### PROSPECTUS SUPPLEMENT

(To the Prospectus Dated February 3, 2023)



### 320,000 Common Shares Pre-Funded Warrants to Purchase 490,810 Common Shares 490,810 Common Shares Underlying such Pre-Funded Warrants

Pursuant to this prospectus supplement and the accompanying prospectus, XORTX Therapeutics Inc. ("we", the "Company" or "XORTX") is offering to an institutional investor (the "Purchaser") under a securities purchase agreement entered into on October 17, 2024 between the Company and the Purchasers (the **Purchase Agreement**"), 320,000 common shares, without par value, of the Company (the "Shares"). Each Share is being sold at a price of \$1.85.

We are also offering pre-funded warrants (the "Pre-Funded Warrants") to purchase up to 490,810 common shares of the Company (the 'Pre-Funded Warrant Shares') to the same Purchaser, whose purchase of Shares in this offering would otherwise result in the Purchaser, together with its respective affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the Purchaser at closing, 9.99%) of our outstanding common shares immediately following the consummation of this offering, in lieu of Shares that would otherwise result in such Purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser at closing, 9.99%) of our outstanding common shares. The offering price of each Pre-Funded Warrant is \$1.84999 (equal to the price per Share being sold in this offering, minus \$0.00001), and the exercise price of each Pre-Funded Warrant is \$0.00001 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 exercise of the Pre-Funded Warrants.

In a concurrent private placement, we are also selling to the Purchaser warrants (the "Common Warrants") to purchase up to 810,810 common shares (the 'Common Warrant Shares'), with an exercise price of \$2.18 per Common Warrant Share, and exercisable immediately upon issuance with a term of five years from the date of issuance. The Common Warrants and the Common Warrant Shares issuable upon the exercise of the Common Warrants are being offered pursuant to the exemptions provided in Section 4(a) (2) under the Securities Act of 1933, as amended (the "Securities Act"), and Rule 506(b) promulgated thereunder, and they are not being offered pursuant to this prospectus supplement and the accompanying prospectus.

Our common shares are listed on the TSX Venture Exchange ("TSXV") and the Nasdaq Stock Market LLC (the "Nasdaq") under the trading symbol "XRTX". On October 16, 2024, the last trading day prior to the date of this prospectus supplement, the closing price of the common shares on the TSXV was US\$2.13 (based on the daily exchange rate for the U.S. dollar in terms of Canadian dollars, as quoted by the Bank of Canada, on October 16, 2024 of C\$1.00 = US\$0.7262), and on the Nasdaq was US\$2.17. The Company has applied to list the Shares, the Pre-Funded Warrant Shares and the Common Warrant Shares on the TSXV and has notified the Nasdaq of the offering. Listing of the Shares, the Pre-Funded Warrant Shares and the Common Warrant Shares will be subject to the approval of the TSXV. The TSXV has conditionally approved the Company's listing application.

There is no established public trading market for the Common Warrants or Pre-Funded Warrants, and the Company does not expect a market to develop, and the Purchaser may not be able to resell the Pre-Funded Warrants purchased under this prospectus supplement and the accompanying prospectus. In addition, the Company does not intend to apply for listing of the Common Warrants or Pre-Funded Warrants on any securities exchange or other nationally recognized trading system.

We have engaged A.G.P./Alliance Global Partners ("A.G.P." or the "Placement Agent"), as our exclusive placement agent in connection with this offering. The Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities but has agreed to use its best efforts to arrange for the sale of the securities in this offering. We have agreed to pay the Placement Agent the placement agent fees set forth in the table below. See "Plan of Distribution" beginning on page S-27 of this prospectus supplement for more information regarding these arrangements.

As of October 17, 2024, the aggregate market value of our outstanding common shares held by non-affiliates was approximately \$7,592,200, which was calculated based on 2,811,926 outstanding common shares held by non-affiliates, at a price per share of \$2.70, the closing price of our common shares on August 29, 2024, the highest closing price of the Company's common shares on the Nasdaq Capital Market during the preceding sixty (60) day period. Pursuant to General Instruction I.B.5 of Form F-3, in no event will we sell the securities described in this prospectus in a public primary offering with a value exceeding more than one-third (1/3) of the aggregate market value of our common shares held by non-affiliates in any twelve (12)-month period, so long as the aggregate market value of our outstanding common shares held by non-affiliates remains below \$75,000,000. During the twelve (12) calendar months prior to and including the date of this prospectus supplement, we have not offered or sold any securities pursuant to General Instruction I.B.5 of Form F-3.

# Price: US\$1.85 per Share and US\$1.84999 per Pre-Funded Warrant

	1	Per Share	Per	Pre-Funded Warrant	Total
Offering price	\$	1.85	\$	1.84999	\$ 1,499,994
Placement Agent's fees <sup>(1)</sup>	\$	0.1295		0.1294993	105,000
Proceeds, before expenses, to us	\$	1.7205	\$	1.7204907	\$ 1,394,994

# Notes:

(1) In addition, we have agreed to reimburse certain expenses of the Placement Agent in connection with this offering. See "Plan of Distribution" for additional disclosure regarding Placement Agent compensation.

and under similar headings in the other documents that are incorporated by reference into this prospectus supplement.

Neither the Securities and Exchange Commission (the "SEC") 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.

Delivery of the Shares and Pre-Funded Warrants to the Purchaser is expected to occur on or about October 18, 2024, subject to satisfaction of customary closing conditions.

# A.G.P.

The date of this prospectus supplement is October 17, 2024.

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# Prospectus

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# ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the securities being offered and also adds to and updates information contained in the second part and the documents incorporated by reference therein. The second part, the Form F-3 registration statement (File No. 333-269429) that was declared effective by the SEC on February 3, 2023, of which this prospectus supplement forms a part (the "Registration Statement") gives more general information, some of which may not apply to all the securities being offered under this prospectus supplement. This prospectus supplement is deemed to be incorporated by reference into the Registration Statement solely for the purpose of the securities offered by this prospectus supplement. Other documents are also incorporated, or are deemed to be incorporated by reference, into the Registration Statement and reference should be made to the Registration Statement for full particulars thereof.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the Registration Statement. We have not authorized anyone to provide you with different information. We are also not making an offer for the securities covered by the Registration Statement in any jurisdiction where such offer is not permitted. You should assume that the information appearing in this prospectus supplement or the Registration Statement is accurate only as of the date on the front of those documents and that information contained in any document incorporated by reference herein or therein is accurate only as of the date of that document unless specified otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

You should not consider any information in this prospectus supplement or the accompanying Registration Statement to be investment, legal or tax advice. You should consult your own counsel, accountants and other advisers for legal, tax, business, financial and related advice regarding the purchase of the securities offered by this prospectus supplement. If the description of the offering varies between this prospectus supplement and the accompanying Registration Statement, you should rely on the information contained in this prospectus supplement.

We have prepared this prospectus supplement in accordance with United States disclosure requirements. Our annual consolidated financial statements that are incorporated by reference into this prospectus supplement and the Registration Statement have been prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board ("IFRS"), and thus may not be comparable to financial statements of United States companies.

# WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC the Registration Statement under the Securities Act with respect to the securities offered by this prospectus supplement.

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), relating to foreign private issuers and applicable Canadian securities legislation and, in accordance therewith, file reports and other information with the SEC and securities regulatory authorities in Canada. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, the Company is not required to publish financial statements as promptly as United States companies, and its financial statements are prepared under IFRS rather than U.S. generally accepted accounting principles.

 $Purchasers\ may\ read\ and\ download\ documents\ we\ have\ filed\ with\ the\ SEC's\ Electronic\ Data\ Gathering\ and\ Retrieval\ system\ a\underline{twww.sec.gov}.$ 

# **EXCHANGE RATE INFORMATION**

Unless stated otherwise or if the context otherwise requires, all references to dollar amounts in this prospectus and any prospectus supplement are references to U.S. dollars.

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The following table sets forth (i) the exchange rates for the U.S. dollar, expressed in Canadian dollars, in effect at the end of the periods indicated; (ii) the average exchange rates for the U.S. dollar, expressed in Canadian dollars, on the last day of each month during such periods; and (iii) the high and low exchange rates for the U.S. dollar, expressed in Canadian dollars, during such periods, each based on the rate of exchange as reported by the Bank of Canada for conversion of U.S. dollars into Canadian dollars:

Six Mont	hs Ended	Year Ended	
June 30,		December 31,	
2024	2023	2023	2022

Rate at the end of period				_
·	0.7306	0.7553	0.7561	0.7383
Average rate during period	0.7361	0.7421	0.7410	0.7692
Highest rate during period	0.7510	0.7604	0.7617	0.8031
Lowest rate during period	0.7250	0.7243	0.7207	0.7217

On October 16, 2024, the daily average exchange rate for the U.S. dollar, expressed in Canadian dollars, as quoted by the Bank of Canada, was US\$1.00 = CDN\$1.3771. Purchasers should be aware that foreign exchange rate fluctuations are likely to occur from time to time, and the Company does not make any representation with respect to future currency values. Purchasers should consult their own advisors with respect to the potential risk of currency fluctuations.

### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein contain or incorporate by reference certain information and statements that may constitute forward-looking information within the meaning of Canadian securities laws and forward-looking statements within the meaning of U.S. federal securities laws, both of which we refer to as forward-looking statements, including, without limitation, statements relating to certain expectations, projections, new or improved product introductions, market expansion efforts, and other information related to our business strategy and future plans. Forward-looking statements can, but may not always, be identified by the use of words such as "anticipate", "plan", "contemplate", "continue", "estimate", "expect", "intend", "propose", "might", "may", "will", "shall", "project", "should", "could", "would", "believe", "predict", "forecast", "pursue", "potential" and "capable" and similar references to future periods or the negatives of these words and expressions and by the fact that these statements do not relate strictly to historical or current matters. These forward-looking statements are based on management's current expectations and are subject to a number of risks, uncertainties, and assumptions, including market and economic conditions, business prospects or opportunities, future plans and strategies, projections, technological developments, anticipated events and trends and regulatory changes that affect us, our customers and our industries. Although the Company and management believe that the expectations reflected in such forward-looking statements are reasonable and based on reasonable assumptions and estimates, there can be no assurance that these assumptions or estimates are accurate or that any of these expectations will prove accurate. Forward-looking statements are inherently subject to significant business, economic and competitive risks, uncertainties and contingencies that could cause actual events to

Undue reliance should not be placed on forward-looking statements. Actual results and developments are likely to differ, and may differ materially, from those anticipated by the Company and expressed or implied by the forward-looking statements contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. Such statements are based on a number of assumptions and risks that may prove to be incorrect, including, without limitation:

- · our ability to obtain additional financing;
- the accuracy of our estimates regarding expenses, future revenues and capital requirements;
- · the success and timing of our preclinical studies and clinical trials;
- our ability to obtain and maintain regulatory approval of XRx-008, also referred to by its trademarked named XORLO<sup>TM</sup> herein. XORTX's proprietary formulation of oxypurinol, and any other product candidates we may develop, and the labeling under any approval we may obtain;

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- · regulatory approvals and discussions and other regulatory developments in the United States, the EU and other countries;
- · the performance of third-party manufacturers and contract research organizations;
- our plans to develop and commercialize our product candidates;
- · our plans to advance research in other kidney disease applications;
- · our ability to obtain and maintain intellectual property protection for our product candidates;
- · the successful development of our sales and marketing capabilities;
- · the potential markets for our product candidates and our ability to serve those markets;
- the rate and degree of market acceptance of any future products;
- · the success of competing drugs that are or become available; and
- · the loss of key scientific or management personnel.

Certain forward-looking statements contained herein and incorporated by reference concerning the general expectations of the Company concerning the Company's business and operations are based on estimates prepared by the Company using data from publicly available sources as well as from market research and industry analysis and on assumptions based on data and knowledge of this industry, which the Company believes to be reasonable. However, although generally indicative of relative market positions, market shares and performance characteristics, such data is inherently imprecise.

Many factors could cause our actual results, level of activity, performance, achievements, future events or developments to differ materially from those expressed or implied by forward-looking statements, including, without limitation, the factors discussed under "Risk Factors".

There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those expressly or impliedly expected or estimated in such statements. Shareholders and investors should not place undue reliance on forward-looking statements as the plans, intentions or expectations upon which they are based might not occur. Although the Company cautions that the foregoing list of risk factors, as well as those risk factors presented under the heading "Risk Factors" and elsewhere in this prospectus supplement and the accompanying prospectus, are not exhaustive, shareholders and investors should carefully consider them and the uncertainties they represent and the risks they entail. The forward-looking statements contained or incorporated by reference in this prospectus supplement and the accompanying prospectus are expressly qualified in their entirety by this cautionary statement. Unless otherwise indicated, forward-looking statements in this prospectus supplement describe our expectations as of the date of this prospectus supplement and, accordingly, are subject to change after such date. We do not undertake to update or revise any forward-looking statements for any reason, except as required by applicable securities laws.

### DOCUMENTS INCORPORATED BY REFERENCE

This prospectus supplement is deemed to be incorporated by reference in the Registration Statement solely for the purpose of this offering. Other documents are also incorporated or deemed to be incorporated by reference in the Registration Statement and reference should be made to the Registration Statement for full particulars thereof.

Copies of the documents incorporated herein by reference may be obtained on request without charge upon written or oral request from our Corporate Secretary at 3710 — 33rd Street NW, Calgary, Alberta, Canada T2L 2M1, Telephone: (403) 455-7727. Copies of these documents are also available through the Internet on the System for Electronic Document Analysis and Retrieval, which can be accessed online at www.sedarplus.ca and on the SEC's Electronic Data Gathering and Retrieval System, which can be accessed online at www.sec.gov and at our website at www.xortx.com.

The following documents, filed with, or furnished to, the SEC, are specifically incorporated by reference into, and form an integral part of, this prospectus supplement and the Registration Statement:

- (a) the Annual Report of the Company on Form 20-F for the year ended December 31, 2023, filed with the SEC on May 10, 2024 (the "Form 20-F");
- (b) Our Reports on Form 6-K filed with the SEC on May 17, 2024, May 20, 2024, June 12, 2024, July 1, 2024, August 15, 2024, August 22, 2024, August 29, 2024, September 13, 2024 and October 9, 2024; and
- (f) The description of our securities included in our Registration Statement on Form 8-A filed with the SEC on September 29, 2021, including any subsequent amendments or reports filed for the purpose of updating such description.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, and any document of the type referred to in the preceding paragraph, subsequent to the date of this prospectus supplement and prior to the termination of the offering of the securities offered by this prospectus supplement and the prospectus are incorporated by reference into this prospectus supplement and the prospectus and form part of this prospectus supplement and the prospectus from the date of filing or furnishing of these documents. The documents incorporated or deemed to be incorporated herein by reference contain meaningful and material information relating to us and the readers should review all information contained in this prospectus supplement and the prospectus and the documents incorporated or deemed to be incorporated herein by reference.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this prospectus supplement, to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not constitute a part of this prospectus supplement, except as so modified or superseded. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document that it modifies or supersedes. The making of such a modifying or superseding statement shall not be deemed an admission for any purposes that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in light of the circumstances in which it was made.

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# PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference herein and therein. This summary is not complete and does not contain all of the information that you should consider before investing in the Shares we are offering. After you read this summary, to fully understand our company and this offering and its consequences to you, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the information referred to under the heading "Risk Factors" in this prospectus beginning on page S-8, and any related free writing prospectus as well as the other documents that we incorporate by reference into this prospectus supplement and accompanying prospectus, including our financial statements and the exhibits to the registration statement of which this prospectus supplement is a part.

### **Our Business**

The Company was incorporated to carry on business under the *Business Corporations Act* (British Columbia) (the "BCBCA") as "APAC Resources Inc." on May 31, 2011 and with registration number BC0911882. XORTX Pharma Corp. ("XORTX Pharma") was incorporated under the laws of Alberta, Canada on August 24, 2012 under the name ReVasCor Inc. and was continued under the Canada Business Corporations Act on February 27, 2013 under the name of XORTX Pharma Corp. XORTX Pharma completed a reverse take-over transaction on January 10, 2018 (the "RTO") with the Company. As part of this transaction, the Company changed its name to its current name: "XORTX Therapeutics Inc." XORTX Pharma remains as a wholly owned subsidiary of the Company and is the Company's only subsidiary.

The Company is a late clinical-stage biotechnology company focused on identifying, developing and potentially commercializing therapies to treat progressive kidney disease modulated by aberrant purine and uric acid metabolism in orphan (rate) disease indications such as autosomal dominant polycystic kidney disease ("ADPKD") and type 2 diabetic nephropathy ("T2DN"), as well as acute kidney injury ("AKI") associated with respiratory virus infection. Our focus is on developing three therapeutic product candidates to slow or reverse the progression of chronic kidney disease in patients at risk of end stage kidney failure, address the immediate need of individuals facing AKI associated with respiratory virus infection, and treat patients with type 2 diabetic nephropathy. We are also looking to identify other opportunities where our existing and new intellectual property can be leveraged to address health issues.

We believe that our technology is underpinned by well-established research and insights into the underlying biology of aberrant purine metabolism, its health consequences and of oxypurinol, a uric acid lowering agent that works by effectively inhibiting xanthine oxidase. We are developing innovative product candidates that include new or existing drugs that can be adapted to address different disease indications where aberrant purine metabolism and/or elevated uric acid is a common denominator, including polycystic kidney disease, pre-diabetes, insulin resistance, metabolic syndrome, diabetes, diabetic nephropathy, and infection. Oxypurinol, and our proprietary pipeline-in-a-product strategy supported by our intellectual property, established exclusive manufacturing agreements, and proposed clinical trials with experienced clinicians, are focused on building a pipeline of assets to address the unmet medical needs for patients with a variety of serious or life-threatening diseases.

### **Corporation Information**

Our registered office is located at Suite 2900, 550 Burrard Street, Vancouver, British Columbia, V6C 0A3. Our operations office and mailing address is 3710 – 33<sup>rd</sup> Street NW, Calgary, Alberta, T2L 2M1 and our telephone number is (403) 455-7727. Our website address is www.xortx.com. The information contained on, or that can be accessed through, our website is not a part of this Registration Statement. We have included our website address in this Registration Statement solely as an inactive textual reference.

### THE OFFERING

Shares offered 320,000 Shares

Price per Share \$1.85

Pre-Funded Warrants offered

We are offering Pre-Funded Warrants to purchase 490,810 Pre-Funded Warrant Shares to the Purchaser, whose purchase of Shares in this offering would otherwise result in the Purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common shares immediately following the consummation of this offering, in lieu of Shares that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser at closing, 9.99%) of our outstanding common shares. The offering price of each Pre-Funded Warrant is \$1.84999 (equal to the price per Share being sold in this offering, minus \$0.00001), and the exercise price of each Pre-Funded Warrant is \$0.00001 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. This offering also relates to the Pre-Funded Warrant Shares issuable upon exercise of any Pre-Funded Warrants sold in this offering. We do not intend to list the Pre-Funded Warrants on any securities exchange or any nationally recognized trading system. See "Description of the Securities" on page S-10.

Common Shares Outstanding after

Offering<sup>(1)</sup>

3,714,375 common shares (assuming the sale of all securities covered by this prospectus supplement and the exercise of all Pre-Funded Warrants issued in this offering, but assuming no exercise of any Common Warrants issued in the concurrent private placement to the Purchaser in this offering, and based on 2,903,565 common shares outstanding as of October 17, 2024 immediately prior to the offering).

Manner of offering of Securities

The Shares and Pre-Funded Warrants (the "Securities") are being offered and sold to the Purchaser in a registered direct offering under the Purchase Agreement entered into on October 17, 2024 between the Company and the Purchasers. See "Plan of Distribution."

Concurrent private placement of Common Warrants

In a concurrent private placement, we are selling to the Purchaser in this offering Common Warrants to purchase up to an additional 810,810 Common Warrant Shares. Each Common Warrant will be exercisable for one Common Warrant Share at an exercise price of \$2.18 per Common Warrant Share, will be exercisable immediately upon issuance and will have a term of five years from the date of issuance. The Common Warrants and the Common Warrant Shares are being offered pursuant to the exemptions provided in Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder, and they are not being offered pursuant to this prospectus supplement and the accompanying prospectus. There is no established public trading market for the Common Warrants and we do not expect a market to develop. In addition, we do not intend to list the Common Warrants on the Nasdaq, any other national securities exchange or any other nationally recognized trading system.

Use of proceeds

We intend to use the net proceeds from the offering of Securities under this prospectus supplement for working capital and other general corporate purposes. See "Use of Proceeds" on page S-10 of this prospectus supplement.

Trading symbols

Our common shares are listed on the TSXV and the Nasdaq under the trading symbol "XRTX".

Risk Factors

Investing in our Securities involves a high degree of risk. See "Risk Factors" beginning on page S-8 of this prospectus supplement for a discussion of factors you should consider carefully when making an investment decision.

- (1) The number of common shares to be outstanding immediately after this offering as shown above is based on 2,903,565 common shares outstanding as of October 17, 2024. Unless otherwise indicated, the number of common shares presented in this prospectus supplement excludes:
  - 134,763 common shares issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$11.67 per common share;
  - 2,019,927 common shares issuable upon the exercise of warrants outstanding, with 1,125,210 issuable at an exercise price of \$5.00 per common share, and 894,717 issuable at an exercise price of CDN\$4.50 per common share (US\$3.29 based on the daily average exchange rate from the Bank of Canada on June 28, 2024);
  - 50,298 common shares issuable upon the exercise of finders' warrants outstanding, with 6,377 issuable at an exercise price of CDN\$42.30 per common share (US\$30.93 based on the daily average exchange rate from the Bank of Canada on June 28, 2024), 16,144 issuable at an exercise price of \$42.93, and 27,777 issuable at an exercise price of \$10.98;
  - 155,594 common shares reserved for future issuances under the Company's Stock Option Plan; and
  - 810,810 Common Warrant Shares issuable upon exercise of the Common Warrants to be issued to the Purchaser participating in this offering in a concurrent private placement at an exercise price of \$2.18 per Common Warrant Share.

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# RISK FACTORS

Investing in our Securities is speculative and involves a high degree of risk. You should carefully consider the risks set out below and in the other documents incorporated by reference in this prospectus supplement, including the Form 20-F, that summarize the risks that may materially affect us and our business before making an investment in the common shares. Please see "Documents Incorporated by Reference." If any of these risks occur, our business, results of operations or financial condition could be materially adversely affected. In that case, the trading price of our securities could decline, and you may lose all or part of your investment. The risks set out in this prospectus supplement are not the only risks we face. You should also refer to the other information set forth in this prospectus supplement as well as those incorporated by reference herein and therein, including financial statements and the related notes, for further risks faced by us.

The Company and the Securities should be considered a speculative investment due to the high-risk nature of our business, and Purchasers should carefully consider all of the information disclosed in this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein prior to making an investment in the Company. In addition, the following risk factors should be given special consideration when evaluating an investment in the Securities.

### A return on the Securities is not guaranteed.

There is no guarantee that the Securities will earn any positive return in the short term or long term. Investing in the Securities is speculative and involves a high degree of risk and should be undertaken only by holders whose financial resources are sufficient to enable them to assume such risks and who have no need for immediate liquidity in their investment. Investing in the Securities is appropriate only for holders who have the capacity to absorb a loss of some or all of their holdings.

### We have broad discretion in the use of proceeds from the offering.

Our management will have broad discretion with respect to the application of net proceeds received by us from the sale of the Securities under this prospectus supplement and may spend such proceeds in ways that do not improve our results of operations or enhance the value of the Securities. Any failure by management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business or cause the price of our common shares to decline.

### Future issuances of securities may result in substantial dilution to the Purchaser under the offering.

We may issue or sell additional common shares or other securities that are convertible or exchangeable into common shares in subsequent offerings or may issue additional common shares or other securities to finance future acquisitions. We cannot predict the size or nature of future sales or issuances of securities or the effect, if any, that such future sales and issuances will have on the market price of the common shares. Sales or issuances of substantial numbers of common shares or other securities that are convertible or exchangeable into common shares, or the perception that such sales or issuances could occur, may adversely affect prevailing market prices of the common shares. With any additional sale or issuance of common shares or other securities that are convertible or exchangeable into common shares, the Purchaser will suffer dilution to its voting power and economic interest in the Company. Furthermore, to the extent holders of our stock options, warrants or other convertible securities convert or exercise their securities and sell the common shares they receive, the trading price of the common shares on the TSXV and on Nasdaq may decrease due to the additional amount of common shares available in the market.

# The market price of our common shares may be volatile.

The market price of our common shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control. This volatility may affect the ability of holders of common shares to sell their securities at an advantageous price. Market price fluctuations in our common shares may be due to our operating results failing to meet expectations of securities analysts or investors in any period, downward revision in securities analysts' estimates, adverse changes in general market conditions or economic trends, acquisitions, dispositions or other material public announcements by us or our competitors, along with a variety of additional factors. These broad market fluctuations may adversely affect the market price of the common shares.

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Financial markets have periodically at times experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of our common shares may decline even if our operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue, our operations could be adversely impacted, and the trading price of our common shares may be materially adversely affected.

# A liquid market in our common shares may not be maintained.

The Purchaser may be unable to sell significant quantities of common shares into the public trading markets without a significant reduction in the price of its common shares, or at all. There can be no assurance that there will be sufficient liquidity of the common shares on the trading market, and that we will continue to meet the listing requirements of the TSXV and Nasdaq or achieve listing on any other public stock exchange. There can be no assurance that an active and liquid market for our common shares will be maintained, and the Purchaser may find it difficult to resell common shares.

We have also applied to list the Shares, the Pre-Funded Warrant Shares and the Common Warrant Shares on the TSXV and have notified the Nasdaq of the offering. Listing is subject to approval by the TSXV and no objection by Nasdaq in accordance with their respective listing requirements. The TSXV has conditionally approved the Company's listing application.

# There is currently no established public trading market for the Common Warrants or the Pre-Funded Warrants.

There is no established public trading market for the Common Warrants or Pre-Funded Warrants, and we do not expect such a market to develop. In addition, we do not plan on making an application to list the Common Warrants or Pre-Funded Warrants on the TSXV or the Nasdaq, or any other securities exchange or other trading system. This may affect the pricing of the Common Warrants and the Pre-Funded Warrants in the secondary market, the transparency and availability of trading prices, and the liquidity of the Common Warrants and the Pre-Funded Warrants. Except in limited circumstances specified in the Common Warrants or Pre-Funded Warrants, holders of the Common Warrants and the Pre-Funded Warrants will not be entitled to any voting rights, dividends or other rights as shareholders of the Company, prior to the exercise of their Common Warrants or Pre-Funded Warrants, as applicable. In addition, the Common Warrants have an exercise price of US\$2.18 per Common Warrant Share, will be exercisable immediately, and will expire five years following the date of issuance. If the price of the common shares does not exceed the exercise price of the Common Warrants during the period when the Common Warrants are exercisable, the Common Warrants may not have any value.

# Holders of Pre-Funded Warrants purchased in this offering will have no rights as holders of common shares until such holders exercise their Pre-Funded Warrants and acquire the Pre-Funded Warrant Shares.

The Pre-Funded Warrants offered hereby do not confer any rights of common share ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire common shares at a fixed price. Until holders of Pre-Funded Warrants acquire Pre-Funded Warrant Shares upon exercise of the Pre-Funded Warrants, holders of Pre-Funded Warrants will have no rights with respect to the Pre-Funded Warrant Shares underlying such Pre-Funded Warrants. Upon exercise of the Pre-Funded Warrants, the holders will be entitled to exercise the rights of a holder of common shares only as to matters for which the record date occurs after the exercise date.

# This offering is being conducted on a "best efforts" basis.

We are offering the securities in this offering on a "best efforts" basis and the Placement Agent is under no obligation to purchase any shares for its own account. The Placement Agent is not required to sell any specific number or dollar amount of securities in this offering but will use its best efforts to procure purchasers for the securities offered under this prospectus supplement. As a "best efforts" offering, there can be no assurance that the offering contemplated hereby will ultimately be consummated.

### USE OF PROCEEDS

We estimate our net proceeds from the offering will be US\$1,275,094 after deducting the Placement Agent's fees and expenses and other expenses under the offering. We currently intend to use the net proceeds from the sale of the Securities offered under this prospectus supplement, for working capital and other general corporate purposes. There may be circumstances where on the basis of results obtained or for other sound business reasons, a re-allocation of funds may be necessary or prudent. Accordingly, we will have broad discretion in the application of the proceeds of this offering. We incurred operating losses and negative operating cash flow for the fiscal years ended December 31, 2023 and 2022. The Company expects to use the net proceeds from the offering in pursuit of its ongoing general business objectives. To that end, a substantial portion of the net proceeds from the offering and/or our existing working capital to fund such negative operating cash flows in future periods, we may need to deploy a portion of the net proceeds from the offering and/or our existing working capital to fund such negative cash flow.

Our ultimate use might vary substantially from what is stated in this prospectus supplement and will depend on a number of factors, including those referred to under *Risk Factors*" in the accompanying prospectus, the documents incorporated by reference herein and therein, and any other factors set forth in this prospectus supplement.

All expenses relating to the offering under this prospectus supplement, will be paid out of the gross proceeds of the offering.

### DESCRIPTION OF THE SECURITIES

Our authorized share capital is comprised of an unlimited number of common shares and an unlimited number of preferred shares, each without par value, issuable in one or more series. We have no preferred shares authorized under our notice of articles or articles.

As of the date of this prospectus supplement, there was a total of 2,903,565 common shares issued and outstanding. In addition, we have 134,763 common shares issuable pursuant to outstanding stock options, and 2,070,225 common shares issuable upon the exercise of outstanding common share purchase warrants. We had approximately 14 holders of record and approximately 1,870 beneficial owners of our common shares as of October 17, 2024. Immediately following the closing of this offering, we expect to have 3,714,375 issued and outstanding common shares, 134,763 common shares issuable pursuant to outstanding stock options, 290,357 options available for grant under our stock option plan to acquire common shares and 2,881,035 outstanding warrants to acquire common shares.

### **Common Shares**

### Voting Rights

Under our articles, the holders of our common shares are entitled to one vote for each common share held on all matters submitted to a vote of the shareholders, including the election of directors. Our notice of articles and articles do not provide for cumulative voting rights. Because of this, the holders of a plurality of the common shares entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose.

# Dividends

Subject to priority rights that may be applicable to any then outstanding shares, and the applicable provisions of the BCBCA, holders of our common shares are entitled to receive dividends, as and when declared by our Board, in their sole discretion as they see fit. For more information, see the section titled "Dividend Policy."

### Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common shares are entitled to share ratably in the net assets legally available for distribution to shareholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding preferred shares

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# Rights and Preferences

Our common shares contain no pre-emptive or conversion rights and have no provisions for redemption or repurchase for cancellation, surrender or sinking or purchase funds. There are no provisions in our notice of articles and articles requiring holders of common shares to contribute additional capital. The rights, preferences and privileges of the holders of our common shares are subject to and may be adversely affected by the rights of the holders of any series of new preferred shares that may be created, authorized, designated, and issued in the future.

### Fully Paid and Non-assessable

All of our outstanding common shares are, and the common shares to be issued pursuant to this offering, when paid for, will be fully paid and non-assessable.

### **Pre-Funded Warrants**

The following description is subject to the detailed provisions of the form of certificate for the Pre-Funded Warrants (the 'Pre-Funded Warrant'). Reference should be made to the Pre-Funded Warrant for the full text of attributes of the Pre-Funded Warrants.

Each whole Pre-Funded Warrant will entitle the holder to acquire, subject to adjustment as summarized below, one Pre-Funded Warrant Share at any time until the Pre-Funded Warrants are exercised in full. The exercise price will be pre-funded except for a nominal exercise price of US\$0.00001 per Pre-Funded Warrant. The Pre-Funded Warrants will be exercisable, at the option of the holder, in whole or in part, by delivering to the Company a duly executed notice of exercise, thereby canceling all or a portion of such holder's Pre-Funded Warrants. The Pre-Funded Warrants may be exercised on a "net" or "cashless" basis if there is no effective registration statement for the issuance of the Pre-Funded Warrant Shares.

The Pre-Funded Warrant will provide that the number of underlying Pre-Funded Warrant Shares and exercise price of the Pre-Funded Warrants will be subject to adjustment in the event of certain share dividends or distributions or of a subdivision or consolidation of the common shares or similar events.

The Pre-Funded Warrant will also provide that, during the period in which the Pre-Funded Warrants are exercisable, it will give notice to holders of Pre-Funded Warrants of certain stated events, at least 10 calendar days prior to the applicable record or effective date, as the case may be, of such events.

In connection with certain specified mergers, sales, business combinations, recapitalizations or similar events (a **Fundamental Transaction**"), holders of the Pre-Funded Warrants will have the right to receive, upon exercise, the same consideration as holders of common shares in respect of the Pre-Funded Warrant Shares that would be issuable upon exercise of the Pre-Funded Warrants immediately prior to such Fundamental Transaction, in addition to any additional consideration receivable by holders of common shares in connection with such Fundamental Transaction.

There is currently no market through which the Pre-Funded Warrants may be sold, and the Purchaser may not be able to resell the Pre-Funded Warrants purchased under this prospectus supplement. The Pre-Funded Warrant will also contain restrictions on the number of Pre-Funded Warrant Shares that may be acquired by the holder of Pre-Funded Warrants upon any exercise of the Pre-Funded Warrants that would result in the holder and its affiliates holding in excess of 4.99% of the number of common shares outstanding immediately after giving effect to the issuance of Pre-Funded Warrant Shares upon exercise of such Pre-Funded Warrants, which beneficial ownership limitation may be increased up to 9.99% upon notice to us. No fractional Pre-Funded Warrant Shares will be issuable upon the exercise of any Pre-Funded Warrants. Holders of Pre-Funded Warrants will not have any voting, dividend or any other rights which a holder of common shares would have, except as set forth in the Pre-Funded Warrants.

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# CONCURRENT PRIVATE PLACEMENT OF COMMON WARRANTS

Concurrently with this offering, we are also selling to the Purchaser in this offering Common Warrants to purchase up to 810,810 Common Warrant Shares, with an exercise price of \$2.18 per Common Warrant Share, subject to certain adjustments, and exercisable immediately upon issuance with a term of five years from the date of issuance.

A holder of Common Warrants will have the right to exercise the Common Warrants on a "cashless" basis if there is no effective registration statement registering the resale of the Common Warrant Shares underlying the Common Warrants. Subject to limited exceptions, a holder of Common Warrants will not have the right to exercise any portion of its Common Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of common shares outstanding immediately after giving effect to such exercise, provided that the holder may increase the beneficial ownership limitation up to 9.99%.

We have agreed to prepare and file with the SEC a registration statement to register for resale of all of the Common Warrant Shares underlying the Common Warrants.

Except as otherwise provided in the Common Warrants or by virtue of such holder's ownership of Common Warrant Shares, the holders of the Common Warrants do not have the rights or privileges of holders of our common shares, including any voting rights, until they exercise their Common Warrants.

The Common Warrants and the Common Warrant Shares issuable upon the exercise of the Common Warrants are being offered pursuant to the exemptions provided in Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder, and they are not being offered pursuant to this prospectus supplement and the accompanying prospectus.

In the event of any fundamental transaction, as described in the Common Warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common shares, subject to certain exceptions, then upon any subsequent exercise of a Common Warrant, the holder will have the right to receive as alternative consideration, for each Common Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of common shares of the successor or acquiring corporation of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of Common Warrant Shares for which the Common Warrant is exercisable immediately prior to such event. Notwithstanding the foregoing, in the event of a fundamental transaction, the holders of the Common Warrants have the right to require us or a successor entity to redeem the Common Warrants for cash in the amount of the Black Scholes Value (as defined in each Common Warrant) of the unexercised portion of the Common Warrants concurrently with or within 30 days following the consummation of a fundamental transaction. However, in the event of a fundamental transaction which is not in our control, including a fundamental transaction approved by our board of directors, the holders of the Common Warrants will only be entitled to receive from us or our successor entity, as of the date of consummation of such fundamental transaction the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of the Common Warrants, that is being offered and paid to the holders of our common shares in connection with the fundamental transaction, whether that consideration is in the form of cash, shares or any combination of cash and shares, or whether the holders of our common shares a

There is no established public trading market for the Common Warrants, and we do not expect a market to develop. In addition, we do not intend to list the Common Warrants on the Nasdaq, any other national securities exchange or any other nationally recognized trading system.

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# CERTAIN CANADIAN FEDERAL AND U.S. FEDERAL INCOME TAX CONSIDERATIONS

# **Material Canadian Federal Income Tax Considerations**

The following is, as of the date of this prospectus, a general summary of the principal Canadian federal income tax considerations under the Income Tax Act (Canada) (the "Canadian Tax Act"), generally applicable to an investor who acquires Shares or Pre-Funded Warrants pursuant to this offering and who, for the purposes of the Canadian Tax Act and at all relevant times, deals at arm's length with the Company and the underwriter, is not affiliated with the Company or the underwriter and who acquires and holds the Shares or, Pre Funded Warrants as capital property, (a "Holder"). Generally, the Shares and Pre-Funded Warrants will be considered to be capital property to a Holder thereof provided that the Holder does not use the Shares or Pre-Funded Warrants in the course of carrying on a business of trading or dealing in securities and such Holder has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade.

This summary does not apply to a Holder (i) that is a "financial institution" for the purposes of the mark-to-market rules contained in the Canadian Tax Act; (ii) that is a "specified financial institution" as defined in the Canadian Tax Act; (iii) if an interest in such a Holder is a "tax shelter" or a "tax shelter investment," each as defined in the Canadian Tax Act; (iv) a holder that reports its "Canadian tax results," as defined in the Canadian Tax Act, in a currency other than Canadian currency; or (v) that has or will enter into a "derivative forward agreement" or a "synthetic disposition arrangement", as those terms are defined in the Canadian Tax Act, with respect to the Shares or, Pre-Funded Warrants,. In addition, this summary does not address the deductibility of interest by a holder who has borrowed money to acquire Shares or Pre-Funded Warrants. Such Holders should consult their own tax advisors with respect to the consequences of acquiring Shares or Pre-Funded Warrants.

Additional considerations, not discussed herein, may be applicable to a Holder that (i) is a corporation resident in Canada and (ii) is (or does not deal at arm's length for the purposes of the Canadian 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 Shares or Pre-Funded Warrants, controlled by a non-resident person (or a group of non-resident persons that do not deal at arm's length with each other for purpose of the Tax Act) for purposes of the "foreign affiliate dumping" rules in section 212.3 of the Canadian Tax Act. Such Holders should consult their own tax advisors with respect to the consequences of acquiring Shares or Pre-Funded Warrants.

This summary is based upon the current provisions of the Canadian Tax Act and the regulations thereunder (the "Regulations"), in force as of the date hereof and the Company's understanding of the current published administrative and assessing practices of the Canada Revenue Agency (the "CRA"). This summary takes into account all specific proposals to amend the Canadian Tax Act and the Regulations publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "Tax Proposals"), and assumes that the Tax Proposals will be enacted in the form proposed, although no assurance can be given that the Tax Proposals will be enacted in their current form or at all. This summary does not otherwise take into account any changes in law or in the administrative policies or assessing practices of the CRA, whether by legislative, governmental or judicial decision or action, nor does it take into account or consider any provincial, territorial or foreign income tax considerations, which considerations may differ significantly from the Canadian federal income tax considerations discussed in this summary.

This summary is of a general nature only, is not exhaustive of all possible Canadian federal income tax considerations and is not intended to be, nor should it be construed to be, legal or tax advice to any particular holder and no representations with respect to the income tax consequences to any holder or prospective holder are made. Consequently, holders and prospective holders of Shares and Pre-Funded Warrants should consult their own tax advisors for advice with respect to the tax consequences to them of acquiring Shares or Pre-Funded Warrants pursuant to this Offering, having regard to their particular circumstances.

All amounts in a currency other than the Canadian dollar relevant in computing a Holder's liability under the Canadian Tax Act with respect to the acquisition, holding or disposition of Shares and, Pre-Funded Warrants, must generally be converted into Canadian dollars using the single daily exchange rate quoted by the Bank of Canada for the day on which the amount arose or such other rate of exchange that is acceptable to the CRA.

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### Exercise of Pre-Funded Warrants

No gain or loss will be realized by a Holder on the exercise of a Pre-Funded Warrant to acquire Pre-Funded Warrant Shares. When a Pre-Funded Warrant is exercised, the Holder's cost of the Pre-Funded Warrant Shares acquired thereby will be equal to the adjusted cost base of the Pre-Funded Warrant to the Canadian, immediately before that time, plus the amount paid on the exercise of the Pre-Funded Warrant. For the purpose of computing the adjusted cost base of each Pre-Funded Warrant Share acquired on the exercise of a Pre-Funded Warrant, the cost of such Pre-Funded Warrant Share must be averaged with the adjusted cost base to the Holder of all other common shares held as capital property immediately before the exercise of the Pre-Funded Warrant.

### Residents of Canada

The following section of this summary applies to a Holder who, for the purposes of the Canadian Tax Act, is or is deemed to be resident in Canada at all relevant times (a "Canadian Resident Holder"). Certain Canadian Resident Holders whose Shares might not constitute capital property may in certain circumstances make an irrevocable election in accordance with subsection 39(4) of the Canadian Tax Act to deem the Shares, and every other "Canadian security" as defined in the Canadian Tax Act, held by such Canadian Resident Holder, in the taxation year of the election and each subsequent taxation year to be capital property. Such election is not available in respect of the Pre-Funded Warrants. Canadian Resident Holders should consult their own tax advisors regarding this election.

# Expiry of Pre-Funded Warrants

In the event of the expiry of an unexercised Pre-Funded Warrant, a Canadian Resident Holder will be considered to have disposed of such Pre-Funded Warrant for nil proceeds and will accordingly realize a capital loss equal to the Canadian Resident Holder's adjusted cost base of such Pre-Funded Warrant immediately before that time. For a description of the tax treatment of capital losses, see "Capital Gains and Losses", below.

# Dividends

Dividends received or deemed to be received on the Shares or Pre-Funded Warrant Shares will be included in computing a Canadian Resident Holder's income. In the case of an individual (other than certain trusts), such dividends will be subject to the gross-up and dividend tax credit rules normally applicable in respect of "taxable dividends" received from "taxable Canadian corporations" (each as defined in the Canadian Tax Act). An enhanced dividend tax credit will be available to individuals in respect of "eligible dividends" designated by the Company to the Canadian Resident Holder in accordance with the provisions of the Canadian Tax Act. There may be limitations on the ability of the Company to designate dividends as eligible dividends.

Dividends received or deemed to be received by a corporation that is a Canadian Resident Holder on the Shares or Pre-Funded Warrant Shares must be included in computing its income but generally will be deductible in computing its taxable income. In certain circumstances, subsection 55(2) of the Canadian Tax Act will treat a taxable dividend received by a Canadian Resident Holder that is a corporation as proceeds of disposition or a capital gain. A Canadian Resident Holder that is a corporation should consult its own tax advisors having regard to its own circumstances. A Canadian Resident Holder that is a "private corporation" as defined in the Canadian Tax Act and certain other corporations controlled, by or for the benefit of an individual (other than a trust) or a related group of individuals (other than trusts) generally will be liable to pay an additional tax on dividends received or deemed to be received on the Shares or Pre-Funded Warrant Shares to the extent such dividends are deductible in computing taxable income. Such additional tax may be refundable in certain circumstances.

# Dispositions of Common Shares or Pre-Funded Warrants

Upon a disposition (or a deemed disposition) of a Share or a Pre-Funded Warrant (which does not include the exercise of a Pre-Funded Warrant and excluding a disposition arising on the expiry of a Pre-Funded Warrant), a Canadian Resident Holder generally will realize a capital gain (or a capital loss) equal to the amount by which the proceeds of disposition of such Share, or Pre-Funded Warrant, net of any reasonable costs of disposition, are greater (or are less) than the adjusted cost base of such Share, or Pre-Funded Warrant, as the case may be, to the Canadian Resident Holder. The tax treatment of capital gains and capital losses is discussed in greater detail below under the subheading "Capital Gains and Capital Losses."

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The adjusted cost base to a Canadian Resident Holder of a Share acquired pursuant to this offering will be averaged with the adjusted cost base of any other of the Company's common shares held by such Canadian Resident Holder as capital property for the purposes of determining the Canadian Resident Holder's adjusted cost base of each common share.

# Capital Gains and Capital Losses

Subject to the August 12 Proposals (as defined below), a Canadian Resident Holder is required to include in computing its income for a taxation year one-half of the amount of any capital gain (a "taxable capital gain") realized in the year. Subject to and in accordance with the provisions of the Canadian Tax Act, a Canadian Resident Holder is required to deduct one-half of the amount of any capital loss (an "allowable capital loss") realized in a taxation year from taxable capital gains realized in the year by such Canadian Resident Holder. Allowable capital losses in excess of taxable capital gains may be carried back and deducted in any of the three preceding taxation years or carried forward and

deducted in any following taxation year against taxable capital gains realized in such year to the extent and under the circumstances described in the Canadian Tax Act.

Proposed Amendments released on August 12, 2024 (the "August 12 Proposals") would increase a Canadian Resident Holder's capital gains inclusion rate for a taxation year ending after June 24, 2024, from one-half to two-thirds, subject to a transitional rule applicable for a Canadian Resident Holder's 2024 taxation year that would reduce the capital gains inclusion rate for that taxation year to, in effect, be one-half for net capital gains realized before June 25, 2024. The August 12 Proposals also include provisions that would, generally, offset the increase in the capital gains inclusion rate for up to \$250,000 of net capital gains realized (or deemed to be realized) by Canadian Resident Holders that are individuals (including certain trusts) in the year that are not offset by net capital losses carried back or forward from another taxation year. The August 12 Proposals also provide that capital losses realized prior to June 25, 2024, which are deductible against capital gains included in income for the 2024 or subsequent taxation years will offset an equivalent capital gain regardless of the inclusion rate which applied at the time such capital losses were realized. Canadian Holders should consult their own tax advisors with respect to the August 12 Proposals

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

A Canadian Resident Holder that is throughout the relevant taxation year a "Canadian-controlled private corporation" or a "substantive CCPC" as defined in the Canadian Tax Act may also be liable to pay an additional refundable tax on its "aggregate investment income" for the year which will include taxable capital gains.

#### Minimum Tax

Capital gains realized and dividends received by a Canadian Resident Holder that is an individual or a trust, other than certain specified trusts, may give rise to minimum tax under the Canadian Tax Act. Such Canadian Resident Holders should consult their own advisors with respect to the application of minimum tax.

### Non-Residents of Canada

The following section of this summary is generally applicable to a Holder who, for the purposes of the Canadian Tax Act, and at all relevant times: (i) has not been and will not be deemed to be resident in Canada; and (ii) does not use or hold the Shares, or Pre-Funded Warrants, or in the course of, carrying on a business, or part of a business, in Canada, each a Non-Canadian Holder. Special rules, which are not discussed in this summary, may apply to a Non-Canadian Holder that is an insurer carrying on business in Canada and elsewhere or that is an "authorized foreign bank" as defined in the Canadian Tax Act. Such a Non-Canadian Holder should consult its own tax advisors.

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### Dividends

Dividends on the Shares or Pre-Funded Warrant Shares paid or credited or deemed to be paid or credited to a Non-Canadian Holder will be subject to Canadian withholding tax at the rate of 25% on the gross amount of the dividend unless such rate is reduced by the terms of an applicable tax treaty. Under the Canada-United States Income Tax Convention (1980) (the "Treaty"), as amended, the rate of withholding tax on dividends paid or credited to a Non-Canadian Holder who is resident in the U.S. for purposes of the Treaty, is entitled to the full benefits under the Treaty and beneficially owns the dividend, or a U.S. Holder, is generally limited to 15% of the gross amount of the dividend Not all persons who are residents of the U.S. for purposes of the Treaty will qualify for the benefits of the Treaty. Non-Canadian Holders that are resident in the U.S. are advised to consult their tax advisors in this regard. The rate of withholding tax on dividends is also reduced under other bilateral income tax treaties or conventions to which Canada is a signatory.

# Expiry of Pre-Funded Warrants

In the event of the expiry of an unexercised Pre-Funded Warrant, a Non-Canadian Holder will be considered to have disposed of such Pre-Funded Warrant for nil proceeds and will accordingly realize a capital loss equal to the Non-Canadian Holder's adjusted cost base of such Pre-Funded Warrant immediately before that time. For a description of the tax treatment of capital losses, see the discussion under "Non-Residents of Canada — Disposition of Shares or Pre-Funded Warrants,", below.

# Dispositions of Shares, or Pre-Funded Warrants

A Non-Canadian Holder generally will not be subject to tax under the Canadian Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a Share or Pre-Funded Warrant nor will capital losses arising therefrom be recognized under the Canadian Tax Act, unless the Share or Pre-Funded Warrant constitutes "taxable Canadian property" to the Non-Canadian Holder thereof for purposes of the Canadian Tax Act, and the gain is not exempt from Canadian federal income tax pursuant to the terms of an applicable tax treaty.

Generally the Shares or Pre-Funded Warrants acquired pursuant to this offering will not be "taxable Canadian property" to a Non-Canadian Holder if the common shares of the Company are listed on a "designated stock exchange", as defined in the Canadian Tax Act (which currently includes Nasdaq) at the time of disposition, unless at any time during the 60-month period immediately preceding the disposition the following two conditions are met concurrently: (i) the Non-Canadian Holder, persons with whom the Non-Canadian Holder did not deal at arm's length, partnerships in which the Non-Canadian Holder or persons with whom the Non-Canadian Holder did not deal at arm's length held a membership interest (either directly or indirectly through one or more partnerships), or the Non-Canadian Holder together with all such persons, owned 25% or more of the Company's issued shares of any class or series of the Company's shares; and (ii) more than 50% of the fair market value of such shares was derived directly or indirectly from one, or any combination of, real or immovable property situated in Canadian resource properties" (as defined in the Canadian Tax Act) or an option, an interest or right in such property, whether or not such property exists. Notwithstanding the foregoing, a common share may otherwise be deemed to be taxable Canadian property to a Non-Canadian Holder, such Non-Canadian Holder for purposes of the Canadian Tax Act. Even if the Shares or Pre-Funded Warrants are taxable Canadian property to a Non-Canadian Holder, such Non-Canadian Holder may be exempt from tax under the Canadian Tax Act on the disposition of such Shares or Pre-Funded Warrants by virtue of an applicable income tax treaty or convention.

A Non-Canadian Holder's capital gain (or capital loss) in respect of Shares, or Pre-Funded Warrants that constitute or are deemed to constitute taxable Canadian property (and are not "treaty-protected property" as defined in the Canadian Tax Act) will generally be computed and included in income in the manner described above under the subheadings "Residents of Canada — Dispositions of Shares, or Pre-Funded Warrants" and "Residents of Canada — Capital Gains and Capital Losses".

Non-Canadian Holders whose Shares or Pre-Funded Warrants may be taxable Canadian property should consult their own tax advisors.

SHAREHOLDERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE CANADIAN OR OTHER TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON SHARES AND WARRANTS, INCLUDING, IN PARTICULAR, THE EFFECT OF ANY NON-U.S., STATE OR LOCAL TAXES.

# Material U.S. Federal Income Tax Considerations for U.S. Holders

The following is a general summary of certain 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 Shares acquired pursuant to this offering and exercise, disposition, and lapse of Warrants acquired pursuant to this offering, the acquisition, ownership, and disposition of the Shares received upon exercise of such Warrants (the "Warrant Shares"), the ownership, exercise and disposition of Pre-Funded Warrants acquired pursuant to this offering and the Shares received upon the exercise of such Pre-Funded Warrants (the "Pre-Funded Warrant Shares") as the case may be. The term "securities" as used in this summary includes the Shares, Pre-Funded Warrants, Warrant Shares and Pre-Funded Warrant Shares, as applicable.

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 as a result of the acquisition of securities 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 specific tax consequences to a U.S. Holder under an applicable 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 net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of the securities. In addition, except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of the securities.

No opinion from legal counsel or ruling from the Internal Revenue Service (the **TRS**") has been requested, or will be obtained, regarding the U.S. federal income tax considerations applicable to U.S. Holders as discussed in this summary. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the positions taken in this summary.

# Scope of this Summary

Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the **Code**"), Treasury Regulations (whether final, temporary, or proposed) promulgated under the Code, published rulings of the IRS, published administrative positions of the IRS and U.S. court decisions, that are 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 retroactively. 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.

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#### U.S. Holders

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of the securities acquired pursuant to this offering that is for U.S. federal income tax purposes:

- · a citizen or individual 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 United States 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.

# 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 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 brokers or dealers in securities or currencies or U.S. Holders that are traders in securities that elect to apply a mark-to-market accounting method; (d) have a "functional currency" other than the U.S. dollar; (e) own securities as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other integrated transaction; (f) acquired the securities in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold the securities other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are partnerships and other pass-through entities (and investors in such partnerships and entities); (i) are subject to special tax accounting rules; (j) own, 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; (k) are U.S. expatriates or former long-term residents of the U.S.; or (l) are subject to taxing jurisdictions other than, or in addition to, the United States. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of the securities.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds the securities, the U.S. federal income tax consequences to such entity or arrangement and the owners of such entity or arrangement generally will depend on the activities of such entity or arrangement and the status of such owners. This summary does not address the tax consequences to any such entity or arrangement or owner. Owners of entities or arrangements that are classified as partnerships for U.S. federal income tax purposes should consult their own tax advisor regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership, and disposition of the securities.

### Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, we believe a Pre-Funded Warrant should be treated as a separate class of Shares for U.S. federal income tax purposes and a U.S. Holder of Pre-Funded Warrants and Pre-Funded Warrant Shares should generally be taxed in the same manner as a holder of 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 US\$0.00001 per share. However, such characterization is not binding on the IRS, and the IRS may treat the Pre-Funded Warrant as warrants to acquire 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" or "Mark-to-Market Election" described below to mitigate PFIC consequences in the event that we are classified as a PFIC. 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.

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#### Passive Foreign Investment Company Rules

If we are considered a "passive foreign investment company" within the meaning of Section 1297 of the Code (a **PFIC**") at any time during a U.S. Holder's holding period, the following sections will generally describe the potentially adverse U.S. federal income tax consequences to U.S. Holders of the acquisition, ownership, and disposition of the securities.

We believe that we may have been classified as a PFIC for the tax year ended December 31, 2023. Based on current business plans and financial expectations, we anticipate that we may be a PFIC for the current tax year and future 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, our PFIC status for the current year and future years 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 PFIC determination made by us (or by one of our subsidiaries). Each U.S. Holder should consult its own tax advisor regarding our status as a PFIC and the PFIC status of each non-U.S. subsidiary.

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.

We generally will be a PFIC for any tax year in which (a) 75% or more of our gross income for 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 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, "passive income" does not include any interest, dividends, rents, or royalties that are received or accrued by us from a "related person" (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income.

Under certain attribution rules, if we are a PFIC, U.S. Holders will be deemed to own their proportionate share of any of our subsidiaries which is also a PFIC (a**Subsidiary PFIC**"), and will generally be subject to U.S. federal income tax under the "Default PFIC Rules Under Section 1291 of the Code" discussed below on their proportionate share of any (i) distribution on the shares of a Subsidiary PFIC and (ii) disposition or deemed disposition of shares of a Subsidiary PFIC, both as if such U.S. Holders directly held the shares of such Subsidiary PFIC. 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 the securities are made. In addition, U.S. Holders may be subject to U.S. federal income tax on any indirect gain realized on the stock of a Subsidiary PFIC on the sale or disposition of the securities.

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### Default PFIC Rules Under Section 1291 of the Code

If we are a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the acquisition, ownership, and disposition of the securities will depend on whether such U.S. Holder makes a "qualified electing fund" or "QEF" election (a "QEF Election") or makes a mark-to-market election under Section 1296 of the Code (a 'Mark-to-Market Election") with respect to the Shares, Pre-Funded Warrants, the 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 with respect to (a) any gain recognized on the sale or other taxable disposition of the securities and (b) any excess distribution received on the securities. 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 securities, if shorter).

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of the securities of a PFIC (including an indirect disposition of shares of a Subsidiary PFIC), and any excess distribution received on such securities (or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder) must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the securities. 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 the securities, it will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether it ceases 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 the Shares, Pre-Funded Warrants, Warrant Shares, and the Pre-Funded Warrant Shares by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code as discussed above) as if such securities 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 related Warrant. 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 the Warrant Shares, Pre-Funded Warrant Shares, Shares, and Pre-Funded Warrants under the PFIC rules and the applicable elections differently.

QEF Election

A U.S. Holder that makes a QEF Election for the first tax year in which its holding period of its Shares or Pre-Funded Warrants begins generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to its Shares or Pre-Funded Warrants. However, a U.S. Holder that makes a 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.

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A U.S. Holder that makes a timely QEF Election generally (a) may receive a tax-free distribution from us to the extent that such distribution represents "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 Shares or Pre-Funded Warrants 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 Shares or Pre-Funded Warrants.

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 Shares or Pre-Funded Warrants in which we were 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 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 the Shares or Pre-Funded Warrants 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 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 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 securities.

Upon the exercise of a Pre-Funded Warrant, a U.S. Holder may be required to make a new QEF Election with respect to the Pre-Funded Warrant Shares received. Each U.S. Holder should consult its own tax advisor regarding the application of the QEF Election rules to the Pre-Funded Warrants and Pre-Funded Warrant Shares.

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U.S. Holders should be aware that, for each tax year, if any, that we are a PFIC, we can provide no assurances that we will satisfy the record keeping requirements of a PFIC, or that we will make available to U.S. Holders the information such U.S. Holders require to make a QEF Election with respect to us or any Subsidiary PFIC, and as a result, a QEF Election may not be available to U.S. Holders. U.S. Holders should consult with their own tax advisors regarding the potential application of the PFIC rules to the ownership and disposition of the securities, and the availability of certain U.S. tax elections under the PFIC rules.

A U.S. Holder makes a QEF Election by attaching a completed IRS Form 8621, including a PFIC Annual Information Statement, to a timely filed U.S. federal income tax return. However, if 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 the Shares, Warrant Shares, and Pre-Funded Warrant Shares are marketable stock. The 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 U.S. Exchange Act or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such foreign exchange has trading volume, listing, financial disclosure, and other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced and (ii) the rules of such foreign exchange ensure active trading of listed stocks. If such stock is traded on such a qualified exchange or other market, such stock generally will be considered "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. Provided that the Shares, Warrant Shares and Pre-Funded Warrant Shares are "regularly traded" as described in the preceding sentence, such shares are expected to be marketable stock. There can be no assurance that the Shares will be "regularly traded" in subsequent calendar quarters. U.S. Holders should consult their own tax advisors regarding the marketable stock rules. A Mark-to-Market Election will likely not be available with respect to the Warrants and Pre-Funded Warrants. Accordingly, each U.S. Holder should consult its own tax advisor regarding the availability of a Mark-to-Market Election with respect to the Warrants and Pre-Funded Warrants. The balance of this discussion generally assumes that a Mark-to-Market Election may be made with respect a Pre-Funded Warrants.

A U.S. Holder that makes a Mark-to-Market Election with respect to its Shares or Pre-Funded Warrants generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to such Shares, Warrant Shares, Pre-Funded Warrants Shares, or Pre-Funded Warrants. 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 Shares or Pre-Funded Warrants 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 Shares and Pre-Funded Warrants.

Any Mark-to-Market Election made by a U.S. Holder for the Shares or Pre-Funded Warrants will also apply to such U.S. Holder's Warrant Shares and Pre-Funded Warrant Shares. As a result, if a Mark-to-Market Election has been made by a U.S. Holder with respect to its 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 securities. Consequently, the default rules under Section 1291 described above generally will apply to the mark-to-market gain realized in the tax year in which Warrant Shares are received. 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 Shares, Pre-Funded Warrants, and any Warrant Shares or Pre-Funded Warrant Shares as of the close of such tax year over (b) such U.S. Holder's tax basis in such securities. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the excess, if any, of (i) such U.S. Holder's adjusted tax basis in the Shares, Pre-Funded Warrants, and any Warrant Shares or Pre-Funded Warrant Shares, over (ii) the fair market value of such securities (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).

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A U.S. Holder that makes a Mark-to-Market Election generally also will adjust such U.S. Holder's tax basis in the Shares, Pre-Funded Warrants, Warrant Shares, and 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 such securities, 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).

A U.S. Holder makes a Mark-to-Market Election by attaching a completed IRS Form 8621 to a timely filed U.S. federal income tax return. A timely 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 securities cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark-to-Market Election with respect to the Shares, Pre-Funded Warrants, 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.

Because the U.S. federal income tax characterization of the Pre-Funded Warrants is unclear, U.S. Holders of Pre-Funded Warrants should consult with their tax advisors as to the availability of a QEF Election or Mark-to-Market election with respect to the Pre-Funded Warrants.

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 securities 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 the securities 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.

Certain additional adverse rules will 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 the securities as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such securities.

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In addition, a U.S. Holder who acquires securities from a decedent will not receive a "step up" in tax basis of such securities to fair market value.

Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with their own tax advisor regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisor regarding the PFIC rules (including the applicability and advisability of a QEF Election and 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 the securities.

# 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."

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 Warrant.

If the acquisition of a Pre-Funded Warrant is not treated as an acquisition of Shares for U.S. federal income tax purposes as described above in under the heading "Treatment of Pre-Funded Warrants", then the foregoing rules described in this paragraph would also apply to the exercise of a Pre-Funded Warrant.

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 the Shares, Pre-Funded Warrants, Warrant Shares, and Pre-Funded Warrant Shares" below).

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General Rules Applicable to U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of the Shares, Pre-Funded Warrants, Warrant Shares and Pre-Funded Warrant Shares

The following discussion describes the general rules applicable to the ownership and disposition of the Shares, Pre-Funded Warrants, Warrant Shares, and Pre-Funded Warrants, Shares, but is subject in its entirety to the special rules described above under the heading "Passive Foreign Investment Company Rules."

### Distributions on the 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 Share, Pre-Funded Warrant, Warrant Share or Pre-Funded Warrant Share (as well as any constructive distribution on a Warrant as described above) 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 and accumulated "earnings and profits", as computed under U.S. federal income tax principles. 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 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 such securities and thereafter as gain from the sale or exchange of such securities (see "Sale or Other Taxable Disposition of the Shares, Pre-Funded Warrant Shares and/or Pre-Funded Warrant Shares" below). However, we may not maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder may be required to assume that any distribution by us with respect to such securities will constitute ordinary dividend income. Dividends received on such securities 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 Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended, or the Shares are readily tradable on a United States securities market, dividends paid by us to non-corporate U.S. Holders, including natividuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certa

# Sale or Other Taxable Disposition of the Shares, Pre-Funded Warrants, Warrant Shares and/or Pre-Funded Warrant Shares

Upon the sale or other taxable disposition of the 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 (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in such securities 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, such securities 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 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.

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# **Additional Tax 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 the securities 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). If the foreign currency received is not converted into U.S. dollars on the date of receipt, 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 receives payment in foreign currency and engages in a subsequent conversion or other disposition of the foreign currency 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 advisor regarding the

U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the securities (or with respect to any constructive dividend 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 paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid or accrued (whether directly or through withholding) by a U.S. Holder during a year. The foreign tax credit rules are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules.

### Information Reporting; Backup Withholding Tax

Under U.S. federal income tax laws 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 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. U. S. Holders may be subject to these reporting requirements unless the securities 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 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 the securities generally may be subject to information reporting and backup withholding tax, currently at the rate of 24%, if a U.S. Holder (a) fails to furnish its correct U.S. taxpayer identification number (generally on 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 it 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, such as U.S. Holders that are corporations, generally are excluded from these information reporting and backup withholding tax rules. 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.

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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 THE SECURITIES. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN THEIR OWN PARTICULAR CIRCUMSTANCES.

# PLAN OF DISTRIBUTION

A.G.P./Alliance Global Partners, as the Placement Agent, has agreed to act as our placement agent in connection with this offering subject to the terms and conditions of the Placement Agency Agreement dated October 17, 2024 (the "Placement Agency Agreement"). The Placement Agent is not purchasing or selling any Securities, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of Securities other than to use its "best efforts" to arrange for the sale of Securities by us. Therefore, we may not sell the entire amount of Securities being offered. The Placement Agent may engage one or more sub-agents or selected dealers to assist with the offering.

We have entered into a securities purchase agreement directly with the investor in connection with this offering, and we will only sell to investor who has entered into the securities purchase agreement.

Upon the closing of this offering, we will pay the Placement Agent a cash transaction fee equal to 7.0% of the aggregate gross proceeds to us from the sale of the Securities in the offering (and Common Warrants in the concurrent private placement). We have also agreed to pay the Placement Agent up to \$85,000 of legal counsel and other out-of-pocket expenses. We estimate the total expenses of this offering and the concurrent private placement, which will be payable by us, excluding the placement agent fees and expenses, will be approximately \$119,905.

The Placement Agent shall have the right to act as sole, lead or co-lead U.S. agent, U.S. underwriter or U.S. advisor in connection with any subsequent capital-raising transaction during the 6-month period following the termination or expiration of the Placement Agency Agreement and also be entitled to the same cash compensation as this offering with respect to certain investors contacted by the Placement Agent in any subsequent financing.

We expect to deliver the securities being offered pursuant to this prospectus supplement on or about October 18, 2024, subject to the Company fulfilling all the requirements of the TSXV.

We have agreed to indemnify the Placement Agent and specified other persons against certain liabilities relating to or arising out of the Placement Agent's activities under the engagement letter and to contribute to payments that the Placement Agent may be required to make in respect of such liabilities.

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the Placement Agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of common shares by the Placement Agent acting as principal. Under these rules and regulations, the Placement Agent:

- · may not engage in any stabilization activity in connection with our securities; and
- · may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

The form of securities purchase agreement will be filed as an exhibit to our Report of Foreign Private Issuer on Form 6-K with the SEC and that will be incorporated by reference into the Registration Statement of which this prospectus supplement forms a part.

From time to time, the Placement Agent 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 may receive customary fees and commissions. However, we have no present arrangements with the Placement Agent for any further services.

Our directors and executive officers have entered into lock-up agreements. Under these agreements, these individuals have agreed, subject to specified exceptions, not to sell or transfer any common shares, warrants or other securities convertible into, or exchangeable or exercisable for, our common shares during a period ending 45 days after the date of this prospectus supplement. Specifically, these individuals have agreed, in part, not to sell, contract to sell, hypothecate, pledge or otherwise dispose of (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by such person, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to, any of our common shares or securities convertible, exchangeable or exercisable into our common shares beneficially owned, held or thereafter acquired.

Notwithstanding these limitations, these common shares may be transferred under limited circumstances, including, without limitation, by gift, will or intestate succession, or any transaction relating to common shares or other securities acquired in the open market after the completion of this offering, provided that no filing is required under the Exchange Act.

In addition, we have agreed that, subject to certain exceptions, (i) we will not conduct any issuances of our common shares for a period of 45 days following closing of this offering and that (ii) we will not effect or enter into an agreement to effect any issuance of common shares or equivalents securities involving an at-the-market offering or a variable rate transaction (as defined in the securities purchase agreement to which we may become party with the Purchaser in the offering) for a period of one year following the closing of this offering; provided that after 45 days following the closing date of this offering, we will be permitted to enter into an agreement and effect sales in connection with an "at the market" offering under Rule 415(a)(4) under the Securities Act.

The transfer agent and registrar for our common shares is TSX Trust Company at its principal office in Toronto, Canada. Our co-transfer agent is Continental Stock Transfer & Trust Company at its principal office in New York, New York.

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Our common shares are listed and posted for trading on the TSXV and Nasdaq under the symbol "XRTX".

# CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2024 as follows:

- · on an actual basis; and
- on an as adjusted basis to reflect our receipt of the net proceeds our sale and issuance of 320,000 Shares and Pre-Funded Warrants to purchase 490,810 Pre-Funded Warrant Shares in this offering based on the offering price of \$1.85 per Share and \$1.84999 per Pre-Funded Warrant and after deducting estimated Placement Agent fees and expenses and estimated offering expenses payable by us (and assuming no exercise of the Common Warrants).

Canadian Dollar amounts have been translated into U.S. Dollars based on the June 28, 2024, daily rate of exchange, which was US\$1.00 = CDN\$1.3687 or CDN\$1.00 = US\$0.7306 as reported by the Bank of Canada and have been provided solely for the convenience of the reader.

You should read this table in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes incorporated by reference into this prospectus supplement:

	As of June 30, 2024			
	Actual		As Adjusted	
	(In tho	usands of US dollars, e	except share data)	
Cash	\$	3,078 \$	4,354	
Equity				
Share capital	\$	17,871 \$	19,146	
Common shares, unlimited authorized shares, without par value;				
shares issued and outstanding, actual; 2,903,565 shares issued and				
outstanding, pro forma as adjusted				
Share-based payments, warrant reserve and other	\$	5,565 \$	5,565	
Obligation to issue shares	\$	25 \$	25	
Accumulated other comprehensive (loss) income	\$	(53) \$	(53)	
Deficit	\$	(20,704) \$	(20,704)	
Total Equity	\$	2,704 \$	3,979	
Total Capitalization	\$	2,704 \$	3,979	

The number of common shares to be outstanding after this offering is based on an aggregate of 2,903,565 shares outstanding as of June 30, 2024. The table above excludes, as of that date:

• 142,518 common shares issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$12.22 per common share;

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- 2,019,927 common shares issuable upon the exercise of warrants outstanding, with 1,125,210 issuable at an exercise price of \$5.00 per common share, and 894,717 issuable at an exercise price of CDN\$4.50 per common share (US\$3.29 based on the daily average exchange rate from the Bank of Canada on June 28, 2024);
- 50,298 common shares issuable upon the exercise of finders' warrants outstanding, with 6,377 issuable at an exercise price of CDN\$42.30 per common share (US\$30.93 based on the daily average exchange rate from the Bank of Canada on June 28, 2024), 16,144 issuable at an exercise price of \$42.93, and 27,777 issuable at an exercise price of \$10.98; and
- · 155,594 common shares reserved for future issuances under the Company's Stock Option Plan.

# DILUTION

If you invest in the Shares in this offering, you will experience dilution to the extent of the difference between the price per Share you pay in this offering and the net tangible

book value per share of our common shares immediately after this offering. As of June 30, 2024, we had a net tangible book value of approximately \$2,535,823 or \$0.87 per common share, based upon 2,903,565 common shares outstanding on such date. Net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities and divided by the total number of common shares outstanding.

After giving effect to the sale by us in this offering of 320,000 Shares at a public offering price of \$1.85 per Share and 490,810 Pre-Funded Warrants at a public offering price of \$1.84999 per Pre-Funded Warrant (assuming full exercise of the Pre-Funded Warrants at an exercise price of \$0.00001, no exercise of the Common Warrants issued in the concurrent private placement), and after deducting estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2024 would have been approximately \$3,811,322 million, or approximately \$1.03 per common share. This represents an immediate increase in net tangible book value of approximately \$0.16 per common share to existing shareholders and an immediate dilution of approximately \$0.82 per common share to new investors. The following table illustrates this calculation on a per share basis.

Assumed public offering price per Share	\$	1.85
Net tangible book value per share as of June 30, 2024	\$ 0.87	
Increase in net tangible book value per share attributable to this offering	\$ 0.16	
As adjusted net tangible book value per share as of June 30, 2024, after giving effect to this offering	\$	1.03
Dilution per share to investors purchasing Shares in this offering	\$	0.82

The number of common shares shown above to be outstanding immediately before and after this offering is based on 2,903,565 common shares outstanding as of June 30, 2024, and excludes, as of such date:

- 142,518 common shares issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$12.22 per common share;
- · 2,019,927 common shares issuable upon the exercise of warrants outstanding, with 1,125,210 issuable at an exercise price of \$5.00 per common share, and 894,717 issuable at an exercise price of CDN\$4.50 per common share (US\$3.29 based on the daily average exchange rate from the Bank of Canada on June 28, 2024);

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- 50,298 common shares issuable upon the exercise of finders' warrants outstanding, with 6,377 issuable at an exercise price of CDN\$42.30 per common share (US\$30.93 based on the daily average exchange rate from the Bank of Canada on June 28, 2024), 16,144 issuable at an exercise price of \$42.93, and 27,777 issuable at an exercise price of \$10.98; and
- · 155,594 common shares reserved for future issuances under the Company's Stock Option Plan.

#### EXPENSES OF ISSUANCE

The following is a statement of the expenses (all of which are estimated), other than any fees and expenses reimbursed by us to be incurred in connection with the offering under this prospectus supplement. The amounts set forth below are in United States Dollars. All of the amounts below are estimated, other than SEC registration filing fees and FINRA filing fees (each of which have been prorated for this offering).

SEC Registration Fee	\$ 240
FINRA Filing Fee	\$ 165
TSXV Listing Fees	\$ 4,000
Nasdaq Listing Fees	\$ 5,000
Printing Expenses	\$ 3,000
Legal fees and expenses	\$ 100,000
Accountants' fees and expenses	\$ 4,500
Transfer agent fees and expenses	\$ 3,000
Total	\$ 119,905

# LEGAL MATTERS

Troutman Pepper Hamilton Sanders LLP has acted as our United States counsel in connection with this offering and will pass on certain legal matters with respect to United States law in connection with this offering. Fasken Martineau DuMoulin LLP has acted as Canadian counsel for the Company in connection with this offering and will pass upon the validity of the Securities issued in this offering and certain legal matters as to Canadian law. Sullivan & Worcester LLP has acted as counsel for the Placement Agent in connection with certain legal matters relating to this offering.

### **EXPERTS**

The financial statements and management's assessment of the effectiveness of internal control over financial reporting incorporated in this prospectus supplement by reference to the Form 20-F have been incorporated in reliance on the report of Smythe LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

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**Prospectus** 



XORTX Therapeutics Inc. US\$50,000,000 Common Shares Warrants Units XORTX Therapeutics Inc. ("we", "us", "our", "XORTX" or the "Company") may offer and issue from time to time common shares (\*Common Shares\*), warrants ("Warrants") and units comprised of Common Shares and Warrants ("Units") of the Company or any combination thereof (collectively, the "Securities") up to an aggregate initial offering price of US\$50,000,000 (or the equivalent thereof if the Securities are denominated in any other currency or currency unit) during the period that this registration statement (the "Prospectus"), including any amendments hereto, remains effective. Securities may be offered separately or together, in amounts, at prices and on terms to be determined based on market conditions at the time of sale and set forth in one or more prospectus supplements (each, a "Prospectus Supplement" and together, the "Prospectus Supplements").

The specific terms of the Securities with respect to a particular offering will be set out in the applicable Prospectus Supplement and may include, where applicable (i) in the case of Common Shares, the number of Common Shares offered, the offering price, and any other terms specific to the Common Shares being offered, (ii) in the case of Warrants, the offering price, the designation, the number and the terms of the Common Shares purchasable upon exercise of the Warrants, any procedures that will result in the adjustment of these numbers, the exercise price, the dates and periods of exercise and any other terms specific to the Warrants being offered, and (iii) in the case of Units, the number of Units offered, the offering price of the Units, the number, designation and terms of the Common Shares and Warrants comprising the Units and any procedures that will result in the adjustment of those numbers and any other specific terms applicable to the offering of Units. Where required by statute, regulation or policy, and where Securities are offered in currencies other than United States dollars, appropriate disclosure of foreign exchange rates applicable to the Securities will be included in the Prospectus Supplement describing the Securities.

All shelf information permitted under applicable law to be omitted from this Prospectus will be contained in one or more Prospectus Supplements that will be delivered to purchasers together with this Prospectus. Each Prospectus Supplement will be incorporated by reference into this Prospectus for the purposes of securities legislation as of the date of the Prospectus Supplement and only for the purposes of the distribution of the Securities to which the Prospectus Supplement pertains.

This Prospectus constitutes a public offering of the Securities only in those jurisdictions where they may be lawfully offered for sale and only by persons permitted to sell the Securities in those jurisdictions. We may offer and sell Securities to, or through, underwriters or dealers and also may offer and sell certain Securities directly to other purchasers or through agents pursuant to exemptions from registration or qualification under applicable securities laws. A Prospectus Supplement relating to each issue of Securities offered thereby will set forth the names of any underwriters, dealers, or agents involved in the offering and sale of the Securities and will set forth the terms of the offering of the Securities, the method of distribution of the Securities including, to the extent applicable, the proceeds we will receive and any fees, discounts or any other compensation payable to underwriters, dealers or agents and any other material terms of the plan of distribution.

Our Common Shares are currently traded under the symbol "XRTX" on the TSX Venture Exchange (the "TSXV") and on the Nasdaq Capital Market ("Nasdaq"). On January 26, 2023 (the last trading day prior to the date of this Prospectus), the closing price of the Common Shares on: (i) the TSXV was \$0.91; and (ii) the Nasdaq was US\$0.692. We will apply to have any Common Shares distributed under this Prospectus listed on the TSXV and the Nasdaq provided the Common Shares are currently listed or traded on such exchanges. Any listing and admission will be subject to XORTX fulfilling all of the listing requirements of the TSXV and the Nasdaq, respectively. Unless otherwise specified in the applicable Prospectus Supplement, any offering of Warrants or Units will be a new issue of Securities with no established trading market and, accordingly, such Securities will not be listed on any securities or stock exchange or on any automated dealer quotation system. Pursuant to General Instruction I.B.5. of Form F-3, in no event will we sell our securities in a public primary offering with a value exceeding more than one- third of our public float in any 12-month period so long as our public float remains below US\$75 million. During the 12 calendar months prior to and including the date of this prospectus, we have not offered or sold any securities pursuant to General Instruction I.B.5. of Form F-3.

We are an "emerging growth company" as defined by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act") and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. However, we have elected not to take advantage of the extended transition period allowed for emerging growth companies for complying with new or revised accounting guidance as allowed by Section 107 of the JOBS Act and Section 7(a)(2)(B) of the Securities Act of 1933, as amended, (the "Securities Act").

There is no market through which the Warrants or Units may be sold and purchasers may not be able to resell such Securities purchased under this Prospectus and any applicable Prospectus Supplement. This may affect the pricing of such Securities in the secondary market, the transparency and availability of trading prices, the liquidity of the Securities, and the extent of issuer regulation. See "Risk Factors".

We express all amounts in this prospectus in Canadian dollars, except where otherwise indicated. References to "\$" are to Canadian dollars and references to "US\$" are to U.S. dollars.

Our principal executive offices are located at 3710 — 33rd Street NW, Calgary, Alberta, Canada T2L 2M1, Telephone: (403) 455-7727.

We have prepared this Prospectus in accordance with United States disclosure requirements. Our financial statements are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") and thus may not be comparable to financial statements of United States companies.

Purchasers of the Securities should be aware that the acquisition of the Securities may have tax consequences in the United States and in Canada. Such consequences for purchasers who are resident in, or citizens of, the United States, or who are resident in Canada may not be described fully herein or in any applicable Prospectus Supplement. Purchasers of the Securities should read the tax discussion contained in the applicable Prospectus Supplement with respect to a particular offering of Securities.

The enforcement by investors of civil liabilities under United States federal securities laws may be affected adversely by the fact that XORTX is incorporated and governed under the laws of the Province of British Columbia, Canada, that a number of our officers and directors are residents of countries other than the United States, that some or all of the underwriters, if any, may be residents of a foreign country, and a substantial portion of our assets and some of said persons are located outside the United States.

No underwriter has been involved in the preparation of this Prospectus nor has any underwriter performed any review of the contents of this Prospectus.

Investing in the Securities involves a high degree of risk. Prospective purchasers of the Securities should carefully consider all the information in this Prospectus and in the documents incorporated by reference in this Prospectus. See "Risk Factors" beginning on page 4 of this Prospectus.

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.

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You should rely only on the information contained in or incorporated by reference into this Prospectus or any Prospectus Supplement. References to this "Prospectus" include documents incorporated by reference therein. See "Documents Incorporated by Reference". The information in or incorporated by reference into this Prospectus is current only as of its date. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to offer these Securities.

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# CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Prospectus contains forward-looking statements that are subject to risks and uncertainties. These forward-looking statements include information about possible or assumed future results of our business, financial condition, results of operations, liquidity, plans and objectives. In some cases, you can identify forward-looking statements by terminology such as "believe," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "potential," or the negative of these terms or other similar expressions. The statements we make regarding the following matters are forward-looking by their nature and are based on certain of the assumptions noted below:

- $\cdot$  the intentions, plans and future actions of the Company;
- · statements relating to the business and future activities of the Company;
- $\cdot \quad \text{anticipated developments in operations of the Company;} \\$
- · market position, ability to compete and future financial or operating performance of the Company;
- · the timing and amount of funding required to execute the Company's business plans;
- capital expenditures;
- $\cdot$  the effect on the Company of any changes to existing or new legislation or policy or government regulation;
- the availability of labor;
- · requirements for and availability to us of additional capital;
- · goals, strategies and future growth;
- · the adequacy of financial resources;
- expectations regarding revenues, expenses and anticipated cash needs;
- $\cdot$  the impact of the COVID-19 pandemic on the business and operations of the Company; and
- · general market conditions and macroeconomic trends driven by the COVID-19 pandemic and/or geopolitical conflicts, including supply chain disruptions, market volatility, inflation, and labor challenges, among other factors.

The preceding list is not intended to be an exhaustive list of all of our forward-looking statements. The forward-looking statements are based on our beliefs, assumptions and expectations of future performance, taking into account the information currently available to us. These statements are only predictions based upon our current expectations and projections about future events. There are important factors that could cause our actual results, levels of activity, performance or achievements to differ materially from the results, levels of activity, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, those factors identified under the

"Risk Factors" in this Prospectus. Furthermore, unless otherwise stated, the forward-looking statements contained in this Prospectus are made as of the date hereof, and we have no intention and undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, changes or otherwise, except as required by law.

### PUBLICLY AVAILABLE INFORMATION ON XORTX

We file reports and other information with the securities commissions and similar regulatory authorities in the provinces of Canada (collectively, the 'Commissions'). These reports and information are available to the public free of charge on SEDAR at www.sedar.com.

We are subject to the information requirements of the U.S. Securities Exchange Act of 1934, as amended (the 'Exchange Act'), relating to foreign private issuers and applicable Canadian securities legislation and, in accordance therewith, file reports and other information with the SEC and securities regulatory authorities in Canada. Investors may read and download documents we have filed with the SEC's Electronic Data Gathering and Retrieval system at www.sec.gov.

Readers should rely only on information contained or incorporated by reference in this Prospectus and any applicable Prospectus Supplement. We have not authorized anyone to provide the reader with different information. We are not making an offer of the Securities in any jurisdiction where the offer is not permitted. Readers should not assume that the information contained in this Prospectus is accurate as of any date other than the date on the front of this Prospectus, unless otherwise noted herein or as required by law. It should be assumed that the information appearing in this Prospectus and the documents incorporated herein by reference are accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

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### DOCUMENTS INCORPORATED BY REFERENCE

Information has been incorporated by reference in this Prospectus from documents filed with the Commissions and filed with, or furnished to, the SEC Copies of the documents incorporated herein by reference may be obtained on request without charge upon written or oral request from our Corporate Secretary at 3710 — 33rd Street NW, Calgary, Alberta, Canada T2L 2M1, Telephone: (403) 455-7727. Copies of these

documents are also available through the Internet on the System for Electronic Document Analysis and Retrieval, which can be accessed online awww.sedar.com and on the SEC's Electronic Data Gathering and Retrieval System, which can be accessed online at www.sec.gov and at our website at www.xortx.com.

The following documents, which we filed or furnished with the Commissions and the SEC, as applicable, are specifically incorporated by reference into, and form an integral part of, this Prospectus:

- (a) Our Annual Report on Form 20-F for the year ended December 31, 2021 filed with the SEC on May 3, 2022, as amended January 27, 2023 (together, the "Form 20-F");
- (b) Our Reports on Form 6-K filed with the SEC on May 16, June 30 (with respect to the Company's July 20, 2022 Annual and Special Meeting of Shareholders), July 22, August 11, November 14, and November 28, 2022 and January 19, 2023; and
- (c) The description of our securities included in our Registration Statement on <u>Form 8-A filed with the SEC on September 29, 2021</u>, including any subsequent amendments or reports filed for the purpose of updating such description.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, and any document of the type referred to in the preceding paragraph, subsequent to the date of this Prospectus and prior to the termination of the offering of the Securities offered by this Prospectus are incorporated by reference into this Prospectus and form part of this Prospectus from the date of filing or furnishing of these documents. We may incorporate by reference into this Prospectus any Form 6-K that is submitted to the SEC after the date of the filing of the registration statement of which this Prospectus forms a part and before the date of termination of this offering. Any such Form 6-K that we intend to so incorporate shall state in such form that it is being incorporated by reference into this Prospectus. The documents incorporated or deemed to be incorporated herein by reference contain meaningful and material information relating to us and the readers should review all information contained in this Prospectus and the documents incorporated or deemed to be incorporated herein by reference.

A Prospectus Supplement containing the specific terms of an offering of Securities and other information relating to the Securities will be delivered to prospective purchasers of such Securities together with this Prospectus and will be deemed to be incorporated into this Prospectus as of the date of such Prospectus Supplement only for the purpose of the offering of the Securities covered by that Prospectus Supplement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Prospectus, to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not constitute a part of this Prospectus, except as so modified or superseded. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document that it modifies or supersedes. The making of such a modifying or superseding statement shall not be deemed an admission for any purposes that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in light of the circumstances in which it was made.

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# RISK FACTORS

Prospective investors in a particular offering of Securities should carefully consider the risks presented in this Prospectus, as well as the information and risk factors contained in the Prospectus Supplement relating to that offering and any and all other information incorporated by reference in this Prospectus. Discussions of certain risks affecting the Company are generally provided and described in, among other documents, the Company's annual and interim reports filed from time to time, which are incorporated by reference into this Prospectus and include the Company's annual information form, annual management's discussion and analysis and interim management's discussion and analysis. In particular, see the "Risk Factors" heading in the Company's latest annual information form and interim or annual management's discussion and analysis, as the case may be.

An investment in the Securities offered hereunder is speculative and involves a high degree of risk. The risks and uncertainties described or incorporated by reference herein are not the only ones the Company may face. Additional risks and uncertainties, including those that the Company is unaware of or that are currently deemed immaterial, may also become important factors that affect the Company and its business. If any such risks actually occur, the Company's business, financial condition and results of operations could be materially adversely affected.

In addition to the risks set out in our Form 20-F and Forms 6-K filed May 16, August 11, and November 14, 2022 and the other risk factors presented in a Prospectus Supplement or other reports that may, from time to time, be incorporated by reference into this Prospectus, prospective investors should also carefully consider the risks set out below.

# You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional Common Shares or other securities convertible into or exchangeable for Common Shares at prices that may not be the same as the price per share paid by any investor in an offering in a subsequent Prospectus Supplement. We may sell Common Shares or other securities in any other offering at a price per share that is less than the price per share or other security paid by any investor in an offering in a subsequent Prospectus Supplement, and investors purchasing Common Shares or other securities in the future could have rights superior to you. The price per share at which we sell additional Common Shares or securities convertible or exchangeable into Common Shares, in future transactions may be higher or lower than the price per share paid by any investor in an offering under a subsequent Prospectus Supplement.

### There can be no assurance as to the liquidity of the trading market for certain Securities or that a trading market for certain Securities will develop.

There is no public market for our warrants, and unless otherwise specified in the applicable Prospectus Supplement, the Company does not intend to apply for listing of Warrants. If these securities are traded after their initial issue, they may trade at a discount from their initial offering prices depending on the market for similar securities, prevailing interest rates and other factors, including general economic conditions and the Company's financial condition. There can be no assurance as to the liquidity of the trading market for any Warrants or that a trading market for these securities will develop.

# There will be no market for the Units.

We have not applied and do not intend to apply to list the Units on any securities exchange. There will be no market through which Units may be sold and purchasers may not be able to resell Units purchased in any offering. If the Units are traded after their initial issue, they may trade at a discount from their initial offering prices depending on the market conditions, prevailing interest rates and other factors, including general economic conditions and our financial condition. There can be no assurance as to the liquidity of the trading market for the Units or that a trading market for such Units will develop.

#### MATERIAL CHANGES

Except as otherwise disclosed in this Prospectus there have been no material changes to our operations that have occurred since September 30, 2022, and that have not been described in a report on Form 6-K furnished under the Exchange Act and incorporated by reference into this Prospectus.

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# CAPITALIZATION AND INDEBTEDNESS

Our capitalization will be set forth in the applicable prospectus supplement or in a report on Form 6-K subsequently furnished to the SEC and specifically incorporated by reference into this prospectus.

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### DESCRIPTION OF SHARE CAPITAL

### General

The following is a summary of the material rights of our share capital as contained in our notice of articles and articles and any amendments thereto. This summary is not a complete description of the share rights associated with our capital stock. For more detailed information, please see our notice of articles and articles, which are filed as exhibits to the registration statement of which this prospectus forms a part.

### Common Shares

# **Outstanding Shares**

Our authorized share capital consists of an unlimited number of Common Shares, each without par value.

As of January 27, 2023, we had 1,167,095 Common Shares issuable pursuant to exercisable outstanding stock options, 583,899 Common Shares issuable pursuant to outstanding options that are not currently exercisable, 10,579,796 Common Shares issuable upon the exercise of outstanding common share warrants, and we had approximately 15 holders of record of our Common Shares.

# Voting Rights

Under our articles, the holders of our Common Shares are entitled to one vote for each common share held on all matters submitted to a vote of the shareholders, including the election of directors. Our notice of articles and articles do not provide for cumulative voting rights. Because of this, the holders of a plurality of the Common Shares entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose.

### Dividends

Subject to priority rights that may be applicable to any then outstanding Common Shares, and the applicable provisions of the Business Corporation Act British Columbia ("BCBCA"), holders of our Common Shares are entitled to receive dividends, as and when declared by our Board, in their sole discretion as they see fit. For more information, see the section titled "Dividend Policy."

#### Liquidation

In the event of our liquidation, dissolution or winding up, holders of our Common Shares are entitled to share ratably in the net assets legally available for distribution to shareholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding preferred shares.

# Rights and Preferences

Our Common Shares contain no pre-emptive or conversion rights and have no provisions for redemption or repurchase for cancellation, surrender or sinking or purchase funds. There are no provisions in our notice of articles and articles requiring holders of Common Shares to contribute additional capital. The rights, preferences and privileges of the holders of our Common Shares are subject to and may be adversely affected by the rights of the holders of any series of new preferred shares that may be created, authorized, designated, and issued in the future.

### Fully Paid and Non-assessable

All of our outstanding Common Shares are, and the Common Shares to be issued pursuant to this Prospectus, when paid for, will be fully paid and non-assessable.

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#### DESCRIPTION OF THE WARRANTS

Warrants will typically be offered with Common Shares, with such securities often referred to collectively as a "Unit", but may be offered separately. The Warrants either will be issued under a warrant indenture or agreement that will be entered into by the Company and a trustee at the time of issuance of the Warrants or will be represented by warrant certificates issued by the Company.

Warrants will entitle the holder thereof to receive Common Shares and/or other Securities upon the exercise thereof and payment of the applicable exercise price. A Warrant will be exercisable for a specific period of time at the end of which time it will expire and cease to be exercisable.

Holders of Warrants are not shareholders of the Company. The particular terms and provisions of Warrants offered by this Prospectus and any applicable Prospectus Supplement will be described in the Prospectus Supplement filed in respect of such Warrants. This description may include, without limitation and as applicable: (i) the title or designation of the Warrants; (ii) the number of Warrants offered; (iii) the number of Common Shares and/or other Securities purchasable upon exercise of the Warrants and the procedures for exercise; (iv) the exercise price of the Warrants; (v) the dates or periods during which the Warrants are exercisable and when they expire; (vi) the designation and terms of any other Securities with which the Warrants will be offered, if any, and the number of Warrants that will be offered with each such Security; and (vii) any other material terms and conditions of the Warrants including, without limitation, transferability and adjustment terms and whether the Warrants will be listed on a securities exchange.

### DESCRIPTION OF THE UNITS

Units are securities consisting of one or more of the other Securities described in this Prospectus offered together as a "Unit". A Unit is typically issued such that the holder thereof is also the holder of each Security included in the Unit. Thus, the holder of a Unit will have the rights and obligations of a holder of each Security comprising the Unit. The unit agreement under which a Unit is issued may provide that the Securities comprising the Unit may not be held or transferred separately at any time or before a specified date.

The particular terms and provisions of Units offered by this Prospectus and any applicable Prospectus Supplement will be described in the Prospectus Supplement filed in respect of such Units. This description may include, without limitation and as applicable: (i) the designation and terms of the Units and of the Securities comprising the Units, including whether and under what circumstances those Securities may be held or transferred separately; (ii) any provisions for the issuance, payment, settlement, transfer or exchange of the Units or of the Securities comprising the Units; (iii) whether the Units will be issued in fully registered or global form; and (iv) any other material terms and conditions of the Units.

# CORPORATE GOVERNANCE

Under the BCBCA, we are required to hold a general meeting of our shareholders at least once every year at a time and place determined by our Board, provided that the meeting must not be held later than 15 months after the preceding annual general meeting. A notice to convene a meeting, specifying the date, time and location of the meeting must be sent to shareholders, to each director and the auditor not less than 21 days prior to the meeting or such other minimum period as required by the applicable securities laws. Under the BCBCA, shareholders entitled to notice of a meeting may waive or reduce the period of notice for that meeting, provided applicable securities laws requirements are met.

Pursuant to our articles, all business transacted at a special meeting of shareholders (except business relating to the conduct of or voting at the meeting) and all business transacted at an annual meeting of shareholders (except business relating to the conduct of or voting at the meeting, consideration of our financial statements presented at the meeting, consideration of any director or auditor's report, setting or changing of the number of directors, election or appointment of directors, appointment of the auditor, remuneration of the auditor, business arising out of a report of the directors not requiring the passage of a special or exceptional resolution, and any other business which, under the articles or BCBCA, may be transacted at a meeting of shareholders without prior notice of the business being given to the shareholders) is deemed to be special business. Notice of a meeting of shareholders at which special business is to be transacted shall (a) state the general nature of that business; and (b) if the special business includes considering, ratifying, adopting or authorizing any document, or the signing of any document, have attached to it the document or state that such document is available for inspection.

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Under our articles, our Board has the power at any time to call a meeting of our shareholders where special business is to be considered.

Those entitled to vote at a meeting are entitled to attend meetings of our shareholders. Every shareholder entitled to vote may appoint one or more (but not to exceed five) proxyholders to attend the meeting in the manner and to the extent authorized and with the authority conferred by the proxy. Directors, auditors, legal counsels, secretaries (if any), and any other persons invited by the directors are entitled to attend any meeting of our shareholders but will not be counted in quorum or be entitled to vote at the meeting unless he or she or it is a shareholder or proxyholder entitled to vote at the meeting.

The material differences between the BCBCA and the DGCL that may have the greatest such effect include, but are not limited to, the following: (i) for material corporate transactions (such as mergers and amalgamations, other extraordinary corporate transactions or amendments to our articles) the BCBCA generally requires a two-thirds majority vote by shareholders (including, in some circumstances, shareholders that otherwise do not have the right to vote), whereas the DGCL generally requires only a majority vote; (ii) under the BCBCA, holders of 5% or more of our shares that carry the right to vote at a meeting of shareholders can requisition a general meeting of shareholders at which special matters may be conducted, whereas such right does not exist under the DGCL; and (iii) unlike the DGCL which does not provide for any oppression remedy for shareholders of Delaware entities, the BCBCA provides an oppression remedy that enables a court to make an order, whether interim or final, if an application is made to the court by a shareholder in a timely manner and it appears to the court that there are reasonable grounds for believing (A) that the affairs of the corporation are being or have been conducted, or the powers of the directors are being or have been exercised, in a manner that is oppressive to one or more shareholders, or (B) that some act of the corporation has been done or is threatened, or that some resolution of the shareholders or of the shareholders holding shares of a class or series of shares has been passed or is proposed, that is unfairly prejudicial to one or more of the shareholders including the applicant.

### **Certain Takeover Bid Requirements**

Unless such offer constitutes an exempt transaction, an offer made by a person, an "offeror", to acquire outstanding shares of a Canadian entity that, when aggregated with the offeror's holdings (and those of persons or companies acting jointly with the offeror), would constitute 20% or more of the outstanding shares in a class, would be subject to the take-over provisions of Canadian securities laws. The foregoing is a limited and general summary of certain aspects of applicable securities law in the provinces and territories of Canada, all in effect as of the date hereof.

In addition to those takeover bid requirements noted above, the acquisition of our shares may trigger the application of statutory regimes including among others, the Investment Canada Act (Canada) and the Competition Act (Canada).

Limitations on the ability to acquire and hold our shares may be imposed by the Competition Act (Canada). This legislation permits the Commissioner of Competition (the "Commissioner"), to review any acquisition of control over or of a significant interest in us. This legislation grants the Commissioner jurisdiction, for up to one year after closing, to challenge this type of acquisition before the Canadian Competition Tribunal on the basis that it would, or would be likely to, substantially prevent or lessen competition in any market in Canada.

Since we are a publicly-traded corporation, this legislation also requires any person who intends to acquire our voting shares to file a notification with the Canadian Competition Bureau if certain financial thresholds are exceeded and if that person (and their affiliates) would hold more than 20% of our voting shares as a result of such acquisition. If a person already owns more than 20% of our voting shares, a notification must be filed before the acquisition of additional voting shares that would bring that person's holdings to over 50%. Where a notification is required, the legislation prohibits completion of the acquisition until the expiration of a statutory waiting period or, if applicable, a second statutory waiting period, unless the Commissioner provides written notice that he does not intend to challenge the acquisition. A common closing condition of acquisitions subject to notification under the Competition Act (Canada) is clearance from the Commissioner, even if the applicable statutory waiting period has expired and the parties are in a legal position to close.

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The Investment Canada Act (Canada) requires any person that is a "non-Canadian" (as defined in the Investment Canada Act (Canada)) who acquires control of an existing Canadian business, where the acquisition of control is not a reviewable transaction, to file a notification with Innovation, Science and Economic Development. The Investment Canada Act (Canada) generally prohibits the implementation of a reviewable transaction unless, after review, the relevant minister is satisfied that the investment is likely to be of net benefit to Canada. Under the Investment Canada Act (Canada), the acquisition of control of us (either through the acquisition of our shares or all or substantially all our assets) by a non-Canadian would be reviewable under the "net benefit" standard only if the applicable specified financial threshold is met or exceeded and no exemption applied.

The acquisition of a majority of the voting interests of an entity is deemed to be acquisition of control of that entity. The acquisition of less than a majority but one-third or more of the voting shares of a corporation or an equivalent undivided ownership interest in the voting shares of a corporation is presumed to be an acquisition of control of that corporation unless it can be established that, on the acquisition, the corporation is not controlled in fact by the acquirer through the ownership of voting shares. The acquisition of less than one-third of the voting shares of a corporation is deemed not to be an acquisition of control of that corporation.

Under the national security regime in the Investment Canada Act (Canada), a national security review on a discretionary basis may also be undertaken by the federal government in respect of a much broader range of investments by a non-Canadian to "acquire, in whole or in part, or to establish an entity carrying on all or any part of its operations in Canada", provided that the entity has a specified nexus to Canada. The relevant test is whether such an investment by a non-Canadian could be "injurious to national security." The relevant minister has broad discretion to determine whether an investor is a non-Canadian and may be subject to national security review. Review on national security grounds is at the discretion of the federal government and, depending on the facts, may occur on a pre- or post-closing basis and includes the ability to block a transaction or, for a completed transaction, order divestiture.

There is no law, governmental decree or regulation in Canada that restricts the export or import of capital or which would affect the remittance of dividends or other payments by us to non-Canadian holders of our Common Shares or preferred shares, other than withholding tax requirements.

Neither our notice of articles to be in effect upon the completion of this offering nor articles to be in effect upon the completion of this offering contain any change of control limitations with respect to a merger, acquisition or corporate restructuring that involves us.

This summary above is not a comprehensive description of relevant or applicable considerations regarding such requirements and, accordingly, is not intended to be, and should not be interpreted as, legal advice to any prospective purchaser and no representation with respect to such requirements to any prospective purchaser is made. Prospective investors should consult their own Canadian legal advisors with respect to any questions regarding the foregoing and securities law in the provinces and territories of Canada.

# Actions Requiring a Special Majority

Under our articles, the number of votes required for the corporation to pass a special resolution at a meeting of shareholders is two-third of the votes cast on the resolution. Special resolutions include resolutions to: (i) create special rights or restrictions for, and attach such special rights or restrictions to, any class or series of shares; (ii) vary or delete any special rights or restrictions attached to any class or series of shares; and (iii) remove a director before the expiration of his or her term of office.

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advance of any proposed meeting by delivering a timely written notice in proper form to our registered office in accordance with the requirements of the BCBCA. The notice must include information on the business the shareholder intends to bring before the meeting. In addition, our articles require that shareholders must give advance notice to nominate directors or to submit proposals for consideration at shareholders' meetings.

These provisions could have the effect of delaying until the next shareholder meeting the nomination of certain persons for director that are favored by the holders of a majority of our outstanding voting securities.

# **Ownership and Exchange Controls**

There is currently no law, governmental decree or regulation in Canada that restricts the export or import of capital, or which would affect the remittance of dividends, interest or other payments by us to non-resident holders of our Common Shares, other than withholding tax requirements.

There is currently no limitation, imposed by Canadian law or our articles that will be in effect prior to closing, on the right of non-residents to acquire, hold or vote our Common Shares, other than those imposed by applicable securities laws and the Investment Canada Act (Canada). The Investment Canada Act (Canada) will generally not apply except in respect of national security and where control of a Canadian business, which has an enterprise value or assets at or over a certain threshold, is acquired and will not generally apply to trading of securities listed on a stock exchange.

# USE OF PROCEEDS

The net proceeds to be derived from the sale of Securities will be the issue price thereof less any commission paid in connection therewith and the expenses relating to the particular offering of Securities. The net proceeds to us from any offering of Securities, the proposed use of those proceeds and the specific business objectives that we wish to accomplish with such proceeds will be set out in the applicable Prospectus Supplement. There may be circumstances where, on the basis of results obtained or for other sound business reasons, a re-allocation of funds may be necessary or prudent. Accordingly, management of the Company will have broad discretion in the application of the proceeds of an offering of Securities. The actual amount that the Company spends in connection with each intended use of proceeds may vary from the amounts specified in the applicable Prospectus Supplement and will depend on a number of factors, including those referred to under "Risk Factors" and any other factors set out in the applicable Prospectus Supplement. We may invest funds which we do not immediately use. Such investments may include short- term marketable investment grade securities.

We may, from time to time, issue securities (including debt securities) other than pursuant to this Prospectus. The Company had negative cash flow from operating activities of \$6,062,510 and \$6,811,510 for the year ended December 31, 2021 and for the nine-month period ended September 30, 2022, respectively. The Company cannot guarantee that positive cash flow from operating activities will be obtained. The Company may continue to have negative cash flow from operating activities until sufficient levels of sales are achieved.

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# PLAN OF DISTRIBUTION

We may sell the Securities, separately or together, to or through underwriters or dealers purchasing as principals for public offering and sale by them, and also may sell Securities to one or more other purchasers directly or through agents. Each Prospectus Supplement will set forth the terms of the offering, including the name or names of any underwriters or agents, if any, the purchase price or prices of the Securities and the proceeds we will receive from the sale of the Securities.

The Securities may be sold from time to time in one or more transactions at a fixed price or prices which may be changed or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices including sales in transactions that are deemed to be "at-the-market" distributions, including sales made directly on the TSXV, Nasdaq or other existing trading markets for the securities. The prices at which the Securities may be offered may vary as between purchasers and during the period of distribution. If, in connection with the offering of Securities at a fixed price or prices, the underwriters, if any, have made a bona fide effort to sell all of the Securities at the initial offering price fixed in the applicable Prospectus Supplement, the public offering price may be decreased and thereafter further changed, from time to time, to an amount not greater than the initial public offering price fixed in such Prospectus Supplement, in which case the compensation realized by the underwriters will be decreased by the amount that the aggregate price paid by purchasers for the Securities is less than the gross proceeds paid to us by the underwriters.

Underwriters, dealers and agents who participate in the distribution of the Securities may be entitled under agreements to be entered into with us to indemnification by us against certain liabilities, including liabilities under the Securities Act and Canadian securities legislation, or to contribution with respect to payments which such underwriters, dealers or agents may be required to make in respect thereof. Such underwriters, dealers and agents may be customers of, engage in transactions with, or perform services for, us in the ordinary course of business.

In connection with any offering of Securities, except as otherwise set out in a Prospectus Supplement relating to a particular offering of Securities, the underwriters may over-allot or effect transactions intended to maintain or stabilize the market price of the Securities offered at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time.

### TRADING PRICE AND VOLUME

Our Common Shares are listed on Nasdaq and the TSXV under the symbol "XRTX". Trading price and volume of the Common Shares will be provided in each Prospectus Supplement.

# DIVIDEND POLICY

We have never paid any dividends on our Common Shares or any of our other securities. We currently intend to retain any future earnings to finance the growth and development of our business, and we do not anticipate that we will declare or pay any cash dividends in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of our Board and will be dependent upon our financial condition, results of operations, capital requirements, restrictions under any future indebtedness and other factors the Board deems relevant.

### DILUTION

Purchasers of Securities in an offering may suffer immediate and substantial dilution in the net tangible book value per share of Common Shares. Dilution in net tangible book value per share represents the difference between the amount per Share paid by purchasers in an offering and the net tangible book value per share of Common Shares immediately after an offering.

# LEGAL MATTERS

Unless otherwise specified in the Prospectus Supplement relating to an offering of Securities, certain Canadian and United States legal matters relating to the offering of such Securities will be passed upon for us by Fasken Martineau DuMoulin LLP as to matters relating to Canadian law and by Troutman Pepper Hamilton Sanders LLP as to matters relating to United States federal securities law. In addition, certain legal matters in connection with any offering of Securities may be passed upon for any underwriters, dealers or agents by counsel to be designated at the time of the offering by such underwriters, dealers or agents with respect to matters of Canadian and United States law.

### EXPENSES OF ISSUANCE AND DISTRIBUTION

The following is a statement of the expenses (all of which are estimated), other than any underwriting discounts and commissions and expenses reimbursed by us, if any, to be incurred in connection with a distribution of an assumed amount of US\$50,000,000 of Securities under the offering.

SEC registration fees	US\$	5,510
Nasdaq Listing fees		(1)
TSXV Listing fees		(1)
Printing Expenses		(1)
Legal fees and expenses		(1)
Accountants' fees and expenses		(1)
Transfer agent fees and expenses		(1)
Miscellaneous		(1)
Total	US\$	5,510

# Notes:

(1) To be provided by a Prospectus Supplement, or as an exhibit to a Report on Form 6-K that is incorporated by reference into this Prospectus.

#### **EXPERTS**

The consolidated financial statements of XORTX as of and for the year ended December 31, 2021, have been audited by Smythe LLP, independent registered public accounting firm, as set forth in their report thereon. Smythe LLP is independent with respect to us within the meaning of the Code of Professional Conduct of the Chartered Professional Accountants of British Columbia and under all relevant U.S. professional and regulatory standards, including Public Company Accounting Oversight Board Rule 3520. We have included our financial statements in this prospectus and in this registration statement in reliance on the report of Smythe LLP given on their authority as experts in accounting and auditing.

### TRANSFER AGENT, REGISTRAR AND AUDITOR

The transfer agent and registrar for our Common Shares is TSX Trust Company at its principal office in Toronto, Canada. Our co-transfer agent is Continental Stock Transfer & Trust Company.

Smythe LLP, located at 1700 — 475 Howe Street, Vancouver, British Columbia, Canada V6C 2B3 is our independent registered public accounting firm and has been appointed as our independent auditor.

# DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or person controlling the registrant in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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# MATERIAL CONTRACTS

Our material contracts are described in the documents incorporated by reference into this prospectus.

See "Publicly Available Information on XORTX" and "Documents Incorporated by Reference" above.

# CERTAIN INCOME TAX CONSIDERATIONS

Material income tax consequences relating to the purchase, ownership and disposition of any of the Securities offered by this Prospectus will be set forth in the applicable Prospectus Supplement relating to the offering of those Securities. You are urged to consult your own tax advisors prior to any acquisition of our Securities.

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320,000 Common Shares Pre-Funded Warrants to Purchase 490,810 Common Shares 490,810 Common Shares Underlying such Pre-Funded Warrants

XORTX THERAPEUTICS INC.

October 17, 2024