expiry of Warrants**

The expiry of an unexercised Warrant generally will result in a capital loss to the Resident Holder equal to the adjusted cost base of the Warrant to the Resident Holder immediately before its expiry. See discussion below under the subheading "Taxation of Capital Gains and Capital Losses".

## Taxation of Dividends Received by Resident Holders

A Resident Holder will be required to include in computing its income for a taxation year any taxable dividend received or deemed to be received on a Common Share or Pre-Funded Warrant Share or Warrant Share. In the case of a Resident Holder that is an individual (other than certain trusts), such dividend will be subject to the gross-up and dividend tax credit rules normally applicable under the Tax Act to taxable dividends received from taxable Canadian corporations. Taxable dividends that are designated by the Company as "eligible dividends" will be subject to an enhanced gross-up and tax credit regime in accordance with the rules in the Tax Act. There may be limitations on the ability of the Company to designate dividends as eligible dividends. In the case of a Resident Holder that is a corporation, the amount of any such taxable dividend that is included in its income for a taxation year will generally be deductible in computing its taxable income for that taxation year. In certain circumstances, subsection 55(2) of the Tax Act will treat a taxable dividend received by a Resident Holder that is a corporation as proceeds of a disposition

or a capital gain. Resident Holders that are corporations should consult their own tax advisors having regard to their own circumstances.

A Resident Holder that is a "private corporation" (as defined in the Tax Act) or a "subject corporation" (as defined for the purposes of Part IV of the Tax Act), may be liable to pay an additional tax (refundable in certain circumstances) under Part IV of the Tax Act on dividends received or deemed to be received on the Shares to the extent such dividends are deductible in computing taxable income for the year.

# Disposition of Common Shares, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrants and Warrant Shares

A Resident Holder who disposes of or is deemed for the purposes of the Tax Act to have disposed of a Common Share or Pre-Funded Warrant Share or Warrant Share (other than to the Company unless purchased by the Company in the open market in the manner in which shares are normally purchased by any member of the public in the open market) or a Warrant or a Pre-Funded Warrant (other than on the expiry or exercise thereof), will realize a capital gain (or incur a capital loss) equal to the amount by which the proceeds of disposition in respect of the Common Share, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrant Share or Warrant exceed (or are exceeded by) the aggregate of: (i) the adjusted cost base to the Resident Holder of such Common Share, Pre-Funded Warrants, Pre-Funded Warrant Shares, Warrant Immediately before the disposition; and (ii) any reasonable expenses incurred for the purpose of making the disposition. The adjusted cost base to a Resident Holder of a Common Share or Pre-Funded Warrant or Warrant acquired pursuant to the Offering or a Warrant Share acquired pursuant to the exercise of a Pre-Funded Warrant will be calculated as set out under the subheadings "Allocation of Offering Price" and "Exercise of Warrants" above. The tax treatment of capital gains and capital losses is discussed in greater detail below under the subheading "Taxation of Capital Gains and Capital Losses".

## Taxation of Capital Gains and Capital Losses

Generally, one-half of any capital gain (a "taxable capital gain") realized by a Resident Holder must be included in the Resident Holder's income for the taxation year in which the disposition (or deemed disposition) occurs. Subject to and in accordance with the provisions of the Tax Act, one-half of any capital loss incurred by a Resident Holder (an "allowable capital loss") must generally be deducted from taxable capital gains realized by the Resident Holder in the taxation year in which the disposition (or deemed disposition) occurs. Allowable capital losses in excess of taxable capital gains for the taxation year of disposition (or deemed disposition) generally may be carried back and deducted in the three preceding taxation years or carried forward and deducted in any subsequent taxation year against net taxable capital gains realized in such years, to the extent and under the circumstances provided in the Tax Act.

Pursuant to Tax Proposals announced in the Federal Budget on April 16, 2024 (the "Budget 2024 Tax Proposals"), subject to certain transitional rules, the portion of a capital gain included in the taxable capital gain will be increased from one-half to two-thirds in respect of (i) dispositions realized by a Resident Holder that is an individual (excluding a trust) on or after June 25, 2024, for the portion of capital gains realized in the year (or, in the case of the 2024 taxation year, the portion of the year beginning on June 25, 2024) that exceed \$250,000 (net of current-year capital losses, capital losses of other years applied to reduce current-year capital gains and capital gains subject to certain statutory exemptions and incentives), and (ii) dispositions realized by a Resident Holder that is a corporation or trust on or after June 25, 2024. Under the Budget 2024 Tax Proposals, two-thirds of capital losses (including capital losses realized prior to June 25, 2024) will be deductible against capital gains included in income at the two-thirds inclusion rate such that a capital loss will offset an equivalent capital gain regardless of the inclusion rate. The Budget 2024 Tax Proposals do not include comprehensive rules (including draft legislation) and state that additional details related to the change of the capital gains inclusion rate are forthcoming. Resident Holders are advised to consult their personal tax advisors with regard to the Budget 2024 Tax Proposals.

The amount of any capital loss realized on the disposition or deemed disposition of Common Shares or Pre-Funded Warrant Share or Warrant Shares by a Resident Holder that is a corporation may, in certain circumstances, be reduced by the amount of dividends (including deemed dividends) which have been previously received (or deemed to be received) by it on such shares or shares substituted for such shares to the extent and under the circumstances specified by the Tax Act. Similar rules may apply where a Resident Holder that is a corporation is a member of a partnership or beneficiary of a trust that owns such shares or that itself is a member of a partnership or a beneficiary of a trust that owns such shares. Resident Holders to whom these rules may be relevant should consult their own tax advisors.

A Resident Holder that is throughout its taxation year a "Canadian-controlled private corporation" (as defined in the Tax Act) may be liable to pay an additional refundable tax on its "aggregate investment income", which includes an amount in respect of taxable capital gains. Tax Proposals contained in Bill C-59 tabled in Parliament on November 30, 2023 would, if enacted, extend this additional tax and refund mechanism in respect of "aggregate investment income" to a Resident Holder that is or is deemed to be a "substantive CCPC" (as defined in the Tax Proposals) at any time in the relevant taxation year. Resident Holders are advised to consult their own tax advisors.

Capital gains realized (or deemed to be realized) by a Resident Holder who is an individual (other than certain trusts) may give rise to alternative minimum tax under the Tax Act. Resident Holders should consult their own advisors with respect to the application of alternative minimum tax.

C-17

**Table of Contents** 

# [ADDITIONAL CANADIAN PAGE]

#### MARKETING MATERIALS

Any template version of any other marketing materials filed with the securities commission or similar regulatory authority in each of the provinces and territories of Canada, other than Québec, in connection with this Offering after the date hereof, but prior to the termination of the distribution of our Common Shares under this Canadian Prospectus (including any amendments to, or an amended version of, any template version of any marketing materials), is deemed to be incorporated by reference herein. Any template version of any marketing materials used in connection with this Offering is not part of this Canadian Prospectus to the extent that the contents of the template version of the marketing materials have been modified or superseded by a statement contained in this Canadian Prospectus.

#### CONTINUOUS DISCLOSURE

We recently became subject to the reporting requirements of the United States Securities and Exchange Commission under Section 15(d) of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"), and we will be filing annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K in order to satisfy our periodic disclosure requirements under the Exchange Act. We intend to comply with applicable Canadian continuous disclosure requirements under National Instrument 51-102 *Continuous Disclosure Obligations* and other applicable Canadian securities laws, including any provisions available to an SEC Issuer within the meaning of such instrument and other applicable Canadian securities laws, which may result in us filing our annual reports on Form 10-K and quarterly reports on Form 10-Q in Canada to satisfy our Canadian continuous disclosure requirements.

## NOTICE TO INVESTORS REGARDING U.S. GAAP

We prepare our financial information in accordance with U.S. generally accepted accounting principles, which differ in certain material respects from Canadian generally accepted accounting principles applicable to publicly accountable enterprises (which are International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"). As we are an SEC issuer (as such term is defined in NI 52-107), we are not required to provide, and have not provided, a reconciliation of our financial statements to IFRS.

## STATUTORY RIGHTS OF WITHDRAWAL AND RESCISSION

Securities legislation in certain of the provinces and territories of Canada provides purchasers with the right to withdraw from an agreement to purchase securities. This right may be exercised within two business days after receipt or deemed receipt of this Canadian Prospectus and any amendment. The securities legislation further provides a purchaser with remedies for rescission or, in some jurisdictions, revisions of the price or damages if the prospectus and any amendment contains a misrepresentation or is not delivered to the purchaser, provided that the remedies for rescission, revisions of the price or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for the particulars of these rights or consult with a legal adviser.

	C-18	
Table of Contents		
	[ADDITIONAL CANADIAN PAGE]	
	U.S. PROSPECTUS	
	(See Attached)	
	C-19	

## **Table of Contents**

## [ADDITIONAL CANADIAN PAGE]

# CERTIFICATE OF THE COMPANY

**Dated: June 14, 2024** 

This prospectus constitutes full, true and plain disclosure of all material facts relating to the securities offered by this prospectus as required by the securities legislation of each of the provinces and territories of Canada, except Québec.

"Michael McFadden"	"Don Kalkofen"
Michael McFadden	Don Kalkofen
Chief Executive Officer	Chief Financial Officer
On behalf of the Bo	pard of Directors of the Company
"Len Mertz"	"Kenneth Cawkell"
Len Mertz Director	Kenneth Cawkell Director
	C-20

Table of Contents

[ADDITIONAL CANADIAN PAGE]

# CERTIFICATE OF THE CANADIAN UNDERWRITER

## **Dated: June 14, 2024**

To the best of our knowledge, information and belief, this prospectus constitutes full, true and plain disclosure of all material facts relating to the securities offered by this prospectus as required by the securities legislation of each of the provinces and territories of Canada, except Québec.

## A.G.P. CANADA INVESTMENTS ULC

"James Randall Kirsch"

James Randall Kirsch President Co-Head of Investment Banking Alliance Global Partners Canada

# VENTUM FINANCIAL CORP.

"John Rak"

John Rak Managing Director, Investment Banking Ventum Financial Corp.

# CERTIFICATE OF THE COMPANY

**Dated: June 13, 2024** 

This	prospectus	constitutes	full, t	true ai	nd plain	disclosi	are of	all	material	facts	relating to	the	securities
offe	red by this p	rospectus a	s requ	ired b	y the sec	curities l	egisla	tion	of each	of the	provinces	and	territories
of C	anada, exce	pt Québec.											

"Michael McFadden"	"Don Kalkofen"		
Michael McFadden	Don Kalkofen		
Chief Executive Officer	Chief Financial Officer		
"Len Mertz"	"Kenneth Cawkell"		
Len Mertz	Kenneth Cawkell		
Director	Director		

# CERTIFICATE OF THE CANADIAN UNDERWRITERS

**Dated: June 13, 2024** 

To the best of our knowledge, information and belief, this prospectus constitutes full, true and plain disclosure of all material facts relating to the securities offered by this prospectus as required by the securities legislation of each of the provinces and territories of Canada, except Québec.

# A.G.P. CANADA INVESTMENTS ULC

"James Randall Kirsch"

James Randall Kirsch

President of A.G.P. Canada

## VENTUM FINANCIAL CORP.

"John Rak"

John Rak

Managing Director, Investment Banking