As filed with the U.S. Securities and Exchange Commission on April 21, 2026.

Registration No. 333-290512

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Post-Effective Amendment No. 1 to

FORM F-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

XORTX THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

British Columbia	**2834**	**N/A**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

3710 – 33rd Street NW
Calgary, Alberta, Canada T2L 2M1
(403) 455-7727

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

C T Corporation System
28 Liberty Street
New York, NY 10005
(212) 894-8940

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Thomas M. Rose **Shona C. Smith** **Troutman Pepper Locke LLP** **111 Huntington Avenue, 9 Floor** **Boston, MA 02199** **United States** **(617) 227-4420**	**Rick Pawluk** **Dentons Canada LLP** **850 – 2nd Street SW 15th Floor** **Calgary, Alberta T2P 0R8** **Canada** **(403) 268-7042**	**Ross D. Carmel** **Thiago Spercel** **Sichenzia Ross Ference Carmel LLP** **1185 Avenue of the Americas, 31st Floor** **New York, NY 10036** **United States** **(646) 838-1310**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

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

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

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

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

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act.

Emerging growth company ☒

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

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

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

SUBJECT TO COMPLETION, DATED APRIL 21, 2026

PRELIMINARY PROSPECTUS

Up to 2,202,643 Common Shares

or

Up to 2,202,643 Pre-Funded Warrants to purchase up to an aggregate of 2,202,643 Common Shares

XORTX Therapeutics Inc.

We are offering on a "reasonable best efforts" basis up to 2,202,643 common shares, no par value (the "**Shares**"), of XORTX Therapeutics Inc., a British Columbia corporation (the "**Company**"), at an assumed public offering price of $2.27 per Share, which was the closing price of our common shares on the Nasdaq Capital Market on April 17, 2026.

We are offering to certain purchasers 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% (or, at the election of the purchaser, 9.99%) of our outstanding common shares immediately following the consummation of this offering, the opportunity to purchase, if any such purchaser so chooses, "**Pre-Funded Warrants**", in lieu of Shares that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common shares. The purchase price of each Pre-Funded Warrant is $2.2699 (which is equal to the assumed public offering price per Share to be sold in this offering *minus* $0.0001, the exercise price per Pre-Funded Warrant Share). The Pre-Funded Warrants are immediately exercisable and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. For each Pre-Funded Warrant we sell, the number of Shares we are offering will be decreased on a one-for-one basis.

Our Shares (or Pre-Funded Warrants in lieu thereof) (collectively, the "**Securities**") can only be purchased together in this offering but will be issued separately.

The public offering price for our Shares (or Pre-Funded Warrants in lieu thereof) in this offering will be determined at the time of pricing and may be at a discount to the then current market price of our common shares. The assumed public offering price used throughout this prospectus may not be indicative of the final offering price. The final public offering price will be determined through negotiation between us and investors based upon a number of factors, including our history and our prospects, the industry in which we operate, our past and present operating results, the previous experience of our executive officers and the general condition of the securities markets at the time of this offering. There is no established public trading market for the Pre-Funded Warrants, and we do not expect a market to develop. Without an active trading market, the liquidity of the Pre-Funded Warrants will be limited. In addition, we do not intend to list the Pre-Funded Warrants on the Nasdaq Capital Market, any other national securities exchange or any other trading system.

Our common shares are currently traded under the symbol "XRTX" on the Nasdaq Capital Market and on the TSXV. On April 17, 2026, the last reported sale price of our common shares on the Nasdaq Capital Market was $2.27 and on the TSXV was CAD$2.99.

We are both an "emerging growth company" and a "foreign private issuer," as defined under the U.S. federal securities law and are therefore subject to reduced public company reporting requirements. See "*Prospectus Summary — Implications of Being an Emerging Growth Company and Foreign Private Issuer*" for additional information.

Investing in our Securities involves a high degree of risk. See "*Risk Factors*" beginning on page 10.

None of the Securities and Exchange Commission, any Canadian securities commission, or any domestic or international securities body has approved or disapproved of these Securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Because there is no minimum number of Securities or minimum aggregate amount of proceeds for this offering to close, we may sell fewer than all of the Securities offered hereby, and investors in this offering will not receive a refund in the event that we do not sell an amount of Securities sufficient to pursue the business goals outlined in this prospectus. This offering may be closed without further notice to you and will terminate on the first date that we enter into a placement

agent agreement to sell the Securities offered hereby. We expect to close the offering on or about , 2026. Because there is no escrow account and there is no minimum offering amount, investors could be in a position where they have invested in our Company but we are unable to fulfill our objectives due to a lack of interest in this offering. Also, any proceeds from the sale of Securities offered by us will be available for our immediate use, despite uncertainty about whether we would be able to use such funds to effectively implement our business plan.

We have engaged E.F. Hutton & Co. as our placement agent in connection with this offering. We refer to them as the "**Placement Agent**" in this prospectus. The Placement Agent is not purchasing or selling the Securities offered by us and is not required to arrange for the purchase or sale of any specific number or dollar amount of our Securities but will use its reasonable best efforts to solicit offers to purchase the Securities offered by this prospectus. The Securities will be offered at a fixed price and are expected to be issued in a single closing. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, Placement Agent's fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above.

	Per Share and Accompanying Common Warrant	Per Pre-Funded Warrant	Total
Public offering price			
Placement Agent fees[(1)]			
Proceeds to us (before expenses)[(2)]			

(1) We have agreed to pay the Placement Agent a cash fee equal to four percent (4%) of the aggregate gross proceeds of the offering. We have also agreed to reimburse the Placement Agent for certain of their offering-related expenses and pay the Placement Agent a non-accountable expense allowance of one percent (1%) of the aggregate gross proceeds raised in this offering. See "*Plan of Distribution*" beginning on page 40 of this prospectus for a description of the compensation to be received by the Placement Agent.

(2) Does not include proceeds from the exercise of the Pre-Funded Warrants in cash, if any.

Delivery of the Securities is expected to be made on or about , 2026 subject to customary closing conditions.

Placement Agent

EF Hutton

, 2026

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form F-1 that we filed with the Securities and Exchange Commission ("**SEC**"). Before purchasing any Securities, you should carefully read this prospectus, together with the additional information described under the headings "*Incorporation of Certain Information by Reference*" and "*Where You Can Find Additional Information.*"

Neither we, nor the Placement Agent, have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, including the documents incorporated by reference. We and the Placement Agent take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the Securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date. Our business, financial condition, results of operations and prospects may have changed since that date.

Neither we nor the Placement Agent have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus outside the United States.

This prospectus (and the documents incorporated by reference) contain market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information, and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included in this prospectus may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "*Risk Factors*" contained in this prospectus and in the documents incorporated by reference. Accordingly, investors should not place undue reliance on this information.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under "*Where You Can Find Additional Information*."

We express all amounts in this prospectus in United States dollars, except where otherwise indicated. References to "$" are to United States dollars and references to "CAD$" are to Canadian dollars.

We own or have rights to trademarks, trade names and service marks that we use in connection with the operation of our business. In addition, our name, logos and website name and address are our trademarks or service marks. Solely for convenience, in some cases, the trademarks, trade names and service marks referred to in this prospectus (and the documents incorporated by reference) are listed without the applicable ®, ™ and SM symbols, but we will assert, to the fullest extent under applicable law, our rights to these trademarks, trade names and service marks. Other trademarks, trade names and service marks appearing in this prospectus (and the documents incorporated by reference) are the property of their respective owners.

We report under International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or the IASB. None of the financial statements or other financial information included or incorporated by reference were prepared in accordance with generally accepted accounting principles in the United States.

Except as otherwise indicated, references in this prospectus to "**XORTX**," the "**Company**," "**we**," "**us**" and "**our**" refer to XORTX Therapeutics Inc. and its consolidated subsidiary

PROSPECTUS SUMMARY

This summary highlights certain information contained elsewhere in this prospectus and the documents incorporated by reference. This summary does not contain all of the information that may be important to you. You should read and carefully consider the following summary together with the entire prospectus, and all documents incorporated by reference herein. In particular, attention should be directed to the "Risk Factors," beginning on page 10 of this prospectus and to the sections "Information on the Company" and "Operating and Financial Review and Prospects" in our Annual Report on Form 20-F for the fiscal year ended December 31, 2025, and the audited, consolidated financial statements for the years ended December 31, 2025, 2024 and 2023 and related notes thereto in our Annual Report on Form 20-F for the fiscal year ended December 31, 2025 incorporated by reference herein, before making an investment decision. See also "Cautionary Note Regarding Forward-Looking Statements," "Incorporation of Certain Information by Reference" and "Where You Can Find Additional Information" in this prospectus.

Overview

XORTX Therapeutics is a late clinical-stage biotechnology company focused on identifying, developing and potentially commercializing therapies to treat diseases modulated by aberrant purine and uric acid metabolism in indications such as gout, autosomal dominant polycystic kidney disease ("**ADPKD**") an orphan (rare) disease and larger, more prevalent type 2 diabetic nephropathy ("**T2DN**") as well as acute kidney injury ("**AKI**") associated with respiratory virus infection. In addition, XORTX has expanded interest to include anti-fibrotic medicine in kidney disease.

Our focus is on developing unique therapeutic products to:

- treat gout patients, specifically those that have shown an intolerance to treatment with allopurinol;
- 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, chronically high serum uric acid and its health consequences. Our aim is to advance a novel proprietary formulation 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 we believe can be adapted to address different disease indications where aberrant purine metabolism and/or elevated uric acid is a common denominator, including gout, polycystic kidney disease, pre-diabetes, insulin resistance, metabolic syndrome, diabetes, diabetic nephropathy, and infection. We are focused on building a pipeline of assets to address the unmet medical needs of patients with a variety of serious or life-threatening diseases using our innovative formulations of oxypurinol, and in combination with uric acid lowering agents — a pipeline-in-a-product strategy supported by our intellectual property, established exclusive manufacturing agreements, and proposed clinical trials with experienced clinicians. Our pipeline includes additional new chemical entities with beneficial pharmacologic properties able to decrease inflammatory status specifically as accompanied by kidney disease progression and harmful accumulation of kidney fibrosis.

Our four current unique product development programs are:

- XRx-026, a program for the treatment of gout;
- XRx-008, a program for the treatment of ADPKD;
- XRx-101, a program to treat AKI associated with respiratory virus infection, AKI and associated health consequences; and
- XRx-225, a program for the treatment of T2DN.

- VB4-P5, a program currently at the pre-IND (Investigational New Drug) stage of development targeting forms of kidney disease associated with fibrosis of the kidney.

At XORTX, we aim to develop medications to improve the quality-of-life of patients with life threatening diseases. We develop medications that focus on modulating aberrant purine and uric acid metabolism, including lowering chronically increased elevated uric acid as a therapy, as well as anti-fibrotic medicines to treat progressive kidney disease.

Our Proprietary Therapeutic Platforms

Our expertise and understanding of the pathological effects of aberrant purine metabolism combined with our understanding of uric acid lowering agent structure and function, has enabled the development of our proprietary therapeutic platforms. That knowledge extends to understanding the pathogenic role of fibrosis in kidney disease. These are a complementary suite of therapeutic formulations designed to provide unique solutions for acute and chronic disease. We believe our therapeutic platforms can be used alone, or in combination, with synergistic activity for a tailored approach to a variety of disease entities that can address disease in multiple body systems through management of chronic or acute hyperuricemia, immune modulation, and metabolic disease. We continue to leverage these therapeutic platforms to expand our pipeline of novel and next generation drug-based product candidates that we believe could represent significant improvements to the standard of care in multiple acute and chronic cardiovascular and renal diseases.

We believe our in-house drug design and formulation capabilities confer a competitive advantage to our therapeutic platforms and are ultimately reflected in our programs. Some of these key advantages are:

Highly modular and customizable

- We believe our platforms can be combined in multiple ways and we believe this synergy can be applied to address acute, intermittent or chronic disease progression. For example, our XRx-026 and XRx-008 programs are designed for longer term stable chronic oral dosing of XOI, decreasing production of uric acid. We believe that our formulation technology allows us to manage the unique challenges of cardiovascular and renal disease by modulating purine metabolism and its negative health consequences on the body. Our XRx-101 program for AKI associated with respiratory virus infection is designed to produce rapid suppression of hyperuricemia then maintain purine metabolism at a low level during viral infection and target management of acute organ injury. Our XRx-008 program is designed for longer term stable chronic oral dosing of xanthine oxidase inhibitors. VB4-P5, a program currently at the pre-IND (Investigational New Drug) stage of development targeting forms of kidney disease accompanied by fibrosis of the kidney.

We believe the capabilities of our formulation technology allow us to manage the unique challenges of cardiovascular and renal disease by modulating, purine metabolism, inflammatory and oxidative state.

Fit-for-purpose

We believe our platforms can be utilized to engineer new chemical entities and formulations of those agents that have enhanced properties. For example, our XRx-225 product candidate program represents a potential new class of xanthine oxidase inhibitor(s) with a design that enhances their anti-inflammatory activity. The capability of tailoring the potential therapeutic benefit of this class of new agents permits us to identify targets and diseases that may respond to treatment. Through rational design, we can further optimize those small molecules and proprietary formulations to maximize their clinical potential and importantly their therapeutic effects, while minimizing potential adverse events.

Readily scalable and transferable

We believe our in-house small molecule and formulations design expertise are intended to create a steady succession of drug product candidates that are scalable, efficient to manufacture and produce large scale, high purity active pharmaceutical drug product. We believe this will provide a competitive advantage, new intellectual property and the opportunity to provide first-in-class products that target unmet medical needs and meaningful improvements to quality of life.

Our team's expertise with the development of uric acid lowering agents, specifically regarding the development and use of xanthine oxidase inhibitors, has enabled the development of our therapeutic product candidates to treat the symptoms of, and potentially reduce gout attacks, delay the progression of ADPKD, AKI due to respiratory virus infection, and T2DN. Our anti-fibrotic program may potentially slow mid-to-late stage kidney disease progression by decreasing inflammatory and fibrotic injury to the kidney. There is no guarantee that the FDA will approve our proposed uric acid lowering agent(s) and product candidates for the treatment of gout, kidney disease or the health consequences of diabetes.

Product Candidate Pipeline

Our product candidates include XRx-026, XRx-008, XRx-101, XRx-225, and VB4-P5. Our lead program, XRx-026 is designed to treat gout. This program has recently been prioritized by XORTX in our development efforts as we believe it represents a near-term opportunity for marketing approval and revenue generation. Under the IND planned for submission, additional data will be provided to the FDA including support for the 505(b)(2) development pathway, and a proposed two-part bridging clinical study will be conducted with the first part characterizing the pharmacokinetics of XORTX's commercial form of oxypurinol tablet and the second part evaluating the therapeutic equivalence between allopurinol in gout patients and XORTX's commercial form of oxypurinol. Additionally, manufacture of a GMP commercial drug supply to address the US gout market is required.

The Company's second program, XRx-008, has reported results for the XRX-OXY-101 Bridging Pharmacokinetic Study of XORLO™ (the "**XRX-OXY-101 PK Clinical Trial**") in advance of initiating Phase 3 registration clinical trial testing, the last stage of clinical development before application for FDA approval. In a May 2023 Type D meeting, FDA stated that it was open to considering accelerated approval based on the effects on eGFR at one year as a reasonably likely surrogate endpoint with eGFR at two years as the confirmatory endpoint. Our reported pharmacokinetic bridging study XRX-OXY-101 is intended to support both the XRx-008 and XRx-101 programs. Future late-stage clinical studies targeting attenuation or reversal of AKI in hospitalized individuals with respiratory virus infection are planned. XRx-225 is a non-clinical stage program advancing new chemical entities toward the clinical development stage. VB4-P5 is a pre-IND (Investigational New Drug) stage program targeting both rare and prevalent forms of kidney disease associated with renal interstitial fibrosis.

Products

With respect to the Company's lead and most advanced development program, XRx-026, the FDA has provided responses to the Company's Type B Meeting Package clarifying the remaining steps needed for submission of an NDA through the Section 505(b)(2) regulatory pathway for the treatment of gout. Under the IND planned for submission, additional data will be provided to the FDA including support for the 505(b)(2) development pathway, and a proposed two-part bridging clinical study will be conducted with the first part characterizing the pharmacokinetics of XORTX's commercial form of oxypurinol tablet and the second part evaluating the therapeutic equivalence between allopurinol in gout patients and XORTX's commercial form of oxypurinol. The company intends to use the data generated under the IND to support a future NDA submission. XORTX intends to advance this drug to marketing approval pending favorable study results and its FDA discussions. A commercial drug supply is also required. The Company believes that peak net sales revenue for this product could reach more than $500 million per year.

XRx-008 is XORTX's late clinical stage program focused on demonstrating the potential of its novel product candidate for ADPKD. XRx-008 is the development name given to XORTX's therapeutics program and associated proprietary oral formulation of oxypurinol, appropriate for use in individuals with progressively decreasing kidney filtering capacity.

XORTX is also developing a drug product combination therapy that includes both intravenous uric acid lowering therapy combined with an oral anti-hyperuricemic xanthine oxidase inhibitor, XRx-101, for use in treating patients with AKI associated with respiratory virus infection including co-morbidities such as acute cardiac injury and sepsis.

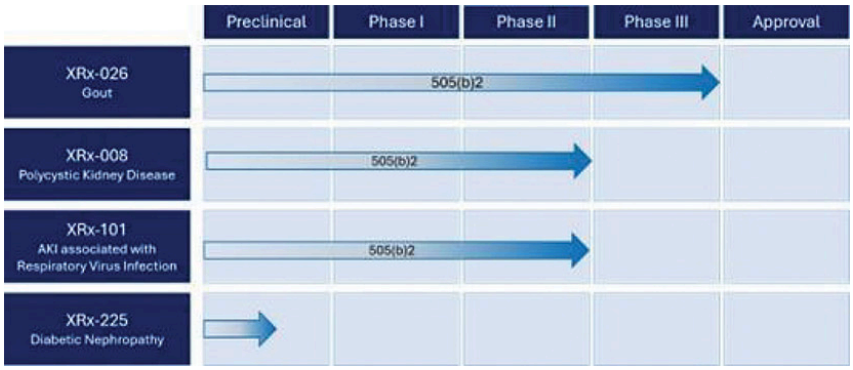
XORTX is currently evaluating novel XOI candidates for its XRx-225 program to treat T2DN as well as developing new chemical entities to address other orphan and large market disease patients with unmet medical needs.

XORTX is currently evaluating new assets acquired through its recently closed Vectus asset transaction. The lead asset, VB4-P5, along with its associated intellectual property, regulatory documentation, and manufacturing data was acquired through this transaction. The program is currently at the pre-IND (Investigational New Drug) stage of development and targets both rare and prevalent forms of kidney disease associated with renal fibrosis.

Patents

XORTX wholly owns composition of matter patents and applications for unique proprietary formulations of xanthine oxidase inhibitors. To date, three patents have been granted: one in the U.S. and two in Europe. XORTX has also submitted two patent applications to cover the use of uric acid lowering agents for the treatment of the health consequences of respiratory virus infection. Recently, XORTX filed a third provisional patent application covering formulations and methods of dosing xanthine oxidase inhibitors in individuals with kidney disease. The recent acquisition of the VB4-P5 programs adds one patent family granted in 30 global jurisdictions.

XORTX Therapeutics Pipeline:



The interpretation by XORTX based upon FDA discussions is that the 505(b)(2) pathway and right of reference to the former NDA provide XORTX the ability to rely upon previous Phase 1 and Phase 2 clinical studies and/or conduct its own additional Phase 1 and Phase 2 studies for the XRx-026, XRx-008 and XRx-101 programs. However, we may elect to conduct our own Phase 1 and Phase 2 studies as necessary or required to further support and gain marketing approval in the aforementioned programs. XORTX believes that the XRx-008 program will be eligible for accelerated review.

Our Strategy

Our goal is to apply our interdisciplinary expertise and pipeline-in-a-product strategy to further identify, develop and commercialize novel treatments for rare/orphan and broader indications related to health consequences associated with gout, progressive kidney disease and the health consequences of diabetes. To achieve this objective, we intend to pursue the following strategies:

1. Subject to discussions with US FDA, under the IND planned for submission, additional data will be provided to the FDA including support for the 505(b)(2) development pathway, and a proposed two-part bridging clinical study will be conducted with the first part characterizing the pharmacokinetics of XORTX's commercial form of oxypurinol tablet and the second part evaluating the therapeutic equivalence between allopurinol in gout patients and XORTX's commercial form of oxypurinol. We plan to then submit an NDA to the FDA, for the XRx-026 product candidate program, which we believe will address an unmet medical need for gout.

2. Subject to discussions with FDA, following the successful completion of the Phase 3 clinical registration trial of XRx-008 product candidate program submit an NDA to the FDA, requesting review under the Accelerated Approval program status. We believe introduction of this class of drug could establish a new standard of care for ADPKD.

3. Maximize the potential of the XRx-026 and XRx-008 product candidate programs, if approved, through independent commercialization and through opportunistic collaborations with third parties.

4. Leverage our pipeline-in-a-product strategy and experience, developing additional proprietary formulations of xanthine oxidase inhibitor and/or uric acid lowering agents to treat select rental indications and complement our activities through acquisitions or in-licensing opportunities in nephrology and diabetes when opportunities arise.

Recent Developments

Annual and Special Meeting of Shareholders

On March 24, 2026, the Company held an annual and special meeting of its shareholders. A total of 2,407,148 common shares of the Company were represented at the Meeting, representing approximately 35% of the total number of common shares of the Company issued and outstanding. All matters presented for approval at the Meeting were duly authorized and approved, including (i) election of all five management nominees (Anthony Giovinazzo (Chair), Allen Davidoff (CEO), Mika Grasso, Richard Grieve and George Scorsis) to the board of directors of the Company, (ii) the appointment of Davidson & Company LLP as auditors of the Company for the ensuing year, (iii) authorization of the directors to fix their remuneration, (iv) re-approval of the stock option plan and (v) approval of a 5:1 share consolidation.

Share Consolidation

On April 1, 2026, the Company announced that the implementation of its share consolidation on the basis of one (1) new common share for every five (5) existing common shares had received all required approvals from the TSX Venture Exchange and the Nasdaq Stock Exchange. The share consolidation occurred on April 6, 2026.

Unless otherwise stated, all share and per share amounts of our common stock included in this prospectus have been adjusted to give effect to the share consolidation to all periods presented.

Vectus Asset Acquisition

On April 13, 2026, the Company announced the closing its Vectus asset acquisition transaction, first announced on October 17, 2025. As consideration for the acquisition, we issued 154,544 common shares and 692,150 pre-funded warrants to Vectus at a deemed issue price of $3.5432, representing an acquisition price of $3.0 million. The shares issued and underlying the pre-funded warrants are subject to a four-month hold period from the date of issue in accordance with applicable securities laws.

The program includes a novel new chemical entity, VB4-P5, along with its associated intellectual property, regulatory documentation, and manufacturing data. The program is currently at the pre-IND (Investigational New Drug) stage of development and targets both rare and prevalent forms of kidney disease — areas with substantial unmet medical need. Assets included with the acquisition are — the patent family specifically related to the VB4-P5 compound and its use to treat kidney fibrosis and kidney disease, as well as the data generated by Vectus from its work on the VB4-P5 small molecule and related assets.

Nasdaq Continued Listing Compliance

On April 17, 2025, we received a deficiency notice from Nasdaq informing us that our common shares had failed to comply with the $1.00 minimum bid price required for continued listing under Nasdaq Listing Rule 5550(a)(2) based upon the closing bid price of our common shares for the 30 consecutive business days prior to the date of the deficiency notice. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were given 180 calendar days from the date of the deficiency notice to regain compliance with the minimum bid price requirement. If at any time before the end of the 180 calendar day period, the bid price of the shares closes at or above $1.00 per share for a minimum of 10 consecutive business days (subject to Nasdaq's

discretion to extend this 10 day period under Rule 5810(c)(3)(H)), and the Company continues to meet the other listing requirements, Nasdaq will provide written notification that the Company has achieved compliance with the minimum bid price requirement and will consider such deficiency matters closed. The Company is also listed on the TSXV and the notification letter did not affect the Company's compliance status with such listing. On October 20, 2025, the Company announced that it received a notice from Nasdaq granting the Company's request for a 180-day extension to regain compliance with the minimum bid price requirement of $1.00 per share under the Nasdaq Rule 5550(a)(2). The Company was first notified by Nasdaq that it was non-compliant with this requirement on April 17, 2025, and was given until October 14, 2025 to regain compliance, which was later extended to April 13, 2026. On April 1, 2026, the Company announced the implementation of its share consolidation on the basis of one (1) new common share for every five (5) old common shares had received all required approvals from its shareholders, the TSX Venture Exchange and the Nasdaq Stock Exchange. The share consolidation occurred on April 6, 2026. On April 20, 2026, the Company was notified by Nasdaq that it had regained compliance with Listing Rule 5550(a)(2).

Risk Factors

Our ability to implement our business strategy is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the sections entitled "*Risk Factors*" in this prospectus and "*Item 3. Key Information — D. Risk Factors*" in our Annual Report on Form 20-F for the year ended December 31, 2025, incorporated by reference herein.

Our Corporate Information

We were incorporated under the laws of Alberta, Canada on August 24, 2012, under the name ReVasCor Inc. and were continued under the Canada Business Corporations Act on February 27, 2013, under the name of XORTX Pharma Corp. Upon completion of a reverse take-over transaction on January 10, 2018, with APAC Resources Inc., a company incorporated under the laws of British Columbia, we changed our name to "XORTX Therapeutics Inc." and XORTX Pharma Corp. became a wholly owned subsidiary. We are governed by the *Business Corporation Act* (British Columbia) ("**BCBCA**").

The Company's operations and mailing address is 3710 — 33rd Street NW, Calgary, Alberta, Canada T2L 2M1 and its registered address is located at 550 Burrard Street, Suite 2900, Vancouver, British Columbia, V6C 0A3 and our telephone number is (403) 455-7727. The Company's shares trade on the TSXV and on the Nasdaq Capital Market under the symbol "XRTX", and on each of the Frankfurt Stock Exchange, Munich Stock Exchange, Berlin Stock Exchange, and Stuttgart Stock Exchange under the trading symbol "ANU". 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 prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Implications of Being an Emerging Growth Company and Foreign Private Issuer

Emerging Growth Company

As a company with less than $1.235 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the JOBS Act. As such, we are eligible to, and intend to, take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not "emerging growth companies," such as not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002. We may take advantage of these exemptions until we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earlier to occur of: (1) the last day of our fiscal year following the fifth anniversary of the date of the first sale of common equity securities of the company in a registered offering under Securities Act of 1933, as amended (the "**Securities Act**"); (2) the last day of the fiscal year in which we have total annual gross revenue of $1.235 billion or more; (3) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (4) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

Foreign Private Issuer

We report under the Securities Exchange Act of 1934, as amended ("**Exchange Act**"), as a "foreign private issuer" as defined under the rules of the SEC. Even after we no longer qualify as an emerging growth company, as long as we continue to qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic issuers, including:

- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations with respect to a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their share ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial statements and other specified information, and current reports on Form 8-K upon the occurrence of specified significant events, although we report our results of operations on a quarterly basis under the Canadian securities laws.

Both foreign private issuers and emerging growth companies are also exempt from certain more stringent executive compensation disclosure rules. Thus, even if we no longer qualify as an emerging growth company, but remain a foreign private issuer, we will continue to be exempt from the more stringent compensation disclosures required of companies that are neither an emerging growth company nor a foreign private issuer.

We would cease to be a foreign private issuer at such time as more than 50% of our outstanding voting securities are held by U.S. residents, and any one of the following three circumstances applies: (i) the majority of our executive officers or directors are U.S. citizens or residents, (ii) more than 50% of our assets are located in the United States or (iii) our business is administered principally in the United States.

In this prospectus, we have taken advantage of certain of the reduced reporting requirements as a result of being an emerging growth company and a foreign private issuer. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold equity securities.

THE OFFERING

Common shares currently issued and outstanding	2,239,137 common shares
Common shares offered by us	Up to 2,202,643 Shares based on an assumed public offering price of $2.27 per Share, the last reported sale price of our common shares on the Nasdaq Capital Market on April 17, 2026.
Common shares to be issued and outstanding after this offering	Up to 3,595,087 common shares (assuming no sale of any Pre-Funded Warrants).
Pre-Funded Warrants	We are offering to certain purchasers 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% (or, at the election of such purchaser, 9.99%) of our outstanding common shares immediately following the closing of this offering, the opportunity to purchase, if such purchasers so choose, Pre-Funded Warrants, in lieu of Shares that would otherwise result in any such purchaser's beneficial ownership, together with its affiliates and certain related parties, exceeding 4.99% (or, at the election of such purchaser, 9.99%) of our outstanding common shares immediately following the consummation of this offering. The purchase price of each Pre-Funded Warrant is equal to the purchase price per Share in this offering minus $0.0001, the exercise price of each Pre-Funded Warrant. Each Pre-Funded Warrant is immediately exercisable and may be exercised at any time until it has been exercised in full. For each Pre-Funded Warrant we sell, the number of Shares we are offering will be decreased on a one-for-one basis. This offering also relates to the Pre-Funded Warrant Shares issuable upon exercise of any Pre-Funded Warrants sold in this offering.
Reasonable best efforts	We have agreed to issue and sell the Shares (or Pre-Funded Warrants in lieu thereof), (the "**Securities**") offered hereby to the investors through the Placement Agent. The Placement Agent is not required to buy or sell any specific number or dollar amount of the Securities offered hereby, but it will use its reasonable best efforts to solicit offers to purchase the Securities offered by this prospectus. See "*Plan of Distribution*" on page 40 of this prospectus.
Use of proceeds	We expect to receive approximately $4.7 million in net proceeds from the sale of the Securities offered by us in this offering, based on an assumed public offering price of $2.27 per Share, the last reported sale price of our common shares on the Nasdaq Capital Market on April 17, 2026, and assuming no sale of any Pre-Funded Warrants, after deducting Placement Agent fees and estimated offering expenses payable by us. We currently expect to use the net proceeds from this offering to fund our ongoing research and development activities, and for working capital and general corporate purposes. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, our management will have broad discretion in the application of the net proceeds of this offering. See "*Use of Proceeds*" for additional information.
Placement Agent	E.F. Hutton & Co.

Lock-up agreements	Our directors and officers have agreed with the Placement Agent not to offer for sale, issue, sell, contract to sell, pledge or otherwise dispose of any of our common shares or securities convertible into common shares for a period of 180 days from the closing of this offering.
Risk factors	Investing in our Securities involves a high degree of risk. You should read the "*Risk Factors*" section starting on page 10 of this prospectus and "*Item 3. — Key Information — D. Risk Factors*" in our Annual Report on Form 20-F for the year ended December 31, 2025 incorporated by reference herein, and other information included or incorporated by reference in this prospectus, for a discussion of factors to consider carefully before deciding to invest in our Securities.
Nasdaq and TSXV symbol	"XRTX"

The number of the common shares to be issued and outstanding immediately after this offering as shown above assumes that all of the Shares offered hereby are sold (and no Pre-Funded Warrants are issued) and is based on 2,239,137 common shares issued and outstanding as of April 17, 2026. This number excludes:

- 632,330 common shares issuable upon the exercise of warrants outstanding, with 185,375 common shares issuable at a warrant exercise price of $25.00 per common share, 162,162 common shares issuable at a warrant exercise price of $10.90, and 284,793 common shares issuable at a warrant exercise price of $6.00;
- 30,607 common shares issuable upon the exercise of stock options to directors, officers, employees, consultants and other service providers under our stock option plan outstanding, at a weighted average exercise price of CDN$45.42 per common share ($7.57 based on the daily average exchange rate from the Bank of Canada on April 7, 2026); and
- 29,643 common shares issuable upon the exercise of finders' warrants and underwriters' warrants outstanding, with 3,228 common shares issuable at a warrant exercise price of $214.65 per common share, 5,555 common shares issuable at a warrant exercise price of $54.90 per common share, 3,360 common shares issuable at a warrant exercise price of $6.00 per common share, and 17,500 common shares issuable at a warrant exercise price of $3.45 per common share.

RISK FACTORS

Any investment in our Securities involves a high degree of risk. You should carefully consider the risks described below and in "*Item 3. Key Information - D. Risk Factors*" in our Annual Report on Form 20-F for the year ended December 31, 2025 incorporated by reference herein, and all of the information included or incorporated by reference in this prospectus before deciding whether to purchase our Securities. The risks and uncertainties described below are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the events or circumstances described in the following risk factors actually occur, our business, financial condition and results of operations would suffer. In that event, the price of our common shares could decline, and you may lose all or part of your investment. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See "*Cautionary Note Regarding Forward-Looking Statements*."

Risks Related to the Offering

The Company and the Securities should be considered a speculative investment due to the high-risk nature of our business, and investors should carefully consider all of the information disclosed in this prospectus and the documents incorporated herein 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 our common shares is not guaranteed.

There is no guarantee that our common shares 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 investors 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 and may spend such proceeds in ways that do not improve our results of operations or enhance the value of the common shares. 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 purchasers of the Securities under this 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, purchasers of the Securities in this offering may suffer dilution to their 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 the Nasdaq Capital Market 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.

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.

Our failure to meet the continued listing requirements of The Nasdaq Stock Market LLC could result in a de-listing of our common shares.

If we fail to continue to satisfy the continued listing requirements of The Nasdaq Stock Market LLC ("**Nasdaq**"), such as the corporate governance requirements or the minimum closing bid price requirement, Nasdaq will take steps to de-list our common shares. Any such de-listing would likely have a negative effect on the price of our common shares and would impair the ability to sell or purchase our common shares, as well as adversely affect our ability to issue additional securities and obtain additional financing in the future.

On April 17, 2025, we received a deficiency notice from Nasdaq informing us that our common shares had failed to comply with the $1.00 minimum bid price required for continued listing under Nasdaq Listing Rule 5550(a)(2) based upon the closing bid price of our common shares for the 30 consecutive business days prior to the date of the deficiency notice. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were given 180 calendar days from the date of the deficiency notice to regain compliance with the minimum bid price requirement. If at any time before the end of the 180 calendar day period, the bid price of the shares closes at or above $1.00 per share for a minimum of 10 consecutive business days (subject to Nasdaq's discretion to extend this 10 day period under Rule 5810(c)(3)(H)), and the Company continues to meet the other listing requirements, Nasdaq will provide written notification that the Company has achieved compliance with the minimum bid price requirement and will consider such deficiency matters closed. The Company is also listed on the TSXV and the notification letter did not affect the Company's compliance status with such listing. On October 20, 2025, the Company announced that it received a notice from Nasdaq granting the Company's request for a 180-day extension to regain compliance with the minimum bid price requirement of $1.00 per share under the Nasdaq Rule 5550(a)(2). The Company was first notified by Nasdaq that it was non-compliant with this requirement on April 17, 2025, and was given until October 14, 2025 to regain compliance, which was later extended to April 13, 2026. On April 1, 2026, the Company announced the implementation of its share consolidation on the basis of one (1) new common share for every five (5) old common shares had received all required approvals from its shareholders, the TSX Venture Exchange and the Nasdaq Stock Exchange. The share consolidation occurred on April 6, 2026. On April 20, 2026, the Company was notified by Nasdaq that it had regained compliance with Listing Rule 5550(a)(2).

Our common shares may be de-listed if we do not maintain compliance with the minimum bid price requirement, as well as other continued listing requirements of the Nasdaq, and our shareholders could face significant material adverse consequences, including:

- Limited availability or market quotations for our common shares;
- Reduced liquidity of our common shares;
- Determination that our common shares are "penny stock", which would require brokers trading in our common shares to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our common shares;
- Limited amount of news and analysts' coverage of us; and
- Decreased ability for us to issue additional equity securities or obtain additional equity or debt financing in the future.

We can provide no assurances that we will remain in compliance with the Nasdaq Marketplace Rules in the future.

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

Purchasers may be unable to sell significant quantities of common shares into the public trading markets without a significant reduction in the price of the common shares, or at all. There can be no assurance that there will be sufficient liquidity of the common shares on the trading markets, 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 purchasers may find it difficult to resell common shares.

We have applied to list the Shares and the Pre-Funded Warrant Shares on the TSXV and have notified 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 Pre-Funded Warrants.

There is no established public trading market for the 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 Pre-Funded Warrants on the TSXV or the Nasdaq Capital Market, or any other securities exchange or other trading system. This may affect the pricing of the Pre-Funded Warrants in the secondary market, the transparency and availability of trading prices, and the liquidity of the Pre-Funded Warrants.

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.

Except in limited circumstances specified in the Pre-Funded Warrants, their holders will not be entitled to any voting rights, dividends or other rights as shareholders of the Company, prior to the exercise of their Pre-Funded Warrants, as applicable. The Pre-Funded Warrants 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 "reasonable best efforts" basis.

We are offering the Securities in this offering on a "reasonable best efforts" basis and the Placement Agent is under no obligation to purchase any Securities 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. As a reasonable best efforts offering, there can be no assurance that the offering contemplated hereby will ultimately be consummated.

An investment in our Securities is speculative, and there can be no assurance of any return on any such investment.

An investment in our Securities is highly speculative, and there is no assurance that investors will obtain any return on their investment. Investors will be subject to substantial risks involved in their investment, including the risk of losing their entire investment.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this prospectus and the documents incorporated by reference herein constitute forward-looking statements. These statements relate to future events or the Company's (as defined herein) future performance. All statements other than statements of historical fact are forward-looking statements. The use of any of the words "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 expressions are intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. No assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this prospectus and the documents incorporated by reference herein should not be unduly relied upon. These statements speak only as of the date of this prospectus and the documents incorporated by reference herein. In addition, this prospectus and the documents incorporated by reference herein may contain forward-looking statements and forward-looking information attributed to third party industry sources.

In particular, forward-looking statements in this prospectus and the documents incorporated by reference herein include, but are not limited to, statements about:

- 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 XORLO™, XORTX's proprietary formulation of oxypurinol, for use in the Company's XRx-026 program to treat gout, and its XRx-008 program to treat autosomal dominant kidney disease ("**ADPKD**"), and any other product candidates we may develop, and the labeling under any approval we may obtain;
- 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, if they are approved;
- 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.

All forward-looking statements, including, without limitation, our examination of historical operating trends, are based upon our current expectations and various assumptions. Certain assumptions made in preparing the forward-looking statements include:

- the availability of capital to fund planned expenditures;
- prevailing regulatory, tax and environmental laws and regulations;
- the ability to secure necessary personnel, equipment, supplies and services;
- our ability to manage our growth effectively;
- the absence of material adverse changes in our industry or the global economy;
- trends in our industry and markets;

- our ability to maintain good business relationships with our strategic partners;
- our ability to comply with current and future regulatory standards;
- our ability to protect our intellectual property rights;
- our continued compliance with third-party license terms and the non-infringement of third-party intellectual property rights;
- our ability to manage and integrate acquisitions; and
- our ability to raise sufficient debt or equity financing to support our continued growth.

We believe there is a reasonable basis for our expectations and beliefs, but they are inherently uncertain. We may not realize our expectations, and our beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements. Consequently, forward-looking statements should be regarded solely as our current plans, estimates and beliefs. You should not place undue reliance on forward-looking statements. We cannot guarantee future results, events, levels of activity, performance or achievements. We do not undertake and specifically decline any obligation to update, republish or revise forward-looking statements to reflect future events or circumstances or to reflect the occurrences of unanticipated events, except as required by law.

EXCHANGE RATE DATA

We express all amounts in this prospectus in United States dollars, except where otherwise indicated. References to "$" are to United States dollars and references to "CAD$" are to Canadian dollars. The following table sets forth the annual average exchange rate of one U.S. dollar, expressed in Canadian dollars, for the years ended December 31, 2025, 2024 and 2023, as supplied by the Bank of Canada:

Year Ended	Annual Average
December 31, 2025	1.3706
December 31, 2024	1.3698
December 31, 2023	1.3497

On April 17, 2026, the Bank of Canada average daily rate of exchange was $1.00 = CAD$1.3671.

USE OF PROCEEDS

We estimate our net proceeds from the offering, based on an assumed public offering price of $2.27, the last reported sale price of our common stock on the Nasdaq Capital Market on April 17, 2026, and assuming no sale of any Pre-Funded Warrants will be approximately $4.7 million 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, to fund our ongoing research and development activities, and for working capital and 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, 2025 and 2024. 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 are expected to be allocated to working capital requirements. To the extent that we have 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 and will depend on a number of factors, including those referred to under the heading "*Risk Factors*" in the prospectus, the documents incorporated by reference herein, and any other factors set forth in this prospectus.

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

DIVIDEND POLICY

We have never declared or paid any cash dividends to our shareholders, and we do not anticipate or intend to pay cash dividends in the foreseeable future. Payment of cash dividends, if any, in the future will be at the discretion of our Board in compliance with applicable legal requirements and will depend on a number of factors, including future earnings, our financial condition, operating results, contractual restrictions, capital requirements, business prospects, our strategic goals and plans to expand our business, applicable law and other factors that our Board may deem relevant.

The BCBCA imposes further restrictions on our ability to declare and pay dividends. See "*Description of Share Capital — Dividends*" for additional information.

CAPITALIZATION

The following table sets forth our cash as well as capitalization as of December 31, 2025:

- on an actual basis;
- on a pro forma basis to give effect to the Vectus Acquisition whereby we issued 154,544 common shares and 692,150 pre-funded warrants to Vectus at a deemed issue price of $3.5432, representing an acquisition price of $3.0 million; and
- on an pro forma as adjusted basis to give further effect to (i) the pro forma adjustments above and (ii) the issuance of 2,202,643 Shares in this offering at an assumed public offering price of $2.27 per Share, the last reported sale price of our common stock on the Nasdaq Capital Market, assuming no sales of any Pre-Funded Warrants, which, if sold, would reduce the number of Shares that we are offering on a one-for-one basis, and after deducting estimated Placement Agent fees and expenses and estimated offering expenses payable by us.

You should read this information in conjunction with our consolidated financial statements and the notes thereto, and the related management's discussions and analysis of financial condition and results of operations, included in our Report on Form 6-K for the fiscal year ended December 31, 2025 filed with the SEC on March 3, 2026, incorporated by reference in this prospectus.

	As of December 31, 2025		
	Actual	Pro forma	Pro forma as adjusted
Cash	$ 864,514	$ 864,514	$ 5,614,513
Equity			
Share capital	$20,183,547	$23,183,547	$28,183,547
Common shares, unlimited authorized shares, without par value; 1,392,444 common shares issued and outstanding, actual; 2,239,137 common shares issued and outstanding, pro forma; 4,441,779 common shares issued and outstanding, pro forma as adjusted			
Share-based payments, warrant reserve and other	$ 5,778,074	$ 5,778,074	$ 5,778,074
Obligation to issue common shares	$ 0	$ 0	$ 0
Accumulated other comprehensive (loss) income	$ (52,605)	$ (52,605)	$ (52,605)
Deficit	$23,824,557	$23,824,557	$23,824,557
Total Equity	$ 2,084,459	$ 5,084,459	$10,084,459
Total Capitalization	$ 2,948,973	$ 5,948,973	$10,698,973

The pro forma as adjusted number of common shares outstanding after the offering as shown above assumes (i) the pro forma adjustments described above; and (ii) that all of the Shares offered hereby are sold (and no Pre-Funded Warrants are issued), and is based on 1,392,444 common shares issued and outstanding as of December 31, 2025. The table above excludes:

- 632,330 common shares issuable upon the exercise of warrants outstanding, with 185,375 common shares issuable at a warrant exercise price of $25.00 per common share, 162,162 common shares issuable at a warrant exercise price of $10.90, and 284,793 common shares issuable at a warrant exercise price of $6.00;
- 30,607 common shares issuable upon the exercise of stock options to directors, officers, employees, consultants and other service providers under our stock option plan outstanding, at a weighted average exercise price of CDN$45.42 per common share ($7.57 based on the daily average exchange rate from the Bank of Canada on April 7, 2026); and
- 29,643 common shares issuable upon the exercise of finders' warrants and underwriters' warrants outstanding, with 3,228 common shares issuable at a warrant exercise price of $214.65 per common share, 5,555 common shares issuable at a warrant exercise price of $54.90 per common share, 3,360 common shares issuable at a warrant exercise price of $6.00 per common share, and 17,500 common shares issuable at a warrant exercise price of $3.45 per common share.

DILUTION

If you invest in the Securities 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 pro forma net tangible book value per share of our common shares immediately after this offering. As of December 31, 2025, we had a net tangible book value of approximately $1.6 million or $0.23 per common share, based upon 1,392,444 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.

Our pro forma net tangible book value as of December 31, 2025, was approximately $1.9 million or $0.8517 per common share. Pro forma net tangible book value per share represents total tangible assets less total liabilities, divided by the number of shares of our common shares outstanding as of December 31, 2025, after giving effect to the issuance of 154,544 common shares and 692,150 pre-funded warrants to Vectus at a deemed issue price of $3.5432, representing an acquisition price of $3.0 million.

After giving effect to (i) the pro forma adjustments above and (ii) the sale by us in this offering of 2,202,643 Shares at an assumed public offering price of $2.27 per Share, which is equal to the last reported sale price of our common stock on the Nasdaq Capital Market on April 17, 2026 (assuming the sale of the maximum offering amount and that no Pre-Funded Warrants are sold in this offering), and after deducting estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2025 would have been approximately $6. 7 million, or approximately $1.4987 per common share. This represents an immediate accretion in pro forma net tangible book value of approximately $0.6470 per common share to existing shareholders and an immediate dilution in pro forma net tangible book value of approximately $0.7713 per common share to new investors. The following table illustrates this calculation on a per share basis.

Assumed public offering price per Share		$2.2700
Net tangible book value per share as of December 31, 2025	$1.3696	
Decrease in net tangible book value per share attributable to the pro forma adjustments	$0.5179	
Pro forma net tangible book value per share on December 31, 2025	$0.8517	
Increase in net tangible book value per share attributable to this offering	$0.6470	
Pro forma as adjusted net tangible book value per share as of December 31, 2025, after giving effect to this offering		$1.4987
Dilution per share to investors purchasing Shares in this offering		$0.7713

A $0.10 increase in the assumed public offering price of $2.27 per Share, which is the last reported sale price of our common shares on the Nasdaq Capital Market on April 17, 2026, would have the following impacts. It would change our pro forma as adjusted net tangible book value per common share from $1.4987, the value under the public offering, to $1.5459 under an offering with an increased price of $0.10 per share, an increase of $0.0471 per share. New investors under the public offering stand to be diluted by $0.7713 per share, whereas under an offering with an increased price of $0.10 per share, they would be diluted by $0.8241 per share, an increased dilution of $0.0529 per common share to new investors, assuming the number of Shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the estimated Placement Agent fees and estimated offering expenses payable by us. We may also increase or decrease the number of Shares we are offering.

If the size of the offering was expanded by 100,000 Shares, it would have the following impacts. It would change our pro forma as adjusted net tangible book value per share after the offering to $1.5132, an increase of approximately $0.0145 per share over the currently anticipated public offering. It would change the dilution per common share to new investors from $0.7713 under the current offering, to $0.7568 under an expanded offering, a reduction in dilution of $0.0145 per share. The information discussed above is illustrative only and will adjust based on the actual public offering price and other terms of the offering determined at pricing.

The pro forma as adjusted number of common shares outstanding after the offering as shown above assumes (i) the pro forma adjustments described above; and (ii) that all of the Shares offered hereby are sold

(and no Pre-Funded Warrants are issued), and is based on 1,392,444 common shares issued and outstanding as of December 31, 2025. This number excludes:

- 632,330 common shares issuable upon the exercise of warrants outstanding, with 185,375 common shares issuable at a warrant exercise price of $25.00 per common share, 162,162 common shares issuable at a warrant exercise price of $10.90, and 284,793 common shares issuable at a warrant exercise price of $6.00;
- 30,607 common shares issuable upon the exercise of stock options to directors, officers, employees, consultants and other service providers under our stock option plan outstanding, at a weighted average exercise price of CDN$45.42 per common share ($7.57 based on the daily average exchange rate from the Bank of Canada on April 7, 2026); and
- 29,643 common shares issuable upon the exercise of finders' warrants and underwriters' warrants outstanding, with 3,228 common shares issuable at a warrant exercise price of $214.65 per common share, 5,555 common shares issuable at a warrant exercise price of $54.90 per common share, 3,360 common shares issuable at a warrant exercise price of $6.00 per common share, and 17,500 common shares issuable at a warrant exercise price of $3.45 per common share.

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 April 17, 2026, we had 2,239,137 common shares outstanding, 24,854 common shares issuable pursuant to exercisable outstanding stock options, 632,330 common shares issuable upon the exercise of outstanding common share purchase warrants, and we had approximately 14 holders of record of our common shares. The issued and outstanding common shares are fully paid.

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 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 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 fully paid and non-assessable.

Listing

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

Transfer Agent and Registrar

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.

DESCRIPTION OF PRE-FUNDED WARRANTS

The following summary of certain terms and provisions of the Pre-Funded Warrants offered hereby is not complete and is subject to, and qualified in its entirety by, the warrant agent agreement between us and Continental Stock Transfer & Trust Company, as warrant agent, and the form of Pre-Funded Warrant, which is filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions set forth in the warrant agent agreement, including the annexes thereto, and the form of Pre-Funded Warrant.

The term "pre-funded" refers to the fact that the purchase price of our Shares in this offering includes almost the entire exercise price that will be paid under the Pre-Funded Warrants, except for a nominal remaining exercise price of $0.0001. The purpose of the Pre-Funded Warrants is to enable investors that may have restrictions on their ability to beneficially own more than 4.99% (or, upon election of the holder, 9.99%) of our outstanding common shares following the consummation of this offering the opportunity to make an investment in the Company without triggering their ownership restrictions, by receiving Pre-Funded Warrants in lieu of our Shares which would result in such ownership of more than 4.99% (or 9.99%), and receive the ability to exercise their option to purchase the Pre-Funded Warrant Shares underlying the Pre-Funded Warrants at such nominal price at a later date.

Exercisability and Exercise Price. Each Pre-Funded Warrant is exercisable for one Pre-Funded Warrant Share, with an exercise price equal to $0.0001 per Pre-Funded Warrant Share, at any time that the Pre-Funded Warrant is outstanding. There is no expiration date for the Pre-Funded Warrants. The Pre-Funded Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the Pre-Funded Warrant Shares underlying the Pre-Funded Warrants under the Securities Act is effective and available for the issuance of such shares, by payment in full in immediately available funds for the number of Pre-Funded Warrant Shares purchased upon such exercise. The Company will use commercially reasonable efforts to maintain an effective registrations statement registering the issuance of Pre-Funded Warrant Shares underlying the Pre-Funded Warrants under the Securities Act. If such a registration statement is not effective or available the holder may, in its sole discretion, elect to exercise the Pre-Funded Warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of Pre-Funded Warrant Shares determined according to the formula set forth in the Pre-Funded Warrant. No fractional shares will be issued in connection with the exercise of a Pre-Funded Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price. The holder of a Pre-Funded Warrant will not be deemed a holder of our underlying common shares until the Pre-Funded Warrant is exercised.

Exercise Limitation. Subject to limited exceptions, a holder of Pre-Funded Warrants will not have the right to exercise any portion of its Pre-Funded Warrants if the holder (together with such holder's affiliates and certain related parties) would beneficially own a number of common shares in excess of 4.99% (or, upon election of the holder, 9.99%) of the common shares then outstanding after giving effect to such exercise. Any Pre-Funded Warrant holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, provided that any increase in such percentage shall not be effective until 61 days following notice from the holder to us.

Adjustment. The exercise price and the number of Pre-Funded Warrant Shares issuable upon exercise of the Pre-Funded Warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common shares.

Fundamental Transaction. In the event of a fundamental transaction, as described in the Pre-Funded Warrants and generally including any reorganization, recapitalization or reclassification of our common shares, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common shares, or any person or group becoming the beneficial owner of more than 50% of the voting power represented by our outstanding common shares, the holders of the Pre-Funded Warrants will be entitled to receive upon exercise of the Pre-Funded Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Pre-Funded Warrants immediately prior to such fundamental transaction without regard to any limitations on exercised contained in the Pre-Funded Warrants.

Rights as a Shareholder. Except as otherwise provided in the Pre-Funded Warrants or by virtue of such holder's ownership of our common shares, the holder of a Pre-Funded Warrant does not have the rights or privileges of a holder of our common shares, including any voting rights, until the holder exercises the Pre-Funded Warrant.

Warrant Agent. The Pre-Funded Warrants will be issued in registered form under a warrant agent agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. The Pre-Funded Warrants shall initially be represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Exchange Listing. We do not intend to apply to list the Pre-Funded Warrants on any securities exchange or other trading system.

Governing Law. The Pre-Funded Warrants and the warrant agent agreement are governed by New York law.

TAXATION

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) and the regulations thereunder (collectively, the "**Canadian Tax Act**"), generally applicable to an investor who (A) acquires, as beneficial owner, Shares or Pre-Funded Warrants pursuant to this offering, or Pre-Funded Warrant Shares pursuant to an exercise of Pre-Funded Warrants as the case may be, and (B) for the purposes of the Canadian Tax Act and at all relevant times, (i) deals at arm's length with the Company, the underwriter and a subsequent purchaser of Shares, Pre-Funded Warrants, and Pre-Funded Warrant Shares (each an "**Offered Security**") (ii) is not affiliated with the Company, the underwriter and a subsequent purchaser of an Offered Security, and (iii) acquires and holds the Offered Security, as capital property (a "**Holder**"). Generally, the Offered Securities will be considered to be capital property to a Holder provided that the Holder does not use the Offered Securities in the course of carrying on a business of trading or dealing in securities and such Holder has not acquired the Offered Securities 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) that reports its "Canadian tax results," as defined in the Canadian Tax Act, in a currency other than Canadian currency; (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 Offered Securities, (vi) that receives dividends on the Shares, Pre-Funded Warrant Shares or Common Warrant Shares under or as part of a "dividend rental arrangement", as defined in the Canadian Tax Act, or (vii) that is exempt from tax under the Canadian Income Tax Act. **Such Holders should consult their own tax advisors.**

In addition, this summary does not address the deductibility of interest by an investor who has borrowed money to acquire Offered Securities. **Such investors should consult their own tax advisors with respect to the consequences of acquiring Offered Securities.**

Additional considerations, not discussed herein, may be applicable to an investor 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 Offered Securities, 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 investors should consult their own tax advisors with respect to the consequences of acquiring, holding and disposing of Offered Securities.**

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 investor and no representations with respect to the income tax consequences to any investor or prospective investor are made. Consequently, investors and prospective investors should consult their own tax advisors for advice with respect to the tax consequences to them of acquiring, holding and disposing of Offered Securities, having regard to their particular circumstances.

Currency Conversion

Subject to certain exceptions that are not discussed in this summary, 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 Offered Securities 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.

Allocation of Offering Price

A Holder who acquires Offered Securities pursuant to this Offering may be required to allocate the purchase price paid, on a reasonable basis, between the acquired Share and Pre-Funded Warrant, as the case may be in order to determine their respective costs to such Holder for purposes of the Canadian Tax Act.

For its purposes, the Company intends to allocate $ to each Common Share and $ to each Pre-Funded Warrant and believes such allocation is reasonable. The Company's allocation, however, is not binding on the CRA or on a Holder and the CRA may disagree with such allocation. Legal counsel to the Company and the underwriters express no opinion with respect to such allocation.

The adjusted cost base to a Holder of each Share will be determined by averaging the cost of such Share with the adjusted cost base to such Holder of all other common shares (if any) of the same class of the Company held by the Holder as capital property immediately prior to the acquisition.

The adjusted cost base to a Holder of each Pre-Funded Warrant will be determined by averaging the cost of such Pre-Funded Warrant with the adjusted cost base to such Holder of all other Pre-Funded Warrants (if any) held by the Holder as capital property immediately prior to the acquisition.

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 Holder, 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 of the Company 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 or Pre-Funded Warrant 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 or Pre-Funded Warrant 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 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 Shares or Warrants

Upon a disposition (or a deemed disposition) of a Share, Pre-Funded Warrant Share or Common Warrant Share, as the case may be (other than to the Company that is not a sale in the open market in the manner in which shares are normally purchased by any member of the public in the open market), a Pre-Funded Warrant (other than on the exercise of a Pre-Funded Warrant or a disposition arising on the expiry of a Pre-Funded Warrant) or a Common Warrant (other than on the exercise of a Common Warrant or a disposition arising on the expiry of a Common Warrant), as the case may be, 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 shares or warrants, as the case may be, net of any reasonable costs of disposition, are greater (or are less) than the adjusted cost base of such shares or warrants, 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*."

The adjusted cost base to a Canadian Resident Holder of a Share acquired pursuant to this offering, or a Pre-Funded Warrant Share or a Common Warrant Share acquired pursuant to an exercise of a Pre-Funded Warrant or Common Warrant Share, 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

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.

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: (i) throughout the relevant taxation year a "Canadian-controlled private corporation" (as defined in the Canadian Tax Act), or (ii) at any time in the relevant taxation year, a "substantive CCPC" (as defined in the Canadian Tax Act), may also be liable to pay an additional tax (refundable in certain circumstances) on its "aggregate investment income" (as defined in the Canadian Tax Act) 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 Offered Securities in the course of carrying on a business, or part of a business, in Canada (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.**

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. The Multilateral Convention to Implement Tax Treaty Related to Measures to Prevent Base Erosion and Profit Shifting (the "**MLI**"), of which Canada is a signatory, affects many of Canada's bilateral tax treaties (but not the Treaty), including the ability to claim benefits under such tax treaties. **Non-Canadian Holders are urged to consult their own tax advisors to determine their entitlement to relief under an applicable income tax treaty or convention.**

Expiry of 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 Warrants*", below.

Dispositions of Shares or 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 an Offered Security nor will capital losses arising therefrom be recognized under the Canadian Tax Act, unless the Offered Security 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 or convention (subject to the potential application of the MLI to the tax treaty or convention).

Generally the Offered Security 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 Canada, "Canadian resource properties" (as defined in the Canadian Tax Act), "timber 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, Offered Securities may otherwise be deemed to be taxable Canadian property to a Non-Canadian Holder for purposes of the Canadian Tax Act. Even if the Offered Securities 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 Offered Securities by virtue of an applicable income tax treaty or convention (subject to the potential application of the MLI to the applicable tax treaty or convention).

A Non-Canadian Holder's capital gain (or capital loss) in respect of Offered Securities 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 — Disposition of Shares or Warrants" and "Residents of Canada — Capital Gains and Capital Losses*".

Non-Canadian Holders whose Offered Securities may be taxable Canadian property should consult their own tax advisors.

Eligibility for Investment

Based on the current provisions of the Canadian Tax Act in force as of the date prior to the date hereof, the Offered Securities, if issued on the date hereof, would be "qualified investments" under the Canadian Tax Act for trusts governed by a "registered retirement savings plan ("**RRSP**"), a "registered retirement income fund" ("**RRIF**"), a registered education savings plan ("**RESP**"), a "registered disability savings plan" ("**RDSP**"), a "tax-free savings account" ("**TFSA**"), a "first home savings account ("**FHSA**") (each a "Registered Plan") or a "deferred profit sharing plan" ("**DPSP**"), each as defined in the Canadian Tax Act, provided that at such time:

(i) in the case of Shares and Pre-Funded Warrant Shares, such shares are listed on a "designated stock exchange" for purposes of the Canadian Tax Act (which currently includes Nasdaq) or the Company otherwise qualifies as a "public corporation" other than a "mortgage investment corporation" (each as defined in the Canadian Tax Act); and

(ii) in the case of Pre-Funded Warrants, either (a) such warrants are listed on a "designated stock exchange" for purposes of the Canadian Tax Act (which currently includes Nasdaq), or (b) the Pre-Funded Warrant Shares are qualified investments as described in paragraph (i) above and the Company is not, and deals at arm's length with each person who is, an annuitant of, a beneficiary of, an employer or a subscriber under, or a holder of, the particular Registered Plan or DPSP.

Notwithstanding the foregoing, the holder, subscriber or annuitant of or under a Registered Plan (the "**Controlling Individual**") will be subject to a penalty tax under the Canadian Tax Act with respect to the Offered Securities held by such Registered Plan that are "prohibited investments" for purposes of the Canadian Tax Act. An Offered Security will generally not be a "prohibited investment" provided that the Controlling Individual deals at arm's length with the Company for purposes of the Canadian Tax Act and does not have a "significant interest" (as defined in the Canadian Tax Act) in the Company. In addition, the Shares and Pre-Funded Warrant Shares will generally not be a "prohibited investment" if such shares are "excluded property" (as defined in the Canadian Tax Act) for the Registered Plan.

Persons who intend to hold Offered Securities in a Registered Plan or DPSP should consult their own tax advisors in regard to the application of these rules to their particular circumstances.

INVESTORS AND POTENTIAL INVESTORS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE CANADIAN OR OTHER TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE OFFERED SECURITIES, 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 the ownership, exercise and disposition of Pre-Funded Warrants acquired pursuant to this offering and the Pre-Funded Warrant Shares received upon the exercise of such Pre-Funded Warrants. The term "securities" as used in this summary includes the Shares, Pre-Funded Warrants, 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 "**IRS**") 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.

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 common 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 common shares except as described below. Accordingly, no gain or loss should be recognized upon the exercise of a Pre-Funded Warrant and, upon exercise, the holding period of a Pre-Funded Warrant should carry over to the Pre-Funded Warrant Shares received. Similarly, the tax basis of the Pre-Funded Warrant should carry over to the Pre-Funded Warrant Shares received upon exercise, increased by the exercise price of $0.0001 per share. However, such characterization is not binding on the IRS, and the IRS may treat the Pre-Funded Warrants as warrants to acquire common shares. If so, the amount and character of a U.S. Holder's gain with respect to an investment in Pre-Funded Warrants could change, and a U.S. Holder may not be entitled to make the "QEF Election" 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.

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.

Based upon the current and expected composition of our income and assets, we believe that we may have been a PFIC for the taxable year ended December 31, 2024 and expect that we may be a PFIC for the current taxable year. 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. Assets that produce or are held for the production of passive income generally include cash, even if held as working capital (subject to a limited exception for working capital held for expenses reasonably expected to be paid within 90 days) or raised in a public offering, marketable securities, and other assets that may produce passive income. 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.

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, 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, 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 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, a U.S. Holder may have to account for the Shares, Pre-Funded Warrants, and the Pre-Funded Warrant Shares 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.

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.

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.

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, Common Warrant Shares and Pre-Funded Warrant Shares only if such shares are marketable stock. The Shares, Common Warrant Shares and Pre-Funded Warrant Shares generally will be "marketable stock" if the Shares, Common 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, Common 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 common 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 not be available with respect to the Common Warrants, and it is unclear as to whether it may be available with respect to the 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 Common 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 Warrant.

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 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 or 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 Common 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 Common 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 Common 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 Common Warrant Shares after the beginning of such U.S. Holder's holding period for the Common Warrant Shares unless the Common 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 Common 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 Common 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 Common 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).

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, Common 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, Common 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.

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.

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

The following discussion describes the general rules applicable to the ownership and disposition of the Shares, Pre-Funded Warrants and Pre-Funded Warrant 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, 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, or Pre-Funded Warrant Share 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 Warrants, 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.

Dividends paid by a "qualified foreign corporation" are eligible for taxation in the case of non-corporate U.S. Holders at a reduced long-term capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that certain requirements are met. Each non-corporate U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (a) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information provision, or (b) with respect to any dividend it pays on common shares that are readily tradable on an established securities market in the United States. We believe that we qualify as a resident of Canada for purposes of, and are eligible for the benefits of, the Canada-United States Income Tax Convention (1980) as amended (the "**Treaty**"), which the IRS has determined is satisfactory for purposes of the qualified dividend rules and that it includes an exchange of information provision, although there can be no assurance in this regard. Further, our common shares will generally be considered to be readily tradable on an established securities market in the United States if they remain listed on Nasdaq. Therefore, subject to the discussion below under "— Passive Foreign Investment Company Rules", if the Treaty is applicable, or if the common shares are readily tradable on an established securities market in the United States, dividends paid by us will generally be "qualified dividend income" in the hands of non-corporate U.S. Holders, provided that certain conditions are met, including conditions relating to holding period and the absence of certain risk reduction transactions.

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

Upon the sale or other taxable disposition of the Shares, Pre-Funded Warrants, 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.

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.

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

E. F. Hutton & Co., or the Placement Agent, with an address at 745 Fifth Avenue, 34th Floor, New York, NY 10151, has agreed to act as our sole Placement Agent on a reasonable best efforts basis in connection with this offering subject to the terms and conditions of a placement agency agreement, dated , 2026 between the placement and us. The Placement Agent is not purchasing or selling any Securities in this offering but has arranged for the sale to investors of the Securities offered hereby. The public offering price of the Securities in this offering has been determined based upon arm's-length negotiations between the investors and us. The Placement Agent agreement will provide certain representations, warranties and covenants, including indemnifications, from us. Our obligation to issue and sell the Securities to the investors is subject to the closing conditions set forth in the Placement Agent agreement, including the absence of any material adverse change in our business and the receipt of certain opinions, letters and certificates from us or our counsel, which may be waived by the respective parties. All of the Securities will be sold at the offering price specified in this prospectus.

Fees and Expenses

We have agreed to pay the Placement Agent a cash fee equal to four percent (4%) of the aggregate gross proceeds of the offering. We have also agreed to reimburse the Placement Agent for certain of their offering-related expenses and pay the Placement Agent a non-accountable expense allowance of one percent (1%) of the gross proceeds raised in this offering.

Subject to certain conditions, we have also agreed to pay the following expenses relating to this offering: (a) all filing fees and expenses relating to the registration with the SEC of the Securities sold in this offering; (b) all FINRA public offering filing fees; (c) all fees and expenses relating to the listing of the Shares and Pre-Funded Warrant Shares on the Nasdaq Capital Market and the TSXV; (d) all fees, expenses and disbursements relating to the registration or qualification of the securities under the "blue sky" securities laws of such states and other jurisdictions as the Placement Agent may reasonably designate (including, without limitation, all filing and registration fees, and the reasonable fees and disbursements of the Company's "blue sky" counsel, which will be the Placement Agent's counsel); (e) all fees, expenses and disbursements relating to the registration, qualification or exemption of the securities under the securities laws of such foreign jurisdictions as the Placement Agent may reasonably designate; (f) the costs of all mailing and printing of the offering documents; (g) the fees and expenses of the Company's accountants; and (h) reasonable legal fees and disbursements for the Placement Agent's counsel. The foregoing fees, expenses and disbursements incurred by the Placement Agent and reimbursed by the Company shall not exceed $100,000 in the event of a closing of the offering and $40,000 in the event the closing of the offering does not occur.

Right of First Refusal

We have granted the Placement Agent a right of first refusal for a period of six months following the closing of this offering to act as sole book-running manager, sole underwriter or sole placement agent for each and every future public or private offering or other capital-raising financing of equity or equity-linked securities using an underwriter or placement agent by us or any of our successors or subsidiaries, subject to certain exceptions.

Tail

We have also agreed to pay the Placement Agent a tail fee equal to the cash compensation in this offering, if any investor, who was wall-crossed by the Placement Agent with respect to a non-public offering or had back and forth correspondence with the Placement Agent with respect to a public offering of our securities, in each case during the term of its engagement, provides us with capital in any public or private offering or other financing or capital raising transaction during the three-month period following expiration or termination of our engagement of the Placement Agent, subject to an exception.

Lock-Up Agreements.

In connection with this offering, each of our executive officers and directors has agreed, subject to certain exceptions set forth in the lock-up agreements, not to offer, pledge, sell, contract to sell, sell any option or

contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any share capital of the Company or any securities convertible into or exercisable or exchangeable for share capital of the Company, for one hundred eighty (180) days following the closing of the offering.

Determination of Offering Price

The public offering price of the Securities we are offering was negotiated between us and the investors, in consultation with the Placement Agent based on the trading of our common shares prior to the offering, among other things. Other factors considered in determining the public offering price of the Securities we are offering include our history and prospects, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

Passive Market Making

In connection with this offering, the Placement Agent may engage in passive market making transactions in our common stock on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of shares of our common stock and extending through the completion of the distribution.

Indemnification

We have agreed to indemnify the Placement Agent against certain liabilities, including liabilities under the Securities Act, and liabilities arising from breaches of representations and warranties contained in the placement agency agreement, or to contribute to payments that the Placement Agent may be required to make in respect of those liabilities.

Potential Conflicts of Interest

The Placement Agent and its affiliates may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which it may receive customary fees and reimbursement of expenses. In the ordinary course of its various business activities, the Placement Agent and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for its own accounts and for the accounts of its customers, and such investment and securities activities may involve securities and/or instruments of our Company. The Placement Agent and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments, in compliance with applicable securities laws.

Electronic Distribution

This prospectus may be made available in electronic format on websites or through other online services maintained by the Placement Agent or by an affiliate. Other than this prospectus, the information on the Placement Agent's website and any information contained in any other website maintained by the Placement Agent is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the Placement Agent, and should not be relied upon by investors.

EXPENSES OF THE OFFERING

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. 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.

SEC Registration Fee	$ 1,501
FINRA Filing Fee	$ 1,550
TSXV Listing Fees	$ 29,000
Printing Expenses	$ 10,000
Legal Fees and Expenses	$225,000
Accountants' Fees and Expenses	$ 75,000
Miscellaneous	$ 2,949
Total	$345,000

LEGAL MATTERS

The validity of the securities being offered by this prospectus and other legal matters concerning this offering relating to Canadian law will be passed upon for the Company by Dentons Canada LLP. Certain legal matters in connection with this offering relating to U.S. law will be passed upon for the Company by Troutman Pepper Locke LLP and for the Placement Agent by Sichenzia Ross Ference Carmel LLP.

EXPERTS

Davidson & Company LLP, located at 1200 — 609 Granville Street, Pacific Centre, Vancouver, British Columbia, Canada, V7Y 1G6 is our independent registered public accounting firm and had been appointed as our independent auditor. The consolidated financial statements of XORTX as of and for the years ended December 31, 2025 and 2024 have been audited by Davidson & Company LLP, independent registered public accounting firm, as set forth in their report thereon. Davidson & Company 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 the Public Company Accounting Oversight Board Rule 3520. We have incorporated by reference the above referenced financial statements in this prospectus and in this registration statement in reliance on the report of Davidson & Company LLP given on their authority as experts in accounting and auditing.

Smythe LLP, located at 1700 — 475 Howe Street, Vancouver, British Columbia, Canada V6C 2B3 was our former independent registered public accounting firm, appointed as our independent auditor. Smythe LLP resigned as auditors of the Company effective January 16, 2025, and Davidson & Company LLP was appointed as auditors of the Company on such date. The consolidated financial statements of XORTX as of December 31, 2023 and for the year ended December 31, 2023 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 the Public Company Accounting Oversight Board Rule 3520. We have incorporated by reference the above referenced 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.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION

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 SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or 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.

ENFORCEMENT OF CIVIL LIABILITIES

We are incorporated under the laws of British Columbia, Canada. Some of our directors and officers, and some of the experts named in this prospectus, are residents of Canada or otherwise reside outside of the United States, and all or a substantial portion of their assets, and all or a substantial portion of our assets, are located outside of the United States. We have appointed an agent for service of process in the United States, but it may be difficult for shareholders who reside in the United States to effect service within the United States upon those directors, officers and experts who are not residents of the United States. It may also be difficult for shareholders who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers and experts under the U.S. federal securities laws. There can be no assurance that U.S. investors will be able to enforce against us, our directors, officers or certain experts named herein who are residents of Canada or other countries outside the United States, any judgments in civil and commercial matters, including judgments under the U.S. federal securities laws. There can be no assurance that U.S. investors will be able to enforce against us, our directors, officers or certain experts named herein who are residents of Canada or other countries outside the United States, any judgments in civil and commercial matters, including judgments under the U.S. federal securities laws. There is uncertainty with respect to whether a Canadian court would take jurisdiction on a matter of liability predicated solely upon U.S. federal securities laws, and uncertainty with respect to whether a Canadian court would enforce a foreign judgment on liabilities predicated upon the securities laws of the United States.

We have appointed C T Corporation System, at 28 Liberty Street, New York, NY 10005, Ph: (212) 894-8940, as our registered agent.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file reports and other information with the securities commissions and similar regulatory authorities in certain provinces of Canada. These reports and information are available to the public free of charge on SEDAR+ at www.sedarplus.ca.

We are subject to the information requirements of the Exchange Act relating to foreign private issuers and, in accordance therewith, file and furnish reports and other information with the SEC. The SEC maintains an internet website at www.sec.gov, from which you can electronically access the documents we have filed with the SEC's Electronic Data Gathering and Retrieval system at www.sec.gov, including the registration statement of which this prospectus forms a part and its exhibits.

Readers should rely only on information contained or incorporated by reference in this prospectus. 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.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with the SEC. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus.

We incorporate by reference the documents listed below:

- our Annual Report on Form 20-F for the fiscal year ended December 31, 2025 filed with the SEC on March 20, 2026; and
- the description of the securities contained in our Amendment No. 1 to the registration statement on Form 8-A filed with the SEC on October 4, 2021 (File No. 001-40858) pursuant to Section 12 of the Exchange Act, together with all amendments and reports filed for the purpose of updating that description.

We will provide, free of charge upon written or oral request, to each person to whom this prospectus is delivered, including any beneficial owner of the securities, a copy of any or all of the information that has been incorporated by reference into this prospectus, but which has not been delivered with the prospectus. The information contained on or linked to or from our website is not incorporated by reference into this prospectus and should not be considered part of this prospectus. Requests for such information should be made to us at the following address:

3710 — 33rd Street NW Calgary, Alberta, Canada, T2L 2M1
1 (403) 455-7727
info@xortx.com

You should assume that the information appearing in this prospectus, as well as the information we previously filed with the SEC and incorporated by reference, is accurate as of the dates indicated in those documents only. Our business, financial condition and results of operations and prospects may have changed since those dates.

Up to 2,202,643 Common Shares

or

Up to 2,202,643 Pre-Funded Warrants to purchase up to an aggregate of 2,202,643 Common Shares

PRELIMINARY PROSPECTUS

, 2026

Placement Agent

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 6. Indemnification of Directors and Officers

XORTX is subject to the provisions of Part 5, Division 5 of the *Business Corporations Act* (British Columbia) (the "**BCBCA**"). Under Section 160 of the BCBCA, XORTX may, subject to Section 163 of the BCBCA do one or both of the following:

(a) indemnify an eligible party against all eligible penalties to which the eligible party is or may be liable; or

(b) after final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by an eligible party in respect of that proceeding,

where:

(i) "eligible party" means, in relation to XORTX, means an individual who

i. is or was a director or officer of XORTX,

ii. is or was a director or officer of another corporation

1. at a time when the corporation is or was an affiliate of XORTX, or

2. at the request of XORTX, or

iii. at the request of XORTX, is or was, or holds or held a position equivalent to that of, a director or officer of a partnership, trust, joint venture or other unincorporated entity, and includes, except in the definition of "eligible proceeding" and except in sections 163(1) (c) and (d) and 165 of the BCBCA, the heirs and personal or other legal representatives of that individual;

(ii) "eligible penalty" means a judgment, penalty or fine awarded or imposed in, or an amount paid in settlement of, an eligible proceeding,

(iii) "eligible proceeding" means a proceeding in which an eligible party or any of the heirs and personal or other legal representatives of the eligible party, by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, XORTX or an associated corporation

i. is or may be joined as a party, or

ii. is or may be liable for or in respect of a judgment, penalty or fine in, or expenses related to, the proceeding,

(iv) "expenses" includes costs, charges and expenses, including legal and other fees, but does not include judgments, penalties, fines or amounts paid in settlement of a proceeding, and

(v) "proceeding" includes any legal proceeding or investigative action, whether current, threatened, pending or completed.

Under Section 161 of the BCBCA, and subject to Section 163 of the BCBCA, XORTX must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by an eligible party in respect of that proceeding if the eligible party (a) has not been reimbursed for those expenses and (b) is wholly successful, on the merits or otherwise, in the outcome of the proceeding or is substantially successful on the merits in the outcome of the proceeding.

Under Section 162 of the BCBCA, and subject to Section 163 of the BCBCA, XORTX may pay, as they are incurred in advance of the final disposition of an eligible proceeding, the expenses actually and reasonably incurred by an eligible party in respect of the proceeding, provided that XORTX must not make such payments

unless it first receives from the eligible party a written undertaking that, if it is ultimately determined that the payment of expenses is prohibited under Section 163 of the BCBCA, the eligible party will repay the amounts advanced.

Under Section 163 of the BCBCA, XORTX must not indemnify an eligible party against eligible penalties to which the eligible party is or may be liable or pay the expenses of an eligible party under Sections 160(b), 161 or 162 of the BCBCA, as the case may be, if any of the following circumstances apply:

(a) if the indemnity or payment is made under an earlier agreement to indemnify or pay expenses and, at the time that the agreement to indemnify or pay expenses was made, XORTX was prohibited from giving the indemnity or paying the expenses by XORTX's memorandum or Articles;

(b) if the indemnity or payment is made otherwise than under an earlier agreement to indemnify or pay expenses and, at the time that the indemnity or payment is made, XORTX is prohibited from giving the indemnity or paying the expenses by XORTX's memorandum or Articles;

(c) if, in relation to the subject matter of the eligible proceeding, the eligible party did not act honestly and in good faith with a view to the best interests of XORTX or the associated corporation, as the case may be; or

(d) in the case of an eligible proceeding other than a civil proceeding, if the eligible party did not have reasonable grounds for believing that the eligible party's conduct in respect of which the proceeding was brought was lawful.

If an eligible proceeding is brought against an eligible party by or on behalf of XORTX or by or on behalf of an associated corporation, XORTX must not either (a) indemnify the eligible party under Section 160(a) of the BCBCA against eligible penalties to which the eligible party is or may be liable in respect of the proceeding, or pay the expenses of the eligible party under Sections 160(b), 161 or 162 of the BCBCA, as the case may be, in respect of the proceeding.

Under Section 164 of the BCBCA, despite any other provision of Part 5, Division 5 of the BCBCA and whether or not payment of expenses or indemnification has been sought, authorized or declined under Part 5, Division 5 of the BCBCA, on application of XORTX or an eligible party, the court may do one or more of the following:

(a) order XORTX to indemnify an eligible party against any liability incurred by the eligible party in respect of an eligible proceeding;

(b) order XORTX to pay some or all of the expenses incurred by an eligible party in respect of an eligible proceeding;

(c) order the enforcement of, or any payment under, an agreement of indemnification entered into by XORTX;

(d) order XORTX to pay some or all of the expenses actually and reasonably incurred by any person in obtaining an order under Section 164 of the BCBCA; or

(e) make any other order the court considers appropriate.

Section 165 of the BCBCA provides that XORTX may purchase and maintain insurance for the benefit of an eligible party or the heirs and personal or other legal representatives of the eligible party against any liability that may be incurred by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, XORTX or an associated corporation.

Under XORTX's articles, and subject to the BCBCA, XORTX must indemnify a director, former director or alternate director and his or her heirs and legal personal representatives against all eligible penalties to which such person is or may be liable, and XORTX must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by such person in respect of that proceeding. Each director and alternate director is deemed to have contracted with XORTX on the terms of the indemnity contained in XORTX's articles.

Under XORTX's articles, and subject to the BCBCA, XORTX may agree to indemnify and may indemnify any person (including an eligible party). XORTX has not entered into indemnity agreements with its directors and officers.

Pursuant to XORTX's articles, the failure of a director, alternate director or officer of XORTX to comply with the BCBCA or XORTX's articles does not invalidate any indemnity to which he or she is entitled under XORTX's articles.

Under XORTX's articles, XORTX may purchase and maintain insurance for the benefit of any person (or his or her heirs or legal personal representatives) who:

- is or was a director, alternate director, officer, employee or agent of XORTX;
- is or was a director, alternate director, officer, employee or agent of another corporation at a time when such corporation is or was an affiliate of XORTX;
- at XORTX's request, is or was, a director, alternate director, officer, employee or agent of a corporation or of a partnership, trust, joint venture or other unincorporated entity; or
- at XORTX's request, holds or held a position equivalent to that of, a director, alternate director or officer of a partnership, trust, joint venture or other unincorporated entity,

against any liability incurred by him or her as a director, alternate director, officer, employee or agent or person who holds or held such equivalent position.

XORTX maintains directors' and officers' liability insurance which insures directors and officers for losses as a result of claims against the directors and officers of XORTX in their capacity as directors and officers.

At present, we are not aware of any pending or threatened litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification would be required or permitted.

Item 7. Recent Sales of Unregistered Securities

Set forth below is information regarding all securities issued by XORTX without registration under the Securities Act during the past three years after giving effect to the Company's 2023 share consolidation on a 9:1 basis that took place in 2023. XORTX believes that each of such issuances was exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act, Rule 506(b) of Regulation D under the Securities Act, Rule 701 under the Securities Act and/or Regulation S under the Securities Act. No underwriter or underwriting discount or commission was involved in any of the transactions set forth in this Item 7.

Common Share and Warrant Issuances

- On February 15 and March 4, 2024, the Company closed two tranches of a non-brokered offering of 179,943 common share units at a price of CAD $15 per common share unit for aggregate gross proceeds of CAD $2,699,151. Each common share unit consisted of one common share and one warrant to purchase one common share at CAD $22.50 per common share for a period of two years. The warrants were immediately exercisable, and may be exercised for two years from the date of issuance, provided, however that, if, the common shares on the TSXV trade at greater than CAD $30.00 for 10 or more consecutive trading days, the warrants will be accelerated and the warrants will expire on the 30th business day following notice. In connection with the non-brokered offering, the Company paid finder's fees of CAD $132,551, representing a 5% finder's fee on certain subscriptions to qualified finders. On March 25, 2024, 1,000 warrants were exercised at CAD$22.50 for proceeds of CAD$22,500. The Company used the net proceeds from the offering for working capital and general corporate purposes.
- On March 11, 2024, the Company announced an amendment to the terms of an aggregate of 220,287 outstanding common share purchase warrants, as follows:
  - In connection with 46,349 warrants issued pursuant to the private placement that closed on February 9, 2021 and which had an original exercise price of CAD $42.26 per share (CAD $10.00 per share, adjusted to reflect the 2021, 2023 and 2026 Share Consolidations), the Company intended to amend the exercise price from CAD $42.26 to $25.00.

- In connection with 57,271 warrants issued pursuant to the prospectus offering that closed on October 15, 2021 and which had an original exercise price of $214.65 per share ($23.85 per share, adjusted to reflect the 2023 and 2026 Share Consolidations), the Company intended to amend the exercise price from $214.65 to $25.00.
- In connection with 116,666 warrants issued pursuant to the prospectus offering that closed on October 7, 2022 and which had an original exercise price of $54.90 per share ($6.10 per share, adjusted to reflect the 2023 and 2026 Share Consolidation), the Company intended to amend the exercise price from $54.90 to $25.00.

Pursuant to the polices of the TSXV the terms of the warrants, as amended, are subject to an acceleration expiry provision such that if for any ten consecutive trading dates (the "**Premium Trading Days**") during the unexpired term of the warrants, the closing price of the Company's shares on the TSXV exceeds $32.50 (approximately CAD $45.1954), the exercise period of the warrants would be reduced to 30 days, starting seven days after the last Premium Trading Day.

- On April 30, 2024, the Company announced that it received TSXV approval to amend the terms of 204,819 outstanding common share purchase warrants. The exercise price of the warrants was adjusted to $25.00 per share, down from higher original prices, following a series of private placements in 2021 and 2022.
- On May 17, 2024, the Company announced that it received approval from the TSXV to amend the terms of 182,000 outstanding common share purchase warrants issued on October 15, 2021. The exercise price was reduced to $25.00 per share, down from the previous adjusted price of $214.65 per share following a 9:1 consolidation and a 5:1 consolidation. This re-pricing completed a previously announced adjustment and included an acceleration provision.
- On October 18, 2024, the Company closed a registered direct offering and concurrent private placement for the purchase and sale of 162,162 common shares (or pre-funded warrants in lieu thereof). At closing, through the registered direct offering, the company sold: (i) 64,000 common shares at a price of $9.25 per share. and (ii) 98,162 pre-funded warrants at a price of $9.2495 per pre-funded unit, with each pre-funded unit consisting of one pre-funded warrant to purchase one common share. The pre-funded warrants have an exercise price of $0.0005 per share, and will terminate once exercised in full. As at the date of this registration statement, all such pre-funded warrants have been exercised. In addition, through the concurrent private placement, the Company sold 162,162 common share purchase warrants, with an exercise price of $10.90 per share, exercisable immediately upon issuance with a term of five years from the date of issuance. Aggregate gross proceeds amounted to $1,499,993. A.G.P./Alliance Global Partners acted as placement agent for the offering. The Company used the net proceeds from the offering for working capital and general corporate purposes.
- On July 21, 2025, the Company closed a non-brokered private placement of 253,425 units at a price of $3.65 per unit for aggregate gross proceeds of $925,000. Each unit consisted of one common share and one warrant to purchase one common share at $6.00 for a period of five years; provided, however that, if, the common shares on the TSXV trade at greater than CAD $10.00 for 10 or more consecutive trading days, the warrants will be accelerated and the warrants will expire on the 30th business day following notice. In connection with the non-brokered offering, the Company paid finder's fees of $12,264 and issued 3,360 finder's warrants exercisable on the same terms of the warrants comprising the units, representing a 7% finder's fee on certain subscriptions to qualified finders.
- On August 8, 2025, the Company closed a non-brokered private placement of 31,370 units at a price of $3.65 per unit for aggregate gross proceeds of $114,500. Each unit consisted of one common share and one warrant to purchase one common share at $6.00 for a period of five years; provided, however that, if, the common shares on the TSXV trade at greater than CAD $10.00 for 10 or more consecutive trading days, the warrants will be accelerated and the warrants will expire on the 30th business day following notice.
- On April 13, 2026, the Company announced the closing of its Vectus asset acquisition transaction. As consideration for the acquisition, XORTX issued 154,544 common shares and 692,150 pre-funded warrants to Vectus at a deemed issue price of $3.5432, representing an acquisition price of $3.0 million.

For the purpose of this F-1, all equity issued under this transaction has been considered to be common shares. The shares issued (or shares underlying the prefunded warrants) are subject to a four month hold period from the date of issue in accordance with applicable securities laws.

Other than as otherwise noted above, none of the foregoing transactions involved any underwriters, underwriting discounts or commissions or any public offering. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 8. Exhibits and Financial Statement Schedules

The exhibits listed in the exhibits index, appearing elsewhere in this Registration Statement, have been filed as part of this Registration Statement.

All schedules have been omitted because they are not required, are not applicable or the information is otherwise set forth in the financial statements and related notes thereto.

1.1+	Form of Placement Agency Agreement
3.1	Articles and Notice of Articles of the Company (incorporated by reference to Exhibit 3.1 to the Company's Draft Registration Statement on Form F-1 filed on May 26, 2021)
4.1+	Form of Pre-Funded Warrant
5.1+	Opinion of Dentons Canada LLP
5.2+	Opinion of Troutman Pepper Lock LLP
10.1#	Employment Agreement, dated November 1, 2021, by and between the Company and Allen Davidoff (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 20-F filed on May 12, 2025)
10.4†	Master Service and Technology Agreement, dated February 25, 2019, by and between the Company and Prevail InfoWorks, Inc. (incorporated by reference to Exhibit 10.6 to the Company's Draft Registration Statement on Form F-1 filed on May 26, 2021)
10.5†	Side Letter to Master Service and Technology Agreement, dated February 24, 2020, by and between the Company and Prevail InfoWorks, Inc. (incorporated by reference to Exhibit 10.7 to the Company's Draft Registration Statement on Form F-1 filed on May 26, 2021)
10.7†	Standard Exclusive License Agreement with Know How dated effective as of June 23, 2014, by and between the Company and the University of Florida Research Foundation, Inc. (incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form F-1 Filed on August 12, 2021)
10.9#	Consulting Amending Agreement, dated as of January 27, 2022, by and between the Company and Stephen Haworth (incorporated by reference to Exhibit 4.26 to the Company's Form 20-F filed May 3, 2022)
10.10†	Patent Rights Purchase Agreement, dated effective as of December 5, 2012, by and between Dr. Richard Johnson, Dr. Takahiko Nakagawa, and Revascor Inc. (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form F-1 filed on August 12, 2021)
10.12	Form of Warrant Agency Agreement with Continental Stock Transfer & Trust Company, as Warrant Agent (incorporated by reference to Exhibit 10.14 to the Company's Amendment No. 1 to the Registration Statement on Form F-1 filed on September 16, 2021)
10.15#	Stock Option Plan (incorporated by reference as Schedule B to Exhibit 99.2 to the Company's Form 6-K filed on November 23, 2021.)
10.19†	Sponsored Research Agreement dated May 27, 2021 between the Regents of the University of Colorado and the Company (incorporated by reference to Exhibit 4.19 to the Company's Form 20-F filed May 3, 2022)
10.21	At-The-Market Offering Agreement dated November 29, 2023 between the Company and H.C. Wainwright & Co., LLC (incorporated by reference to Exhibit 10.1 to the Company's Form 6-K furnished November 30, 2023)

10.25†	Amended and Restated Consulting Agreement between the Company and Stacy Evans, dated May 1, 2024 (incorporated by reference to Exhibit 4.31 to the Company's Form 20-F filed May 10, 2024)
10.26#	Consulting Agreement, dated as of December 16, 2024 between the Company and Michael Bumby (incorporated by reference to Exhibit 4.32 of the Company's Annual Report on Form 20-F filed on May 12, 2025)
10.27+	Form of Securities Purchase Agreement
21.1	Subsidiaries of the Company (incorporated by reference to Exhibit 21.1 to the Company's Draft Registration Statement on Form F-1 filed on May 26, 2021)
23.1+	Consent of independent registered public accounting firm, Davidson & Company LLP (PCAOB ID: 731)
23.2+	Consent of independent registered public accounting firm, Smythe LLP (PCAOB ID: 995)
23.3+	Consent of Dentons Canada LLP (included in Exhibit 5.1)
23.4+	Consent of Troutman Pepper Locke LLP (included in Exhibit 5.2)
24.1*	Powers of Attorney (included on signature page to the registration statement)
107*	Filing Fee Table

* Previously filed.

\+ Filed herewith.

\# Indicates management contract or compensatory plan.

† Certain information in this exhibit has been excluded from the version of this document filed as an exhibit because it is both not material and the type of information that the Company treats as private or confidential

Item 9. Undertakings

The undersigned hereby undertakes:

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

i. To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Filing Fee Tables," or "Calculation of Registration Fee" table, as applicable, in the effective registration statement;

iii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A. of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Act need not be furnished, provided that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements. Notwithstanding the foregoing, with respect to registration statements on Form F-3, a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Act or Rule 3-19 of this chapter if such financial statements and information are contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Form F-3.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

i. If the registrant is relying on Rule 430B:

A. Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

B. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after

effectiveness of the date of the first contract or sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

ii. If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(6) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the U.S. Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Calgary, Province of Alberta, Canada, on April 21, 2026.

XORTX Therapeutics Inc.

By: /s/ Allen Davidoff
Name: Allen Davidoff
Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form F-1 has been signed by the following persons in the capacities set forth below on April 21, 2026.

Signatures	Title
/s/ Allen Davidoff Allen Davidoff	President and Chief Executive Officer and Director (Principal Executive Officer)
/s/ Michael Bumby Michael Bumby	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
* Anthony Giovinazzo	Non-Executive Chair of the Board
/s/ Mika Grasso Mika Grasso	Director
/s/ Richard Grieve Richard Grieve	Director
/s/ George Scorsis George Scorsis	Director

AUTHORIZED REPRESENTATIVE

Pursuant to the requirements of the Securities Act of 1933, as amended, the undersigned certifies that it is the duly authorized United States representative of the registrant and has duly caused this Registration Statement on Form F-1 to be signed by the undersigned, thereunto duly authorized, on April 21, 2026.

PUGLISI & ASSOCIATES

By: /s/ Donald J. Puglisi
Name: Donald J. Puglisi
Title: Managing Director

Exhibit 1.1

PLACEMENT AGENCY AGREEMENT

[*], 2026

XORTX Therapeutics Inc.
3710-33rd Street NW
Calgary, Alberta, Canada T2L 2M1
Attn: Allen Davidoff, Chief Executive Officer

Dear Mr. Davidoff:

This letter (the "**Agreement**") constitutes the agreement between E.F. Hutton & Co. (the "**Placement Agent**") and XORTX Therapeutics Inc., a British Columbia corporation (the "**Company**"), that the Placement Agent shall serve as the exclusive placement agent for the Company, on a reasonable "best efforts" basis, in connection with the proposed offering (the "**Placement**") of (i) common shares of the Company (the "**Shares**"), no par value per share, and (ii) pre-funded warrants to purchase common shares of the Company (the "**Pre-Funded Warrants**" and, together with the Shares, the "**Securities**"). The Shares, the Pre-Funded Warrants, and the common shares underlying the Pre-Funded Warrants will be offered and sold under the Company's registration statement on Form F-1 (File No. 333-290512).

The terms of the Placement are to be mutually agreed upon by the Company and the purchasers that are signatories to a securities purchase agreement (the "**Purchase Agreement**") (each, purchaser under the Purchase Agreement, a "**Purchaser**" and collectively, the "**Purchasers**"), and nothing herein confers upon the Placement Agent the power or authority to bind the Company or any Purchaser, or constitutes an obligation for the Company to issue any Securities or complete the Placement. The Company expressly acknowledges and agrees that the Placement Agent's obligations hereunder are on a best efforts basis only and that the execution of this Agreement does not constitute a commitment by the Placement Agent to purchase the Securities and does not ensure the successful placement of the Securities, or any portion thereof, or the success of the Placement Agent with respect to securing any other financing on behalf of the Company. The Placement Agent may retain other duly registered brokers or dealers to act as sub-agents or selected dealers on its behalf in connection with the Placement. Certain affiliates of the Placement Agent may participate in the Placement by purchasing some of the Securities. The sale of Securities to any Purchaser will be evidenced by a Purchase Agreement between the Company and such Purchaser in a form reasonably acceptable to the Company and the Purchaser. Capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Purchase Agreement. Prior to the signing of any Purchase Agreement, officers of the Company will be available to answer inquiries from prospective Purchasers.

Section 1. Representations and Warranties of the Company; Covenants of the Company.

(a) Representations of the Company. With respect to the Securities, each of the representations and warranties (together with any related disclosure schedules thereto) and covenants made by the Company to the Purchasers in the Purchase Agreement in connection with the Placement, is hereby incorporated herein by reference into this Agreement (as though fully restated herein) and is, as of the date of this Agreement and as of the date of the closing of the Placement (the "**Closing Date**"), hereby made to, and in favor of, the Placement Agent. In addition to the foregoing, the Company represents and warrants that there are no affiliations with any Financial Industry Regulatory Authority, Inc. ("**FINRA**") member firm participating in the Placement among the Company's officers, directors or, to the knowledge of the Company, any five percent (5.0%) or greater security holders of the Company.

(b) Covenants of the Company. From the date hereof until ninety (90) days after the Closing Date, the Company shall not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any share capital of the Company or any securities convertible into or exercisable or exchangeable for share capital of the Company; (ii) file or caused to be filed any registration statement with the Commission relating to the offering of any share capital of the Company or any securities convertible into or exercisable or exchangeable for share capital of the Company; (iii) complete any offering of debt securities of the Company, other than entering into a line of credit with a traditional bank, or (iv) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of share capital of the Company, whether any such transaction described in clause (i), (ii), (iii) or (iv) above is to be settled by delivery of share capital of the Company or such other securities, in cash or otherwise.

Section 2. Representations of the Placement Agent. The Placement Agent represents and warrants that it (i) is a member in good standing of FINRA, (ii) is registered as a broker/dealer under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") and the securities laws of each state in which an offer or sale of Securities is made (unless exempt from the respective state's broker-dealer registration requirements), (iii) is licensed as a broker/dealer under the laws of the United States of America, applicable to the offers and sales of the Securities by the Placement Agent, (iv) is and will be a corporate body validly existing under the laws of its place of incorporation, and (v) has full power and authority to enter into and perform its obligations under this Agreement. The Placement Agent will immediately notify the Company in writing of any change in its status with respect to subsections (i) through (v) above. The Placement Agent covenants that it will conduct the Placement hereunder in compliance with the provisions of this Agreement and the requirements of applicable law.

Section 3. Compensation. In consideration of the services to be provided for hereunder, the Company shall pay to the Placement Agent and/or its respective designees (provided any such designee is a duly registered broker-dealer or a registered associated person thereof) a cash fee of four percent (4.0%) of the aggregate gross proceeds from the Placement. The Placement Agent reserves the right to reduce any item of compensation or adjust the terms thereof as specified herein in the event that a determination is made by FINRA to the effect that the Placement Agent's aggregate compensation is in excess of that permitted by FINRA Rules or that the terms thereof require adjustment.

Section 4. Intentionally Omitted.

Section 5. Tail Financings. The Placement Agent shall be entitled to a cash fee equal to four percent (4.0%) of the gross proceeds received by the Company from the sale of any equity, debt and/or equity derivative instruments (a "**Tail Financing**") to any investor actually introduced by the Placement Agent to the Company during the period from [*], 2026, to the earlier of (i) the Closing Date or (ii) the Termination Date (as hereinafter defined) (such period being the "**Engagement Period**"), and such Tail Financing is consummated at any time during the three (3) months following the Engagement Period, provided that such Tail Financing is by a party actually introduced to the Company in an offering in which the Company has direct knowledge of such party's participation. In the event of the termination by the Company of this Agreement for cause pursuant to Section 9 hereof, such termination shall eliminate any obligations of the Company with respect to fees provided by this Section 5.

Section 6. Expenses. The Company agrees to pay all costs, fees, and expenses incurred by the Company in connection with the performance of its obligations hereunder and in connection with the transactions contemplated hereby, including, without limitation: (i) all expenses incident to the issuance, delivery, and qualification of the Securities (including all printing and engraving costs); (ii) all fees and expenses of the registrar and transfer agent for the Securities; (iii) all necessary issue, transfer, and other stamp taxes in connection with the issuance and sale of the Securities; (iv) all fees and expenses of the Company's counsel, independent public or certified public accountants, and other advisors; (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping, and distribution of the Registration Statement (including financial statements, exhibits, schedules, consents, and certificates of experts), the Preliminary Prospectus, and the Prospectus, and all amendments and supplements thereto, and this Agreement; (vi) all filing fees, reasonable attorneys' fees, and expenses incurred by the Company in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Securities for offer and sale under the state securities or blue sky laws or the securities laws of any other country; (vii) the fees and expenses associated with listing the Securities on any Trading Market; (viii) the fees and disbursements of counsel to the Placement Agent; *provided*, *however*, that the Company shall not be responsible for accountable expenses of the Placement Agent hereunder in excess of One Hundred Thousand Dollars ($100,000) (or in the event that a Placement closing is not consummated, Forty Thousand ($40,000)); (ix) a non-accountable expense allowance that shall not exceed one percent (1.0%) of the gross proceeds of the Placement; and (x) up to Seven Thousand Five Hundred Dollars ($7,500) for escrow and clearing agent fees.

Section 7. Right of First Refusal. Provided that the Securities are sold in a Placement in accordance with the terms of this Agreement, the Placement Agent shall have an irrevocable right of first refusal (the "**Right of First Refusal**") for a period of six (6) months following the closing of the Placement, to act as sole bookrunning underwriter or placement agent, as the case may be, on any financing for the Company (each, a "**Subject Transaction**"), during such applicable period. In the event the Company advises the Placement Agent that it desires to effect any Subject Transaction, the Company and the Placement Agent will negotiate in good faith the terms of the Placement Agent's engagement in a separate agreement, which agreement would set forth, among other matters, compensation for the Placement Agent based upon customary fees for the services provided. The Placement Agent's participation in any such Subject Transaction will be subject to the approval of the Placement Agent's internal committees and other conditions customary for such Subject Transaction. No fee will be payable pursuant to this Right of First Refusal if the Company terminates the Placement Agent's engagement for cause.

Section 8. Indemnification.

(a) To the extent permitted by law, with respect to the Securities, the Company shall indemnify the Placement Agent and its affiliates, stockholders, directors, officers, employees, members, and controlling persons (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) against all losses, claims, damages, expenses, and liabilities, as the same are incurred (including reasonable actual and documented fees and expenses of counsel), relating to or arising out of its activities hereunder or pursuant to this Agreement, except to the extent that any losses, claims, damages, expenses, or liabilities (or actions in respect thereof) are found in a final judgment (not subject to appeal) by a court of law to have resulted primarily and directly from the Placement Agent's bad faith, willful misconduct or gross negligence in performing the services described herein. Notwithstanding anything set forth herein to the contrary, the Company agrees to indemnify the Placement Agent, to the fullest extent set forth in this Section 8, against any and all claims asserted by any or person or entity alleging that the Placement Agent was not permitted or entitled to act as a placement agent herein, or that the Company was not permitted to hire or retain the Placement Agent herein, including but not limited to any claims arising out of any purported right of first refusal another person or entity claims to have to act as a placement agent or any similar role with respect to the Company or its securities.

(b) Promptly after receipt by the Placement Agent of notice of any claim or the commencement of any action or proceeding with respect to which the Placement Agent is entitled to indemnity hereunder, the Placement Agent will immediately notify the Company in writing of such claim or of the commencement of such action or proceeding, but failure or delay of notification to so notify the Company shall not relieve the Company from any obligation it may have hereunder, except and only to the extent such failure results in the forfeiture by the Company of substantial rights and defenses or materially adversely impacts the Company. If the Company so elects or is requested by the Placement Agent, the Company will assume the defense of such action or proceeding and will employ counsel reasonably satisfactory to the Placement Agent and will pay the reasonable fees and expenses of such counsel. Notwithstanding the preceding sentence, the Placement Agent will be entitled to employ its own counsel separate from counsel for the Company and from any other party in such action if counsel for the Placement Agent reasonably determines that it would be inappropriate under the applicable rules of professional responsibility for the same counsel to represent both the Company and the Placement Agent. In such event, the reasonable and documented fees and disbursements of no more than one such separate counsel will be paid by the Company, in addition to reasonable and documented fees of local counsel. The Company will have the right to settle the claim or proceeding, *provided* that the Company will not settle any such claim, action, or proceeding without the prior written consent of the Placement Agent, which will not be unreasonably withheld. The Company will not be liable for settlement of any action effected without its written consent, which may not be unreasonably withheld, conditioned, or delayed.

(c) The Company agrees to notify the Placement Agent promptly of the assertion against it or any other person of any claim or the commencement of any action or proceeding relating to a transaction contemplated by this Agreement.

(d) If for any reason the foregoing indemnity is unavailable to the Placement Agent or insufficient to hold the Placement Agent harmless, then the Company shall contribute to the amount paid or payable by the Placement Agent as a result of such losses, claims, damages, or liabilities in such proportion as is appropriate to reflect not only the relative benefits received by the Company on the one hand and the Placement Agent on the other, but also the relative fault of the Company on the one hand and the Placement Agent on the other that resulted in such losses, claims, damages, or liabilities, as well as any relevant equitable considerations. The amounts paid or payable by a party in respect of losses, claims, damages, and liabilities referred to above shall be deemed to include any legal or other fees and expenses incurred in defending any litigation, proceeding, or other action or claim. Notwithstanding the provisions hereof, the Placement Agent's share of the liability hereunder shall not be in excess of the amount of fees actually received, or to be received, by the Placement Agent under this Agreement (excluding any amounts received as reimbursement of expenses incurred by the Placement Agent).

(e) The provisions of this Section 8 will remain in full force and effect, survive the expiration or termination of this Agreement, and be in addition to any liability that the Company might otherwise have to any indemnified party under this Agreement, whether or not the transaction contemplated by this Agreement is completed.

Section 9. Engagement Term. The term of this Agreement shall commence on the date hereof and end on the earliest of the following: (a) the Closing Date or (b) the date on which this Agreement is terminated by the Placement Agent or the Company pursuant to the terms hereof (the earliest of such date being the "**Termination Date**"), unless otherwise extended by the parties in writing. If the Company has not consummated the Placement by [*], 2026, the Company may terminate this Agreement by providing ten (10) days' written notice of such termination. The Placement Agent may terminate this Agreement if it reasonably determines that it is unsatisfied with the results of its due diligence investigation, notwithstanding its best efforts to complete the Placement. The Company may terminate this Agreement for cause (which shall mean a material breach by the Placement Agent of this Agreement or a material failure by the Placement Agent to provide the services as contemplated by this Agreement) pursuant to and within the meaning of FINRA Rule 5110(g)(5)(B). Notwithstanding anything to the contrary contained in this Agreement, in the event that the Placement shall not be carried out for any reason whatsoever during the term contemplated herein, the Company shall be obligated to pay to the Placement Agent its actual and accountable out-of-pocket expenses related to the Placement (including the fees and disbursements of the Placement Agents' legal counsel), up to a maximum of $20,000.

Section 10. Placement Agent Information. The Company agrees that any information or advice rendered by the Placement Agent in connection with this engagement is for the confidential use of the Company only in their evaluation of the Placement and, except as otherwise required by law, the Company will not disclose or otherwise refer to the advice or information in any manner without the Placement Agent's prior written consent.

Section 11. No Fiduciary Relationship. This Agreement does not create, and shall not be construed as creating rights enforceable by any person or entity not a party hereto, except those entitled hereto by virtue of the indemnification provisions hereof. The Company acknowledges and agrees that the Placement Agent is not and shall not be construed as a fiduciary of the Company and shall have no duties or liabilities to the equity holders or the creditors of the Company or any other person by virtue of this Agreement or the retention of the Placement Agent hereunder, all of which are hereby expressly waived.

Section 12. Closing. The obligations of the Placement Agent, and the closing of the sale of the Securities hereunder are subject to the accuracy, when made and on the Closing Date, of the representations and warranties on the part of the Company contained herein and in the Purchase Agreement, to the performance by the Company of its obligations hereunder and in the Purchase Agreement, and to each of the following additional terms and conditions, except as otherwise disclosed to and acknowledged and waived by the Placement Agent:

(a) All corporate proceedings and other legal matters incident to the authorization, form, execution, delivery, and validity of each of this Agreement, the Securities, and all other legal matters relating to this Agreement and the transactions contemplated hereby with respect to the Securities have been completed or resolved in a manner reasonably satisfactory in all material respects to the Placement Agent.

(b) No action or proceeding before a court of competent jurisdiction has been taken, and no statute, rule, regulation, or order has been enacted, adopted or issued by any governmental agency or body that would, as of the Closing Date, prevent the issuance or sale of the Securities or materially and adversely affect the business or operations of the Company. No injunction, restraining order, or order of any other nature by any federal or state court of competent jurisdiction has been issued as of the Closing Date that would prevent the issuance or sale of the Securities or materially and adversely affect the business or operations of the Company.

(c) The Company has entered into a Purchase Agreement with each of the Purchasers of the Securities, and such agreements are in full force and effect and contain representations, warranties and covenants of the Company as agreed upon between the Company and the Purchasers.

(d) FINRA raised no objections to the fairness and reasonableness of the terms and arrangements of this Agreement. If requested by the Placement Agent, the Company has filed, or has authorized the Placement Agent's counsel to file on the Company's behalf, with FINRA all necessary materials in compliance with FINRA Rule 5110 with respect to the Placement and has paid all filing fees required in connection therewith.

(e) On or before the Closing Date, the Placement Agent and counsel for the Placement Agent have received such information and documents as they may reasonably require for the purposes of enabling them to pass upon the issuance and sale of the Securities as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties of the Company, or the satisfaction of any of the conditions or agreements, herein contained.

(f) On the date hereof, the Placement Agent shall have received, and the Company shall have caused to be delivered to the Placement Agent, a letter from Davidson & Company LLP (the independent registered public accounting firm of the Company) addressed to the Placement Agent, dated as of the date hereof, in form and substance satisfactory to the Placement Agent. The letter shall not disclose any change in the condition (financial or other), earnings, operations, or business of the Company, which, in the Placement Agent's sole judgment, is material and adverse and that makes it, in the Placement Agent's sole judgment, impracticable or inadvisable to proceed with the Placement of the Securities.

If any of the conditions specified in this Section 12 have not been fulfilled when and as required by this Agreement, the Placement Agent may terminate this Agreement at any time on or prior to the Closing Date by giving oral or written notice to the Company. Any such oral notice must be promptly confirmed in writing.

Section 13. Governing Law. This Agreement will be governed by, and construed in accordance with, the laws of the State of New York applicable to agreements made and to be performed entirely in such State. This Agreement may not be assigned by either party hereto without the prior written consent of the other party. This Agreement is binding upon, and inure to the benefit of, the parties and their respective successors and permitted assigns. Any right to trial by jury with respect to any dispute arising under this Agreement or any transaction or conduct in connection herewith is waived. Any dispute arising under this Agreement may be brought into the courts of the State of New York or into the federal court located in New York, New York, and, by execution and delivery of this Agreement, the Company hereby accepts for itself and in respect of its property, generally and unconditionally, the jurisdiction of aforesaid courts. Each party hereto irrevocably waives personal service of process, consents to process being served in any such suit, action, or proceeding by delivering a copy thereof via overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement, and acknowledges that such service will constitute good and sufficient service of process and notice thereof. If either party commences an action or proceeding to enforce any provisions of this Agreement, then the non-prevailing party in such action or proceeding shall reimburse the prevailing party for its attorney's fees and other costs and expenses incurred in connection with such action or proceeding.

Section 14. Entire Agreement/Miscellaneous. This Agreement embodies the entire agreement and understanding between the parties hereto, and supersedes all prior agreements and understandings, relating to the subject matter hereof. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, such determination will not affect such provision in any other respect or any other provision of this Agreement, which will remain in full force and effect. This Agreement may not be amended or otherwise modified or waived except by an instrument in writing signed by both the Placement Agent and the Company. The representations, warranties, agreements, and covenants contained herein shall survive the Closing Date of the Placement and delivery of the Securities. This Agreement may be executed in two or more counterparts, all of which, when taken together, will be considered one and the same agreement. This Agreement will become effective when each party hereto has received a counterpart hereof signed by the other party. In the event that any signature is delivered by facsimile transmission or a .pdf format file, such signature will create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or .pdf signature page were an original thereof.

Section 15. Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder must be in writing and will be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is sent to the email address specified on the signature pages attached hereto prior to 6:30 p.m. (New York City time) on a Business Day, (ii) the next Business Day after the date of transmission, if such notice or communication is sent to the email address on the signature pages attached hereto on a day that is not a Business Day or later than 6:30 p.m. (New York City time) on any Business Day, (iii) the third business day following the date of mailing, if sent by U.S. internationally recognized air courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications are as set forth on the signature pages hereto.

Section 16. Press Announcements. The Company agrees that the Placement Agent may, on and after the Closing Date, reference the Placement and the Placement Agent's role in connection therewith in the Placement Agent's marketing materials and on its website and to place advertisements in financial and other newspapers and journals, in each case at its own expense and in compliance with applicable securities laws.

[The remainder of this page has been intentionally left blank.]

Please confirm that the foregoing correctly sets forth our agreement by signing and returning to the Placement Agent the enclosed copy of this Agreement.

Very truly yours,

E.F. Hutton & Co.

By: _____
Name:
Title:

Address for notice:
745 Fifth Avenue
34th Floor & PH
New York, NY 10151
Attn:
Email:

[*Signature Page to the Placement Agency Agreement*]

Accepted and Agreed to as of the date first written above:

XORTX THERAPEUTICS INC.

By: _____
Name: Allen Davidoff
Title: Chief Executive Officer

Address for notice:

3710-33rd Street NW
Calgary, Alberta, Canada T2L 2M1
Attn: Allen Davidoff, Chief Executive Officer
Email: adavidoff@xortx.com

[*Signature Page to the Placement Agency Agreement*]

Exhibit 4.1

PRE-FUNDED WARRANT TO PURCHASE COMMON SHARES

XORTX THERAPEUTICS INC.

Warrant Shares: [*] Initial Exercise Date: [*], 2026

THIS PRE-FUNDED COMMON SHARES PURCHASE WARRANT (the "Warrant") certifies that, for value received, [*] or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the "Initial Exercise Date") and until this Warrant is exercised in full (the "Termination Date") but not thereafter, to subscribe for and purchase from XORTX Therapeutics Inc., a British Columbia Corporation (the "Company"), up to [*] common shares of the Company (as subject to adjustment hereunder, the "Warrant Shares"). The purchase price of one Common Share under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "SPA), dated [*], 2026, among the Company and the signatories thereto. In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated in this Section 1:

"Bid Price" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Shares are then listed or quoted on a Trading Market, the bid price of the Common Shares for the time in question (or the nearest preceding date) on the Trading Market on which the Common Shares are then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is the only Trading Market, the volume weighted average price of the Common Shares for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Shares are not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Shares are then reported on the "Pink Open Market" published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per Common Share so reported, or (d) in all other cases, the fair market value of a Common Share as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

"VWAP" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Shares are then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Shares for such date (or the nearest preceding date) on the Trading Market on which the Common Shares are then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is the only Trading Market, the volume weighted average price of the Common Shares for such date (or the nearest preceding date) on OTCQB or OTCQX, as applicable, (c) if the Common Shares are not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Shares are then reported in the "Pink Open Market" published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per Common Share so reported, or (d) in all other cases, the fair market value of a Common Share as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

"Warrants" means this Warrant and other Pre-Funded Warrants issued by the Company pursuant to the Registration Statement.

Section 2. Exercise.

a) Exercise of Warrant. Subject to the provisions of Section 2(e) herein, exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times during the period commencing on the Initial Exercise Date and terminating at 5:00 P.M., New York City time on the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by e-mail attachment of the Notice of Exercise in the form annexed hereto as Exhibit A (the "Notice of Exercise"), and, unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise, delivery of the aggregate Exercise Price of the Warrant Shares specified in the applicable Notice of Exercise as specified in this Section 2(a). Within the earlier of (i) one (1) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer in United States dollars or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. Notwithstanding the foregoing, this Warrant may only be exercised for a whole number of Warrant Shares by a Holder. No fractional Warrant Shares will be issued. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall lower the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Trading Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The aggregate exercise price of this Warrant, except for a nominal exercise price of $0.0001 per Warrant Share, was pre-funded to the Company on or prior to the Initial Exercise Date and, consequently, no additional consideration (other than the nominal exercise price of $0.0001 per Warrant Share) shall be required to be paid by the Holder to any Person to effect any exercise of this Warrant. The Holder shall not be entitled to the return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever, including in the event this Warrant shall not have been exercised prior to the Termination Date. The remaining unpaid exercise price per Warrant Share under this Warrant shall be $0.0001, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. If at the time of exercise hereof, there is no effective registration statement registering the Warrant Shares or the prospectus contained therein is not available for issuance of the Warrant Shares to the Holder, then this Warrant may be exercised, in whole or in part, at such time, by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b)(88) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (x) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (y) the Bid Price of the Common Shares on the principal Trading Market as reported by Bloomberg L.P. as of the time of the Holder's execution of the applicable Notice of Exercise if such Notice of Exercise is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of "regular trading hours" on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of "regular trading hours" on such Trading Day;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).

d) Mechanics of Exercise.

i) Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company ("DTC") through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to the Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the "Warrant Share Delivery Date"), provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received by the Warrant Share Delivery Date. Upon delivery of the Notice of Exercise and payment of the aggregate Exercise Price, as applicable, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date and the aggregate Exercise Price has been delivered (other than in the case of a cashless exercise), the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each $1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Share on the date of the applicable Notice of Exercise), $10 per Trading Day (increasing to $20 per Trading Day on the fifth Trading Day after the Warrant Share Delivery Date) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the Fast Automated Securities Transfer Program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Share as in effect on the date of delivery of the Notice of Exercise. Notwithstanding the foregoing, with respect to any Notice(s) of Exercise delivered on or prior to 12:00 p.m. (New York City time) on the Initial Exercise Date, which may be delivered at any time after the time of execution of the SPA, the Company agrees to deliver the Warrant Shares subject to such notice(s) by 4:00 p.m. (New York City time) on the Initial Exercise Date and the Initial Exercise Date shall be the Warrant Share Delivery Date for purposes hereunder.

ii) Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii) Rescission Rights. If the Warrant Shares are not delivered to the Holder pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise; provided, however, that the Holder shall be required to return any Warrant Shares subject to any such rescinded exercise concurrently with the return to Holder of the aggregate Exercise Price paid to the Company for such Warrant Shares and the restoration of Holder's right to acquire such Warrant Shares pursuant to this Warrant (including, issuance of a replacement warrant certificate evidencing such restored right, if applicable).

iv) Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to deliver to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date (other than any such failure that is solely due to the action or inaction by the Holder with respect to such exercise, including a failure to pay the aggregate Exercise Price therefor), and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, Common Shares to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Common Shares so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of Warrant Shares that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Shares having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of this Warrant to purchase Warrant Shares with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder $1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Warrant Shares upon exercise of the Warrant as required pursuant to the terms hereof.

v) No Fractional Warrant Shares. No fractional Warrant Shares shall be issued upon the exercise of this Warrant. As to any fraction of a Warrant Share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall round down to the nearest whole number of Warrant Shares.

vi) Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that, in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto as Exhibit B duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

vii) Same-Day Processing. The Company shall pay all DTC or Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to DTC (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares, if any.

viii) Closing of Books. The Company will not close its shareholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with (i) the Holder's Affiliates, (ii) any other Persons acting as a group together with the Holder or any of the Holder's Affiliates and (iii) any other Persons whose beneficial ownership of the Common Shares would or could be aggregated with the Holder's for purposes of Section 13(d) (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of Common Shares that are beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of Warrant Shares that are issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of Common Shares which would be issuable upon (i) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or non-converted portion of any other securities of the Company (including, without limitation, any other Common Share Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination, and a submission of a Notice of Exercise shall be deemed a representation and warranty by the Holder of the foregoing determination. In addition, a determination as to any group status as contemplated above shall be determined by the Holder in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding Common Shares, a Holder may rely on the number of outstanding Common Shares as reflected in (A) the Company's most recent periodic or annual report filed with or furnished to the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of Common Shares outstanding. Upon the written or oral request of a Holder, the Company shall within one Trading Day confirm orally and in writing to the Holder the number of Common Shares then outstanding. In any case, the number of outstanding Common Shares shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding Common Shares was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by the Holder prior to the issuance of any Warrants, 9.99%) of the number of Common Shares outstanding immediately after giving effect to the issuance of Warrant Shares issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of Common Shares outstanding immediately after giving effect to the issuance of the Warrant Shares upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the sixty-first (61st) day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant. If the Warrant is unexercisable as a result of the Holder's Beneficial Ownership Limitation, no alternate consideration is owing to the Holder.

Section 3. Certain Adjustments.

a) Share Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a share dividend or otherwise makes a distribution or distributions on the Common Shares or any other equity or equity equivalent securities payable in Common Shares (which, for avoidance of doubt, shall not include any Warrant Shares issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding Common Shares into a larger number of shares, (iii) combines (including by way of reverse share split) outstanding Common Shares into a smaller number of shares, or (iv) issues by reclassification of any share capital of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of Common Shares (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of Common Shares outstanding immediately after such event, and the number of Warrant Shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of shareholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification. For the purposes of clarification, neither the Exercise Price of the Warrant nor the number of Warrant Shares issuable upon exercise of the Warrant will be adjusted in the event that the Company or any subsidiary thereof, as applicable, sells or grants any option to purchase, or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any offer, sale, grant or any option to purchase or other disposition) any Common Shares or Common Share Equivalents, at an effective price per share less than the Exercise Price then in effect.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Share Equivalents or rights to purchase shares, warrants, securities or other property pro rata to the record holders of any class of shares of the Company (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of Warrant Shares acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Shares are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such Common Shares as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Shares, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) except to the extent an adjustment was already made pursuant to Section 3(a) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of Warrant Shares acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Shares are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any Common Shares as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation). To the extent that the Warrant has not been partially or completely exercised at the time of such Distribution, such portion of the Distribution shall be held in abeyance for the benefit of the holder until the holder has exercised the Warrant.

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Shares are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of more than 50% of the outstanding Common Shares, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Shares or any compulsory share exchange pursuant to which the Common Shares are effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or plan of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding Common Shares (not including any Common Shares held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable by holders of Common Shares as a result of such Fundamental Transaction for each Warrant Share for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one Common Share in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Shares are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(d) pursuant to written agreements prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the Warrant Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the Common Shares pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction). Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a Common Share, as the case may be. For purposes of this Section 3, the number of Common Shares deemed to be issued and outstanding as of a given date shall be the sum of the number of Common Shares (excluding treasury shares, if any) issued and outstanding.

f) Notice to Holder.

i) Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii) Notice to Allow Exercise by Holder. If (A) the Company shall declare a Distribution on the Common Shares, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Shares, (C) the Company shall authorize the granting to all holders of the Common Shares rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any shareholders of the Company shall be required in connection with any reclassification of the Common Shares, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Shares are converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 10 Trading Days prior to the applicable record or effective date hereinafter specified, a notice (unless such information is publicly filed with the Commission, in which case a notice shall not be required) stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Shares of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Shares of record shall be entitled to exchange their Common Shares for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously furnish such notice with the Commission pursuant to a Report on Form 6-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. This Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date of this Warrant and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

a) No Rights as Shareholder Until Exercise; No Settlement in Cash. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a shareholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting any rights of a Holder to receive Warrant Shares on a "cashless exercise" pursuant to Section 2(c) or to receive cash payments pursuant to Section 2(d)(i) and Section 2(d)(iv) herein, in no event shall the Company be required to net cash settle an exercise of this Warrant.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of an affidavit of loss reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any share certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (and reimbursement to the Company of all reasonable expenses incidental thereto), and upon surrender and cancellation of such Warrant or share certificate, if mutilated, the Company will make and deliver a new Warrant or share certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or share certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day or a Trading Day, as applicable, then, such action may be taken or such right may be exercised on the next succeeding Business Day or Trading Day, as applicable.

d) Authorized Shares.

i) The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Shares that will be sufficient to permit the full issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Shares may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

ii) Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its articles or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

iii) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall use commercially reasonable efforts to obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the SPA.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant or the SPA, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate Proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, a Notice of Exercise, shall be in writing and delivered personally, by facsimile, by e-mail, or sent by a nationally recognized overnight courier service, addressed to the Company, at 3710 33rd Street NW, Calgary, Alberta, T2L 2M1 Canada, Attention: Allen Davidoff, President and Chief Executive Officer, email address: adividoff@xortx.com, facsimile: (403) 260-3501, or such other email address or address or facsimile number as the Company may specify for such purposes by notice to the Holders. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile, by e-mail, or sent by a nationally recognized overnight courier service addressed to each Holder at the e-mail address or address of such Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the time of transmission, if such notice or communication is delivered via facsimile or e-mail at the facsimile number or e-mail address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or e-mail at the facsimile number or e-mail address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

i) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages may not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

j) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

k) Amendment; Waiver. This Warrant may be modified or amended (or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder, on the other hand.

l) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

m) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

****

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

XORTX THERAPEUTICS INC.

By: _____
Name: Allen Davidoff
Title: President and Chief Executive Officer

NOTICE OF EXERCISE

TO: **XORTX THERAPEUTICS INC.**

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

¨ wire transfer in lawful money of the United States; or

¨ if permitted, the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

_____

The Warrant Shares shall be delivered to the following DWAC Account Number:

_____

_____

_____

[SIGNATURE OF HOLDER]

Name of Investing Entity:

_____

Signature of Authorized Signatory of Investing Entity:

_____

Name of Authorized Signatory:

_____

Title of Authorized Signatory:

_____

Date: _____

_____

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase Warrant Shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Phone Number: _____

Email Address: _____

Dated: _____

Holder's Signature: _____

Holder's Address: _____

Exhibit 5.1

Dentons Canada LLP
15th Floor, Bankers Court
850-2nd Street SW
Calgary, AB, Canada T2P 0R8

dentons.com

April 21, 2026

VIA EMAIL

XORTX Therapeutics Inc.
3710 – 33rd Street NW
Calgary, AB
T2L 2M1

To Whom it May Concern:

Re: XORTX Therapeutics Inc. – Registration Statement on Form F-1

We have acted as Canadian counsel to XORTX Therapeutics Inc., a corporation incorporated under the laws of British Columbia, Canada (the "**Company**"), in connection with a Registration Statement on Form F-1 (the "**Registration Statement**") filed by the Company with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Securities Act**"), and the related prospectus contained therein (the "**Prospectus**"), relating to the offer and sale by the Company of up to US$5,000,0000 of (A) common shares, no par value per share (the "**Shares**"), and/or pre-funded warrants to purchase common shares (the "**Pre-Funded Warrants**") and (B) the common shares issuable from time to time upon exercise of the Pre-funded Warrants (the "**Pre-Funded Warrant Shares**," and together with the Shares and the Pre-Funded Warrants, the "**Securities**"), as contemplated pursuant to the Registration Statement

This opinion is being furnished to you at your request in accordance with the requirements of Item 601(b)(5)(i) of Regulation S-K.

In rendering the opinion set forth herein, we have examined the originals, or photostatic or certified copies, of (i) the Articles of the Company, as currently in effect as amended to date, (ii) certain resolutions of the Board of Directors of the Company related to the filing of the Registration Statement and the related Prospectus, the authorization and issuance of the Securities and related matters, (iii) the Registration Statement and related Prospectus, and all exhibits to the Registration Statement, (iv) the form of Securities Purchase Agreement, to be entered into by and among the Company and the purchasers identified on the signature pages thereto, substantially in the form filed as an exhibit to the Registration Statement (the "**Securities Purchase Agreement**"), (v) the form of Pre-Funded Warrant, and (vi) such other records, documents and instruments as we deemed relevant and necessary for purposes of the opinion stated herein.

We have examined such other documents and have reviewed such questions of law as we have considered necessary or appropriate for the purposes of our opinions set forth below. In rendering our opinions set forth below, we have assumed (i) the authenticity of all documents submitted to us as originals, (ii) the conformity to the originals of all documents submitted as certified, photostatic or electronic copies and the authenticity of the originals thereof, (iii) the legal capacity of natural persons, (iv) the genuineness of signatures not witnessed by us, (v) the due authorization, execution and delivery of all documents by all parties, other than the Company, and the validity, binding effect and enforceability thereof, (vi) the truth, accuracy and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed, and (vii) all necessary approvals related to the Securities, their issuance and all matters related to the offering of same have been received from the TSX Venture Exchange.

As to any facts material to the opinions expressed herein which were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others and of public officials. In making our examination of documents executed or to be executed, we have assumed that the parties thereto, other than the Company, had or will have the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents, and the validity and binding effect thereof on such parties.

Our opinion below is expressed only with respect to the laws of the province of British Columbia and of the laws of Canada applicable therein in effect on the date of this opinion. We have no responsibility or obligation to: (i) update this opinion, (ii) take into account or inform the addressees or any other person of any changes in law, facts or other developments subsequent to this date that do or may affect the opinions we express, or (iii) advise the addressees or any other person of any other change in any matter addressed in this opinion.

Based upon the foregoing and subject to the limitations, qualifications and assumptions set forth herein, we are of the opinion that (i) the Shares have been duly authorized for issuance, and when issued and paid for by the purchasers in accordance with the terms of the Prospectus and the Securities Purchase Agreement, will be validly issued, fully paid and non-assessable and (ii) the Pre-Funded Warrant Shares have been duly authorized and, when issued upon the valid exercise of the Pre-Funded Warrants, will be validly issued, fully paid and non-assessable.

Any additional Securities registered in reliance on Rule 462(b) under the Securities Act in connection with the offering are hereby expressly covered by this opinion. As used in this opinion, the term “Registration Statement” shall include any additional registration statement filed pursuant to Rule 462(b) under the Securities Act in connection with the offering and the term “Prospectus” shall include any prospectus deemed to be included in any such additional registration statement.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to the reference to our firm under the heading “Legal Matters” in the prospectus constituting part of the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Best regards,

Dentons Canada LLP

"Dentons Canada LLP"

Exhibit 5.2

Troutman Pepper Locke LLP
111 Huntington Avenue, 9th Floor
Boston, MA 02199-7613

troutman.com

April 21, 2026

XORTX Therapeutics Inc.
3710 – 33rd Street NW
Calgary, Alberta, T2L 2M1
Canada

Re: XORTX Therapeutics Inc. - Registration Statement on Form F-1 (File No. 333- 290512)

Ladies and Gentlemen:

We have acted as United States counsel to XORTX Therapeutics Inc., a corporation organized under the laws of British Columbia, Canada (the "**Company**"), in connection with a Registration Statement on Form F-1 (File No. 333- 290512) (the "**Registration Statement**") filed by the Company with the United States Securities and Exchange Commission (the "**Commission**") under the United States Securities Act of 1933, as amended (the "**Securities Act")**, and the related prospectus contained therein (the "**Prospectus**"). We are rendering this opinion in connection with the filing by the Company of the Registration Statement relating to the offer and sale by the Company of: up to an aggregate of $5,000,000 of (A) common shares, without par value per share (the "**Shares**"), and/or pre-funded warrants to purchase common shares (the "**Pre-Funded Warrants**"), and (B) the common shares issuable from time to time upon exercise of the Pre-funded Warrants (the "**Pre-Funded Warrant Shares**," and together with the Shares and the Pre-Funded Warrants, the "**Securities**"), pursuant to a Securities Purchase Agreement, to be entered into by and among the Company and the purchasers identified on the signature pages thereto, substantially in the form filed as an exhibit to the Registration Statement (the "**Securities Purchase Agreement**").

This opinion letter is furnished to you for filing with the Commission pursuant to Item 601 of Regulation S-K, promulgated under the Securities Act.

We have examined such documents and have reviewed such questions of law as we have considered necessary or appropriate for the purposes of our opinions set forth below. In rendering our opinions set forth below, we have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures and the conformity to authentic originals of all documents submitted to us as copies. We have also assumed the legal capacity for all purposes relevant hereto of all natural persons and, with respect to all parties to agreements or instruments relevant hereto, that such parties had the requisite power and authority (corporate or otherwise) to execute, deliver and perform such agreements and instruments, that such agreements and instruments have been duly authorized by all requisite action (corporate or otherwise), executed and delivered by such parties and, except to the extent expressly stated in the opinions contained herein, that such agreements and instruments are the valid, binding and enforceable obligations of such parties. As to questions of fact material to our opinions, we have relied upon certificates or comparable documents of officers and other representatives of the Company and of public officials.

Based on the foregoing, and assuming that (i) the Registration Statement and all amendments thereto (including post-effective amendments) is and will continue to be effective under the Securities Act, (ii) the Company is duly incorporated and is validly existing and in good standing under the laws of the jurisdiction of its organization, (iii) the Securities Purchase Agreement and the Pre-Funded Warrants will or have been duly authorized and validly executed and delivered by the Company, (iv) any common shares issuable upon exercise of the Pre-Funded Warrants being offered or sold will or have been be duly authorized, created and, if appropriate, reserved for issuance upon such exercise, and (v) the issuance of the Pre-Funded Warrants and any common shares issuable upon exercise thereof have been or will be done in compliance with all applicable Canadian corporate law, we are of the opinion that the Pre-Funded Warrants, when issued and delivered against payment of the consideration therefor, as contemplated in the Registration Statement and in accordance with the terms of the Securities Purchase Agreement, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

Our opinions set forth above are subject to the following qualifications and exceptions:

(a) Our opinions set forth above are subject to the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar law relating to or affecting creditors' rights generally (including, without limitation, fraudulent conveyance laws).

(b) Our opinions set forth above are subject to the effect of general principles of equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing and the possible unavailability of specific performance or injunctive relief, regardless of whether considered in a proceeding in equity or at law.

(c) We express no opinion as to the enforceability of (i) provisions that relate to choice of law, forum selection or submission to jurisdiction (including, without limitation, any express or implied waiver of any objection to venue in any court or of any objection that a court is an inconvenient forum), (ii) waivers by the Company of any statutory or constitutional rights or remedies, (iii) terms which excuse any person or entity from liability for, or require the Company to indemnify such person or entity against, such person's or entity's negligence or willful misconduct or (iv) obligations to pay any prepayment premium, default interest rate, early termination fee or other form of liquidated damages, if the payment of such premium, interest rate, fee or damages may be construed as unreasonable in relation to actual damages or disproportionate to actual damages suffered as a result of such prepayment, default or termination.

(d) We draw your attention to the fact that, under certain circumstances, the enforceability of terms to the effect that provisions may not be waived or modified except in writing may be limited.

Our opinions expressed above are limited to the corporate laws of the State of New York.

Any additional Securities registered in reliance on Rule 462(b) under the Securities Act in connection with the Offering are hereby expressly covered by this opinion. As used in this opinion, the term "Registration Statement" shall include any additional registration statement filed pursuant to Rule 462(b) under the Securities Act in connection with the offering and the term "Prospectus" shall include any prospectus deemed to be included in any such additional registration statement.

We are furnishing this opinion in connection with the filing of the Registration Statement, and hereby consent to the reference to our firm under the headings "Legal Matters" in the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Troutman Pepper Locke LLP

Troutman Pepper Locke LLP

Exhibit 10.27

SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (this "Agreement") is entered into and made effective as of [*], 2026, between XORTX Therapeutics Inc., a British Columbia corporation (the "Company"), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a "Purchaser" and collectively the "Purchasers").

RECITALS

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to an effective registration statement under the Securities Act (as defined below), the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

ARTICLE I. DEFINITIONS

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms have the meanings set forth in this Section 1.1:

"Acquiring Person" shall have the meaning ascribed to such term in Section 4.5.

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls, or is controlled by or is under common control with a Person as such terms are used in and construed under Rule 405 under the Securities Act.

"Agreement" shall have the meaning ascribed to such term in the Preamble.

"Applicable Laws" shall have the meaning ascribed to such term in Section 3.1(oo).

"Authorizations" shall have the meaning ascribed to such term in Section 3.1(oo).

"BHCA" shall have the meaning ascribed to such term in Section 3.1(mm).

"Board of Directors" means the board of directors of the Company.

"BSA/PATRIOT Act" shall have the meaning ascribed to such term in Section 3.2(e).

"Business Day" means any day except Saturday, Sunday, any day which is a federal legal holiday in the United States or Canada, or any day on which banking institutions in the State of New York or the City of Calgary are authorized or required by law or other governmental action to close.

"Closing" means the closing of the purchase and sale of the Securities pursuant to Section 2.1.

"Closing Date" means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) the Purchaser's obligations to pay the Subscription Amount and (ii) the Company's obligations to deliver the Securities, in each case, have been satisfied or waived, but in no event later than the first (1st) Trading Day following the date hereof (or the second (2nd) Trading Day following the date hereof if this Agreement is signed on a day that is not a Trading Day or after 4:00 p.m. (New York City time) and before midnight (New York City time) on a Trading Day).

"Code" means the United States Internal Revenue Code of 1986, as amended.

"Commission" means the United States Securities and Exchange Commission.

"Common Shares" means the common shares of the Company, no par value per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

"Common Share Equivalents" means any securities of the Company which would entitle the holder thereof to acquire at any time Common Shares, including, without limitation, any debt, preferred shares, right, option, warrant, or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Shares.

"Company" shall have the meaning ascribed to such term in the Preamble.

"Company Canadian Counsel" means Dentons Canada LLP.

"Company U.S. Counsel" means Troutman Pepper Locke LLP.

"Disclosure Time" means, (i) if this Agreement is signed on a day that is not a Trading Day or after 9:00 a.m. (New York City time) and before midnight (New York City time) on any Trading Day, 9:01 a.m. (New York City time) on the Trading Day immediately following the date hereof, and (ii) if this Agreement is signed between midnight (New York City time) and 9:00 a.m. (New York City time) on any Trading Day, no later than 9:01 a.m. (New York City time) on the date hereof.

"DVP" shall have the meaning ascribed to such term in Section 2.1.

"DWAC" shall have the meaning ascribed to such term in Section 2.2(a) (vi).

"EDGAR" means the Electronic Data Gathering, Analysis, and Retrieval System.

"Environmental Law" shall have the meaning ascribed to such term in Section 3.1(n).

"ERISA" shall have the meaning ascribed to such term in Section 3.2(g).

"Evaluation Date" shall have the meaning ascribed to such term in Section 3.1(t).

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"Exempt Issuance" means the issuance of (i) Common Shares, restricted share units, or options, including the Common Shares underlying the restricted share units or options, to employees, officers, directors, or consultants of the Company pursuant to any share or option plan or arrangement duly adopted for such purpose, under applicable securities laws, (ii) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into Common Shares issued and outstanding on the date of this Agreement, *provided* that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price, or conversion price of such securities (other than in accordance with the terms of such outstanding securities, or in connection with share splits or combinations) or to extend the term of such securities, and (iii) securities issued pursuant to merger, acquisition, or strategic transactions in compliance with applicable securities laws, *provided* that such securities are issued as "restricted securities" (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.11(a) herein, and *provided*, *further* that any such issuance shall only be to a Person that (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company, or an owner of an asset in a business synergistic with the business of the Company and in which the Company receives benefits in addition to any investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

"FCPA" means the Foreign Corrupt Practices Act of 1977, as amended.

"Federal Reserve" shall have the meaning ascribed to such term in Section 3.1(mm).

"Hazardous Materials" shall have the meaning ascribed to such term in Section 3.1(n).

"IFRS" shall have the meaning ascribed to such term in Section 3.1(i)

"Indebtedness" shall have the meaning ascribed to such term in Section 3.1(bb).

"Intellectual Property" shall have the meaning ascribed to such term in Section 3.1(q).

"IT Systems and Data" shall have the meaning ascribed to such term in Section 3.1(jj).

"Liens" mean a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right, or other restrictions.

"Lock-Up Agreements" means the lock-up agreements, dated as of the date hereof and executed by each executive officer and director of the Company, in the form of Exhibit B attached hereto.

"Material Adverse Effect" shall have the meaning ascribed to such term in Section 3.1(b).

"Material Permits" shall have the meaning ascribed to such term in Section 3.1(p).

"Money Laundering Laws" shall have the meaning ascribed to such term in Section 3.1(nn).

"Non-cooperative Jurisdiction" shall have the meaning ascribed to such term in Section 3.2(f).

"OFAC" shall have the meaning ascribed to such term in Section 3.1(kk).

"Offering" means the offering of the Securities hereunder.

"Per Share Purchase Price" equals $[*], subject to adjustment for reverse and forward share splits, share dividends, share combinations, and other similar transactions affecting the Common Shares that occur after the date of this Agreement and before the Closing Date; *provided* that the purchase price per Pre-Funded Warrant shall be the Per Share Purchase Price minus $0.0001.

"Person" means an individual or corporation, partnership, trust, incorporated, or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof), or other entity of any kind.

"Placement Agent" means E.F. Hutton & Co.

"Placement Agency Agreement" means that certain Placement Agency Agreement by and between the Company and the Placement Agent, dated as of the date hereof.

"Preliminary Prospectus" means the preliminary prospectus included in the Registration Statement at the time the Registration Statement is declared effective.

"Pre-Funded Warrant Shares" means the Common Shares issuable upon exercise of the Pre-Funded Warrants.

"Pre-Funded Warrants" means, collectively, the pre-funded Common Share purchase warrants delivered to the Purchasers at the Closing in accordance with Section 2.2(a) hereof, in substantially the form of Exhibit A attached hereto.

"Pre-Settlement Period" shall have the meaning ascribed to such term in Section 2.1.

"Pre-Settlement Shares" shall have the meaning ascribed to such term in Section 2.1.

"Proceeding" means an action, claim, suit, investigation, or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition) pending or, to the Company's knowledge, threatened in writing against or affecting the Company or any of its respective properties before or by any court, arbitrator, governmental, or administrative agency or regulatory authority (federal, state, county, local, or foreign).

"Prospectus" means the final prospectus filed with respect to the Registration Statement.

"Purchaser" shall have the meaning ascribed to such term in the Preamble.

"Purchaser Party" shall have the meaning ascribed to such term in Section 4.8.

"Registration Statement" the Company's registration statement on Form F-1 (File No. [333-*]).

"Required Approvals" shall have the meaning ascribed to such term in Section 3.1(e).

"Rule 144" means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

"Rule 424" means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

"Sanctioned Person" shall have the meaning ascribed to such term in Section 3.2(e).

"Sanctions" shall have the meaning ascribed to such term in Section 3.2(e).

"SEC Reports" shall have the meaning ascribed to such term in Section 3.1(h).

"Securities" means the Shares, the Warrants, and the Warrant Shares.

"Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"Shares" means the Common Shares issued to each Purchaser pursuant to this Agreement.

"Shell Bank" shall have the meaning ascribed to such term in Section 3.2(e).

"Short Sales" means all "short sales" as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include locating and/or borrowing Common Shares).

"Subscription Amount" means, as to each Purchaser, the aggregate amount to be paid for the Shares or Pre-Funded Warrants (in lieu of Shares) purchased hereunder as specified below such Purchaser's name on the signature page of this Agreement and next to the heading "Subscription Amount," in United States dollars and in immediately available funds (minus, if applicable, a Purchaser's aggregate exercise price of the Pre-Funded Warrants, which amounts shall be paid as and when such Pre-Funded Warrants are exercised for cash).

"Subsidiary" means any significant subsidiary of the Company as set forth in the SEC Reports and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

"Trading Day" means a day on which the principal Trading Market is open for trading.

"Trading Market" means any of the following markets or exchanges on which the Common Shares are listed or quoted for trading on the date in question: the NYSE American, The Nasdaq Capital Market, The Nasdaq Global Market, The Nasdaq Global Select Market, The New York Stock Exchange, or the TSX Venture Exchange (or any successors to any of the foregoing).

"Transaction Documents" means this Agreement, the Pre-Funded Warrants, the Lock-Up Agreements, and the Placement Agency Agreement, including all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

"Transfer Agent" means TSX Trust Company, the current transfer agent of the Company, at its principal office in Toronto, Canada, together with the Company's co-transfer agent Continental Stock Transfer & Trust Company, and any successor transfer agent of the Company.

"Warrant Shares" means the Common Shares issuable upon exercise of the Warrants.

"Warrants" means the Pre-Funded Warrants.

ARTICLE II. PURCHASE AND SALE

2.1 Closing. On the Closing Date, upon the terms and subject to the conditions set forth herein, the Company agrees to sell, and each of the Purchasers, severally and not jointly, agree to purchase, the Shares and/or the Pre-Funded Warrants subscribed for by such Purchaser as set forth in the signature pages hereto. Notwithstanding anything herein to the contrary, to the extent that a Purchaser determines, in its sole discretion, that such Purchaser's Subscription Amount (together with such Purchaser's Affiliates, and any Person acting as a group together with such Purchaser or any of such Purchaser's Affiliates) would cause such Purchaser's beneficial ownership of the Common Shares to exceed the Beneficial Ownership Limitation, or as such Purchaser may otherwise choose, such Purchaser may elect to purchase Pre-Funded Warrants in lieu of the Shares as determined pursuant to Section 2.2(a). The "Beneficial Ownership Limitation" shall be 4.99% (or, with respect to each Purchaser, at the election of the Purchaser at Closing, 9.99%) of the number of Common Shares outstanding immediately after giving effect to the issuance of the Shares on the Closing Date. In each case, the election to receive Pre-Funded Warrants is solely at the option of the Purchaser. Each Purchaser's Subscription Amount as set forth on the signature page hereto executed by such Purchaser shall be made available for "Delivery Versus Payment" ("DVP") settlement with the Company or its designee. The Company and each Purchaser shall deliver the other items set forth in Section 2.2 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3, the Closing shall occur remotely via the electronic exchange of documents and signatures or such other location as the parties shall mutually agree. Unless otherwise directed by the Placement Agent, settlement of the Shares shall occur via DVP (i.e., on the Closing Date, the Company shall issue the Shares registered in the respective Purchasers' names and addresses and released by the Transfer Agent directly to the account(s) at the Placement Agent identified by each Purchaser; upon receipt of such Shares, the Placement Agent shall promptly electronically deliver such Shares to the applicable Purchaser, and payment therefor shall be made by the Placement Agent (or its clearing firm) by wire transfer to the Company). Notwithstanding anything herein to the contrary, if at any time on or after the time of execution of this Agreement by the Company and an applicable Purchaser, through, and including the time immediately prior to the Closing (the "Pre-Settlement Period"), such Purchaser sells to any Person all, or any portion, of the Shares to be issued hereunder to such Purchaser at the Closing (collectively, the "Pre-Settlement Shares"), such Purchaser shall, automatically hereunder (without any additional required actions by such Purchaser or the Company), be deemed to be unconditionally bound to purchase, such Pre-Settlement Shares at the Closing; *provided* that the Company shall not be required to deliver any Pre-Settlement Shares to such Purchaser prior to the Company's receipt of the purchase price of such Pre-Settlement Shares hereunder; and *provided*, *further* that the Company hereby acknowledges and agrees that the forgoing shall not constitute a representation or covenant by such Purchaser as to whether or not during the Pre-Settlement Period such Purchaser shall sell any Common Shares to any Person and that any such decision to sell any Common Shares by such Purchaser shall solely be made at the time such Purchaser elects to effect any such sale, if any. Notwithstanding the foregoing, with respect to any Notice(s) of Exercise (as defined in the Pre-Funded Warrants) delivered on or prior to 12:00 p.m. (New York City time) on the Closing Date, which may be delivered at any time after the time of execution of this Agreement, the Company agrees to deliver the Pre-Funded Warrant Shares subject to such notice(s) by 4:00 p.m. (New York City time) on the Closing Date and the Closing Date shall be the Warrant Share Delivery Date (as defined in the Pre-Funded Warrants) for purposes hereunder, *provided* that payment of the aggregate Exercise Price (as defined in the Pre-Funded Warrants) (other than in the case of a cashless exercise) is received by such Warrant Share Delivery Date. Unless otherwise directed by the Placement Agent, as soon as reasonably practicable after the Closing Date, the Warrants shall be issued to each Purchaser in originally signed form.

2.2 Deliveries.

(a) On or prior to the Closing Date (except as indicated below), the Company shall deliver or cause to be delivered to each Purchaser the following:

(i) this Agreement duly executed by the Company;

(ii) a legal opinion of Company Canadian Counsel, in form and substance reasonably satisfactory to the Placement Agent, directed to the Placement Agent and the Purchasers;

(iii) a legal opinion of Company U.S. Counsel, in form and substance reasonably satisfactory to the Placement Agent, directed to the Placement Agent and the Purchasers;

(iv) a negative assurance letter of Company U.S. Counsel, addressed to the Placement Agent, in form and substance reasonably satisfactory to the Placement Agent;

(v) the Company's wire instructions, on Company letterhead and executed by the Chief Executive Officer or Chief Financial Officer;

(vi) subject to the penultimate sentence of Section 2.1, a copy of the irrevocable instructions to the Transfer Agent instructing the Transfer Agent to deliver on an expedited basis via The Depository Trust Company Deposit or Withdrawal at Custodian system ("DWAC") Shares equal to each Purchaser's Subscription Amount divided by the Per Share Purchase Price (minus the number of Common Shares issuable upon exercise of such Purchaser's Pre-Funded Warrant, if applicable), registered in the name of such Purchaser;

(vii) if applicable, for each Purchaser of Pre-Funded Warrants pursuant to Section 2.1, a signed Pre-Funded Warrant registered in the name of such Purchaser to purchase up to a number of Common Shares equal to the portion of such Purchaser's Subscription Amount applicable to Pre-Funded Warrants divided by the Per Share Purchase Price minus $0.0001, with an exercise price equal to $0.0001, subject to adjustment therein;

(viii) Lock-Up Agreements executed by each executive officer and director of the Company;

(ix) an Officer's Certificate, in form and substance reasonably satisfactory to the Placement Agent;

(x) a Secretary's Certificate, in form and substance reasonably satisfactory to the Placement Agent; and

(xi) the Preliminary Prospectus and the Prospectus (which may be delivered in accordance with Rule 172 under the Securities Act).

(b) On or prior to the Closing Date, each Purchaser shall deliver or cause to be delivered to the Company the following:

(i) this Agreement duly executed by such Purchaser; and

(ii) such Purchaser's Subscription Amount (minus, if applicable, a Purchasers aggregate exercise price of the Pre-Funded Warrants, which amounts shall be paid as and when such Pre-Funded Warrants are exercised for cash), which shall be made available for DVP settlement with the Company or its designees.

2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Purchasers contained herein (unless such representation or warranty is as of a specific date therein in which case they shall be accurate in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) as of such date);

(ii) all obligations, covenants, and agreements of each Purchaser required to be performed at or prior to the Closing Date shall have been performed; and

(iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(b) The respective obligations of the Purchasers hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Company contained herein (unless such representation or warranty is as of a specific date therein in which case they shall be accurate in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) as of such date);

(ii) all obligations, covenants, and agreements of the Company required to be performed at or prior to the Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement;

(iv) there shall have been no Material Adverse Effect with respect to the Company since the date hereof; and

(v) from the date hereof to the Closing Date, trading in the Common Shares shall not have been suspended by the Commission or the Company's principal Trading Market, and, at any time prior to the Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change (excluding volatility) in, any financial market which, in each case, in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Securities at the Closing.

ARTICLE III. REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. Except as set forth in the SEC Reports, the Company hereby makes the following representations and warranties to each Purchaser:

(a) *Subsidiaries*. All of the Subsidiaries of the Company are set forth in the SEC Reports. The Company owns, directly or indirectly, all of the share capital or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding share capital of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no Subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) *Organization and Qualification of Company*. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing, and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. The Company and each of its Subsidiaries is not in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws, or other organizational or charter documents. The Company and each of its subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, would not reasonably be expected to result in: (i) a material adverse effect on the legality, validity, or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects, or condition (financial or otherwise) of the Company, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii), or (iii), a "Material Adverse Effect"); *provided* that a change in the market price or trading volume of the Common Share alone shall not be deemed, in and of itself, to constitute a Material Adverse Effect. No Proceeding has been instituted in any such jurisdiction revoking, limiting, or curtailing or seeking to revoke, limit, or curtail such power and authority or qualification.

(c) *Authorization; Enforcement*. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors, or the Company's shareholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which the Company is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) *No Conflicts*. The execution, delivery, and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's certificate or articles of incorporation, or bylaws, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company, or give to others any rights of termination, amendment, anti-dilution, or similar adjustments, acceleration, or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt, or other instrument (evidencing a Company debt or otherwise) or other understanding to which the Company is a party or by which any property or asset of the Company is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree, or other restriction of any court or governmental authority to which the Company is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected; except in the case of each of clauses (ii) and (iii), such as would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect.

(e) *Filings, Consents, and Approvals*. The Company is not required to obtain any consent, waiver, authorization, or order of, give any notice to, or make any filing or registration with, any court or other federal, state (including state blue sky law), local, or other governmental authority or other Person in connection with the execution, delivery, and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.4 of this Agreement, (ii) the filing with the Commission of the Prospectus, (iii) the notice and/or application(s) to each applicable Trading Market for the listing of the Shares and the Warrant Shares for trading thereon in the time and manner required thereby, and (iv) filings required by the Financial Industry Regulatory Authority, Inc. (collectively, the "Required Approvals").

(f) *Issuance of the Securities; Qualification; Registration*.

(i) The Shares are duly authorized and, when issued and paid for in accordance with this Agreement, will be duly and validly issued, fully paid, and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents and shall not be subject to preemptive or similar rights of shareholders. The Warrants when paid for and issued in accordance with this Agreement, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, or similar laws affecting the rights of creditors generally and subject to general principles of equity. The Warrant Shares, when issued in accordance with the terms of the Warrants, will be validly issued, fully paid, and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents and shall not be subject to preemptive or similar rights of shareholders. The Company has reserved from its duly authorized share capital the maximum number of Common Shares issuable pursuant to this Agreement and the Warrants (without taking into account any limitations on the exercise of the Warrants set forth therein).

(ii) The Company has prepared and filed the Registration Statement in conformity with the requirements of the Securities Act, which became effective on February 17, 2026, including the Preliminary Prospectus, and such amendments and supplements thereto as may have been required to the date of this Agreement. The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of the Preliminary Prospectus or the Prospectus has been issued by the Commission and no proceedings for that purpose have been instituted or, to the knowledge of the Company, are threatened by the Commission. The Company shall file the Preliminary Prospectus or the Prospectus with the Commission pursuant to Rule 424(b). At the time the Registration Statement and any amendments thereto became effective as determined under the Securities Act, at the date of this Agreement and at the Closing Date, the Registration Statement and any amendments thereto conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and the Preliminary Prospectus, the Prospectus and any amendments or supplements thereto, at the time the Preliminary Prospectus, the Prospectus or any amendment or supplement thereto was issued and at the Closing Date, conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

Any reference herein to the Preliminary Prospectus and the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein as of the date of filing thereof; and any reference herein to any "amendment" or "supplement" with respect to any of the Preliminary Prospectus and the Prospectus shall be deemed to refer to and include (i) the filing of any document with the Commission incorporated or deemed to be incorporated therein by reference after the date of filing of such Preliminary Prospectus or Prospectus and (ii) any such document so filed.

All references in this Agreement to the Registration Statement, the Preliminary Prospectus, or the Prospectus, or any amendments or supplements to any of the foregoing, shall be deemed to include any copy thereof filed with the Commission on EDGAR.

(g) *Capitalization*. The equity capitalization of the Company is as set forth in the Registration Statement and the SEC Reports as of the dates indicated therein. The Company has not issued any share capital since its most recently filed or furnished periodic report under the Exchange Act, other than pursuant to the exercise of stock options or vesting and settlement of restricted share units under the Company's equity incentive plans, the issuance of Common Shares to employees pursuant to the Company's employee share purchase plans, and pursuant to the conversion and/or exercise of Common Share Equivalents outstanding as of the date of the most recently filed or furnished periodic report under the Exchange Act. All of the issued and outstanding Common Shares are fully paid and non-assessable and have been duly and validly authorized and issued, in compliance with all federal and state securities laws and not in violation of or subject to any preemptive or similar right that entitles any Person to acquire from the Company any Common Shares or other security of the Company or any security convertible into, or exercisable or exchangeable for, Common Shares or any other such security, except for such rights as may have been fully satisfied or waived prior to the date hereof. Except as set forth in the Registration Statement and the SEC Reports, the Company has no outstanding options, warrants, scrip rights to subscribe to, calls, or commitments of any character whatsoever relating to, or securities, rights, or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any Common Shares, or contracts, commitments, understandings, or arrangements by which the Company is or may become bound to issue additional Common Shares or Common Share Equivalents. No Person has any right of first refusal, pre-emptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. The issuance and sale of the Securities will not obligate the Company to issue Common Shares or other securities to any Person (other than the Purchasers and the Placement Agent) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange, or reset price under any of such securities. There are no outstanding securities or instruments of the Company with any provision that adjusts the exercise conversion, exchange, or reset price of such security or instrument upon an issuance of securities by the Company. There are no outstanding securities or instruments of the Company that contain any redemption or similar provisions, and there are no contracts, commitments, understandings, or arrangements by which the Company is or may become bound to redeem a security of the Company. The Company does not have any share appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. Except for the Required Approvals, no further approval or authorization of any shareholder of the Company, the Board of Directors, or others is required for the issuance and sale of the Securities. There are no shareholders agreements, voting agreements, or other similar agreements with respect to the Company's share capital to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's shareholders.

(h) *Reports*. The Company has filed all reports, schedules, forms, statements, and other documents required to be filed by the Company under the Securities Act and Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two (2) years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Preliminary Prospectus and the Prospectus, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension (or waiver from the Commission) of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(i) *Financial Statements*. The consolidated financial statements of the Company, including the notes thereto, included or incorporated by reference in the Registration Statement and Prospectus comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting standards Board ("IFRS") applied on a consistent basis during the periods involved, except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by IFRS, and fairly present in all material respects the financial position of the Company as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(j) *Material Changes; Undisclosed Events, Liabilities or Developments*. Since the date of the latest consolidated financial statements included or incorporated by reference into the Registration Statement and the Prospectus, (i) there has been no event, occurrence, or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to IFRS or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its shareholders or purchased, redeemed, or made any agreements to purchase or redeem any share capital, and (v) the Company has not issued any equity securities to any officer, director, or Affiliate, except pursuant to existing Company equity compensation plans, or in connection with the prior offerings of the Company's securities in which certain officers, directors and Affiliates have participated. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement, no event, liability, fact, circumstance, occurrence, or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its businesses, prospects, properties, operations, assets, or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least one (1) Trading Day prior to the date that this representation is made.

(k) *Litigation*. Except as set forth in the SEC Reports, there is no Proceeding pending or, to the knowledge of the Company, threatened against or affecting the Company, or any of its properties which, if there were an unfavorable decision, would individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. None of the Proceedings set forth in the SEC Reports adversely affects or challenges the legality, validity, or enforceability of any of the Transaction Documents or the Securities. Neither the Company nor any director or officer thereof, is or has been the subject of any Proceeding involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the Exchange Act or the Securities Act.

(l) *Labor Relations*. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's employees is a member of a union that relates to such employee's relationship with the Company, and the Company is not a party to a collective bargaining agreement, and the Company believes that its relationship with their employees are good. To the knowledge of the Company, no executive officer of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure, or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and, to the knowledge of the Company, the continued employment of each such executive officer does not subject the Company to any liability with respect to any of the foregoing matters. The Company is in compliance with all applicable U.S. federal, state, local, and foreign laws and regulations relating to employment and employment practices, terms, and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(m) *Compliance*. The Company: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company under), nor has the Company received notice of a claim that it is in default under or that it is in violation of, any indenture, loan, or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree, or order of any court, arbitrator, or other governmental authority, or (iii) is or has been in violation of any statute, rule, ordinance, or regulation of any governmental authority, including without limitation all foreign, federal, state, and local laws relating to taxes, environmental protection, occupational health, and safety, product quality, and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(n) *Environmental Law*. To the knowledge of the Company, the Company (i) is in compliance with all applicable federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder ("Environmental Laws"); (ii) has received all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) is in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply would be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(o) *Title to Assets*. The Company does not own any real estate. The Company has good and marketable title in all personal property owned by them that is material to the business of the Company, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and (ii) Liens for the payment of federal, state, or other taxes, for which appropriate reserves have been made therefor in accordance with IFRS and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company are held by them under valid, subsisting, and enforceable leases with which the Company is in compliance, except where the failure to be in compliance would not reasonably be expected to have a Material Adverse Effect.

(p) *Regulatory Permits*. The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state, local, or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect ("Material Permits"), and the Company has not received any notice of proceedings relating to the revocation or modification of any Material Permit.

(q) *Intellectual Property*. The Company, to its knowledge, owns, possesses, or can acquire on reasonable terms, all Intellectual Property (as defined below) necessary for the conduct of the Company's business as now conducted or as described in the SEC Reports to be conducted, and there are no unreleased liens or security interests which have been filed against any of the patents owned by the Company. Furthermore, (i) to the knowledge of the Company, there is no infringement, misappropriation, or violation by third parties of any such Intellectual Property; (ii) there is no pending or, to the knowledge of the Company, threatened Proceeding by others challenging the Company's rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iii) the Intellectual Property owned by the Company, and to the knowledge of the Company, the Intellectual Property licensed to the Company, has not been adjudged invalid or unenforceable, in whole or in part, and there is no pending or, to the knowledge of the Company, threatened Proceeding by others challenging the validity or scope of any such Intellectual Property, and the Company is not aware of any facts which would form a reasonable basis for any such claim; (iv) there is no pending or, to the knowledge of the Company, threatened Proceeding by others that the Company infringes, misappropriates, or otherwise violates any Intellectual Property or other proprietary rights of others, the Company has not received any written notice of such claim and the Company is unaware of any other fact which would form a reasonable basis for any such claim; (v) the Company has complied with the material terms of each agreement pursuant to which Intellectual Property has been licensed to the Company, and all such agreements are in full force and effect; (vi) any product candidates described in the SEC Reports as under development by the Company fall within the scope of the claims of one or more patents or applications relating to the product candidate or its intended use owned by, or exclusively licensed to, the Company; and (vii) to the Company's knowledge, no employee of the Company is or has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, non-disclosure agreement, or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or actions undertaken by the employee while employed with the Company, except, in the case of clause (vii), as would not reasonably be expected to have a Material Adverse Effect. "Intellectual Property" shall mean all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, domain names, technology, know-how, and other intellectual property.

(r) *Insurance*. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary for companies of the Company's size in the business in which the Company is engaged, including, but not limited to, directors and officers insurance coverage in an amount deemed appropriate and reasonable for the Company. The Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(s) *Transactions With Affiliates and Employees*. Except as set forth in the SEC Reports, none of the executive officers or directors of the Company and, to the knowledge of the Company, none of the employees of the Company is presently a party to any transaction with the Company (other than for services as employees, executive officers, and directors), including any contract, agreement, or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any executive officer, director, or such employee or, to the knowledge of the Company, any entity in which any executive officer, director, or any such employee has a substantial interest or is an officer, director, trustee, shareholder, member, or partner, in each case in excess of one hundred twenty thousand dollars ($120,000) other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company, and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(t) *Sarbanes-Oxley; Internal Accounting Controls*. Except as provided in the SEC Reports, the Company is in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act of 2002, as amended. Except as provided in the SEC Reports, the Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with applicable securities laws and IFRS and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accounting for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as provided in the SEC Reports, the Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company or the Subsidiaries that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company.

(u) *Certain Fees*. Except for fees payable to the Placement Agent, no brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor, or consultant, finder, placement agent, investment banker, bank, or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 3.1(u) that may be due in connection with the transactions contemplated by the Transaction Documents.

(v) *Investment Company*. The Company is not, and immediately after receipt of payment for the Securities, will not be registered or required to register as an "investment company" within the meaning of the Investment Company Act of 1940, as amended. As long as the Warrants remain outstanding, the Company shall use its commercially reasonable efforts to conduct its business in a manner so that it will not become registered or required to register an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(w) *Registration Rights*. Other than to each of the Purchasers pursuant to this Agreement and the Placement Agent, no Person has any right to cause the Company to effect the registration under the Securities Act of any securities of the Company.

(x) *Listing and Maintenance Requirements*. The Common Shares are registered pursuant to Section 12(b) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Shares under the Exchange Act. The Company has not received any notice from the Commission that it is contemplating terminating such registration. Except as set forth in the SEC Reports, the Company has not, in the twelve (12) months preceding the date hereof, received notice from any Trading Market on which the Common Shares are or have been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Common Shares are currently eligible for electronic transfer through The Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to The Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(y) *Application of Takeover Protections*. The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement), or other similar anti-takeover provision under the Company's certificate of incorporation (or similar charter documents) or the laws of its jurisdiction of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their respective obligations or exercising respective their rights under the Transaction Documents, including without limitation as a result of the Company's issuance of the Securities and the Purchasers' ownership of the Securities.

(z) *Disclosure*. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor, to its knowledge, any other Person acting on its behalf (other than the Placement Agent, as to whom the Company makes no representation or warranty) has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes material, non-public information which is not otherwise disclosed in the Preliminary Prospectus and/or the Prospectus. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company, its businesses and the transactions contemplated hereby, including pursuant to the SEC Reports, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

(aa) *No Integrated Offering*. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf (other than the Placement Agent, as to whom the Company makes no representation or warranty) has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this Offering of the Securities to be integrated with prior offerings by the Company for purposes of any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(bb) *Solvency*. Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements, and capital availability thereof, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one (1) year from the Closing Date. The Company is not in default with respect to any Indebtedness. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of fifty thousand dollars ($50,000) (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements, and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of One Hundred Thousand Dollars ($100,000) due under leases required to be capitalized in accordance with IFRS.

(cc) *Tax Status*. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company (i) has made or filed all material United States federal, state, and local income and all foreign tax returns, reports, and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports, and declarations, and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports, or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(dd) *Foreign Corrupt Practices; Criminal Acts*. None of the Company, or, to the knowledge of the Company, any Affiliate or other Person acting on behalf of the Company is aware of or has taken any action, directly or indirectly, that would result in a violation by such Persons of the FCPA, the Convention on Combating Bribery of Foreign Public Officials in International Business Transactions of the Organisation for Economic Co-operation and Development (OECD), the Corruption of Foreign Public Officials Act of Canada, the provisions of the Canadian Criminal Code relating to anti-corruption and bribery, and any applicable provincial laws in Canada, including the Anti-Corruption Act of the Province of Quebec, or any applicable anti-corruption laws, rules, or regulation of the U.S. or any other jurisdiction in which the Company conducts business, including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA, and the Company, and, to the knowledge of the Company, the Affiliates of the Company have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith. The Company has not engaged in, or will engage in, (i) any direct or indirect dealings or transactions in violation of U.S. federal or state criminal laws, including, without limitation, the Controlled Substances Act, the Racketeer Influenced and Corrupt Organizations Act, the Travel Act or any anti-money laundering statute, or (ii) any "aiding and abetting" in any violation of U.S. federal or state criminal laws.

(ee) *Accountants*. The Company's independent registered public accounting firm is as set forth in the Prospectus. To the knowledge and belief of the Company, such accounting firm is a registered public accounting firm as required by the Exchange Act.

(ff) *Acknowledgment Regarding Purchasers' Purchase of Securities*. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers' purchase of the Securities. The Company further represents to each Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(gg) *[Reserved.]*

(hh) *Regulation M Compliance*. The Company has not, and to its knowledge no one acting on its behalf (other than the Placement Agent, as to whom the Company makes no representation or warranty) has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Placement Agent in connection with the placement of the Securities.

(ii) *Stock Option Plans*. Each stock option granted by the Company under the Company's stock option plan, or as an inducement grant outside of a stock option plan, was granted (i) in accordance with the terms of the Company's stock option plan or under its terms, respectively, and (ii) with an exercise price at least equal to the fair market value of the Common Share on the date such stock option would be considered granted under IFRS and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its financial results or prospects.

(jj) *Cybersecurity*. Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (i)(x) to the Company's knowledge there has been no security breach or other compromise of or relating to any of the Company's information technology and computer systems, networks, hardware, software, data (including the data of its respective customers, employees, suppliers, vendors, and any third party data maintained by or on behalf of it), equipment, or technology (collectively, "IT Systems and Data") and (y) the Company has not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or other compromise to its IT Systems and Data that would require notification to any third party, including any governmental or regulatory authority, under applicable law; (ii) the Company is presently in compliance with all applicable laws or statutes and all judgments, orders, rules, and regulations of any court or arbitrator or governmental or regulatory authority, internal policies, and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation, or modification, except as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) the Company has implemented and maintained commercially reasonable safeguards to maintain and protect its material confidential information and the integrity, continuous operation, redundancy, and security of all IT Systems and Data; and (iv) the Company has implemented backup and disaster recovery technology consistent with commercially reasonable industry standards and practices.

(kk) *Office of Foreign Assets Control*. Neither the Company nor, to the Company's knowledge, any director, officer, agent, employee, or affiliate of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC").

(ll) *U.S. Real Property Holding Corporation*. The Company is not and has never been a United States real property holding corporation within the meaning of Section 897 of the Code, and the Company shall so certify upon Purchaser's request.

(mm) *Bank Holding Company Act*. The Company is not subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). The Company does not own or control, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. The Company does not exercise a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(nn) *Money Laundering*. The operations of the Company are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no Action or Proceeding by or before any court or governmental agency, authority, or body or any arbitrator involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(oo) *Regulatory*. Except as described in the Registration Statement, the Preliminary Prospectus and the Prospectus, as applicable, the Company (i) is and at all times has been in material compliance with all applicable statutes, rules, and regulations applicable to the ownership, testing, development, processing, use, distribution, marketing, advertising, labeling, promotion, sale, offer for sale, storage, import, export, or disposal of any product developed or distributed by the Company including, without limitation and if applicable, the California's Information Practices Act and all other federal, state, and international laws and regulations governing the collection, use, retention, disclosure, sharing and security of data relevant to the Company, and laws relating to the liability of providers of online services and products for activities of users within the United States and internationally (collectively, the "Applicable Laws"); (ii) has not received any notice from any court or arbitrator or governmental or regulatory authority or third party alleging or asserting noncompliance with any Applicable Laws or any licenses, exemptions, certificates, approvals, clearances, authorizations, permits, registrations, and supplements or amendments thereto required by any such Applicable Laws ("Authorizations"); (iii) possesses all material Authorizations and such Authorizations are valid and in full force and effect and are not in violation of any term of any such Authorizations; (iv) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation arbitration, or other action from any court or arbitrator or governmental or regulatory authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations nor is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration, or other action threatened; (v) has not received any written notice that any court or arbitrator or governmental or regulatory authority has taken, is taking or intends to take, action to limit, suspend, materially modify, or revoke any Authorizations nor is any such limitation, suspension, modification, or revocation threatened; (vi) has filed, obtained, maintained, or submitted all material reports, documents, forms, notices, applications, records, claims, submissions, and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions, and supplements or amendments were complete and accurate on the date filed (or were corrected or supplemented by a subsequent submission); and (vii) is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority.

(pp) *Reporting Issuer in Canada*. The Company is a "reporting issuer" within the meaning of Section 1(1) of the *Securities Act* (Alberta) in Canada, having filed a prospectus with the Alberta Securities Commission (the "ASC") pursuant to the *Securities Act* (Alberta), a receipt for which has been issued by the ASC.

3.2 Representations and Warranties of the Purchasers. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the date hereof and as of the Closing Date to the Company as follows (unless as of a specific date therein, in which case they shall be accurate as of such date):

(a) *Organization; Authority*. Such Purchaser is either an individual or an entity duly incorporated or formed, validly existing, and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company, or similar power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of the Transaction Documents and performance by such Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate, partnership, limited liability company, or similar action, as applicable, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof or thereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) *Understandings or Arrangements*. Such Purchaser is acquiring the Securities as principal for its own account and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities (this representation and warranty not limiting such Purchaser's right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws).

(c) *Experience of Such Purchaser*. Such Purchaser, either alone or together with its representatives, has such knowledge, sophistication, and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(d) *Access to Information*. Such Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded, (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management, and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment in the Securities. Such Purchaser acknowledges and agrees that neither the Placement Agent nor any Affiliate of the Placement Agent has provided such Purchaser with any information or advice with respect to the Securities nor is such information or advice necessary or desired. Neither the Placement Agent nor any Affiliate has made or makes any representation as to the Company or the quality of the Securities and the Placement Agent and any Affiliate may have acquired non-public information with respect to the Company which such Purchaser agrees need not be provided to it. In connection with the issuance of the Securities to such Purchaser, neither the Placement Agent nor any of its Affiliates has acted as a financial advisor or fiduciary to such Purchaser.

(e) *Sanctioned Persons; BSA/PATRIOT Act*. Such Purchaser is not owned or controlled by or acting on behalf of (in connection with this Agreement), a Sanctioned Person. Such Purchaser is not an institution that accepts currency for deposit and that (i) has no physical presence in the jurisdiction in which it is incorporated or in which it is operating and (ii) is unaffiliated with a regulated financial group that is subject to consolidated supervision (a "Shell Bank") or providing banking services to a Shell Bank. Such Purchaser represents that if it is a financial institution subject to the Bank Secrecy Act (31 U.S.C. Section 5311 et seq.), as amended by the USA PATRIOT Act of 2001 and its implementing regulations (collectively, the "BSA/PATRIOT Act"), such Purchaser maintains policies and procedures reasonably designed to comply with applicable obligations under the BSA/PATRIOT Act. Such Purchaser also represents that, to the extent required by applicable law, it maintains, either directly or through the use of a third-party administrator, policies, and procedures reasonably designed for the screening of any investors in the Purchaser against Sanctions-related lists of blocked or restricted persons. Such Purchaser further represents and warrants that (A) the funds held by Such Purchaser and used to purchase the Securities were not directly or indirectly derived from or related to any activities that may contravene U.S. federal, state, or non-U.S. anti-money laundering, anti-corruption, or Sanctions laws and regulations or activities that may otherwise be deemed criminal and (B) any returns from Such Purchaser's investment will not be used to finance any illegal activities. For purposes of this Agreement, "Sanctioned Person" means at any time any person or entity with whom dealings are restricted, prohibited, or sanctionable under any Sanctions (as defined below), including as a result of being: (I) listed on any Sanctions-related list of designated or blocked or restricted persons; (II) that is a national of, the government of, or any agency or instrumentality of the government of, or resident in, or organized under the laws of, a country or territory that is the target of comprehensive Sanctions from time to time (as of the date of this Agreement, Cuba, Iran, North Korea, Syria, and the Crimea region); or (III) a relationship of ownership, control, or agency with any of the foregoing. "Sanctions" means those trade, economic and financial sanctions laws, regulations, embargoes, and restrictive measures (in each case having the force of law) administered, enacted, or enforced from time to time by (1) the United States (including without limitation the U.S. Department of the Treasury, Office of Foreign Assets Control, the U.S. Department of State, and the U.S. Department of Commerce), (2) the European Union and enforced by its member states, (3) the United Nations, and (4) the United Kingdom.

(f) *Non-cooperative Jurisdiction*. Such Purchaser is not owned or controlled by or acting on behalf of (in connection with this Agreement), a person or entity resident in, or whose funds used to purchase the Securities are transferred from or through, a country, territory, or entity that (i) has been designated as non-cooperative with international anti-money laundering or counter terrorist financing principles or procedures by the United States or by an intergovernmental group or organization, such as the Financial Action Task Force, of which the United States is a member; (ii) is the subject of an advisory issued by the Financial Crimes Enforcement Network of the U.S. Department of the Treasury; or (iii) has been designated by the Secretary of the Treasury under Section 311 of the USA PATRIOT Act as warranting special measures due to money laundering concerns (any such country or territory, a "Non-cooperative Jurisdiction"), or an entity or individual that resides or has a place of business in, or is organized under the laws of, a Non-cooperative Jurisdiction.

(g) *ERISA*. If such Purchaser is an employee benefit plan that is subject to Title I of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), a plan, an individual retirement account or other arrangement that is subject to section 4975 of the Code or an employee benefit plan that is a governmental plan (as defined in section 3(32) of ERISA), a church plan (as defined in section 3(33) of ERISA), a non-U.S. plan (as described in section 4(b)(4) of ERISA), or other plan that is not subject to the foregoing but may be subject to provisions under any other federal, state, local, non-U.S., or other laws or regulations that are similar to such provisions of ERISA or the Code, or an entity whose underlying assets are considered to include "plan assets" of any such plan, account or arrangement subject to the fiduciary or prohibited transaction provisions of ERISA or section 4975 of the Code, such Purchaser represents and warrants that the acquisition and holding of the Securities will not result in a non-exempt prohibited transaction under ERISA or Section 4975 of the Code.

(h) *Certain Transactions and Confidentiality*. Other than consummating the transactions contemplated hereunder, each Purchaser has not, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser, directly or indirectly executed, or made any agreement to execute, any purchases or sales, including Short Sales, of the securities of the Company or "derivative" securities based on securities issued by the Company during the period commencing as of the time that such Purchaser first received communications (written or oral) from the Company, the Placement Agent or any other Person representing the Company regarding the Offering and ending immediately prior to execution of this Agreement. Other than to other Persons party to this Agreement or to such Purchaser's representatives involved in the transactions contemplated by this Agreement, including, without limitation, its officers, directors, partners, legal, and other advisors, employees, agents, and Affiliates, in each case involved in the transactions contemplated by this Agreement, such Purchaser has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

(i) *No Governmental Review*. Such Purchaser understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities, nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

The Company acknowledges and agrees that the representations contained in this Section 3.2 shall not modify, amend, or affect such Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Documents or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transactions contemplated hereby.

ARTICLE IV.

OTHER AGREEMENTS OF THE PARTIES

4.1 Legends. The Shares, the Warrants, and the Warrant Shares shall be issued free of legends. If at any time following the date hereof the Registration Statement is not effective or is not otherwise available for the sale of the Shares, the Warrants, or the Warrant Shares, the Company shall immediately notify the holders of the Warrants in writing that such registration statement is not then effective and thereafter shall promptly notify such holders when the registration statement is effective again and available for the sale of the Securities (it being understood and agreed that the foregoing shall not limit the ability of the Company to issue, or any Purchaser to sell, any of the Securities in compliance with applicable federal and state securities laws). The Company shall use commercially reasonable efforts to keep a registration statement (including the Registration Statement) registering the issuance of the Warrant Shares effective during the term of the Warrants.

4.2 Furnishing of Information; Public Information. Until no Purchaser owns Securities, the Company shall use its commercially reasonable efforts to maintain the registration of the Common Shares under Section 12(b) or 12(g) of the Exchange Act and to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act, except in the event that the Company consummates: (A) any transaction or series of related transactions as a result of which any Person (together with its Affiliates) acquires then outstanding securities of the Company representing more than fifty percent (50%) of the voting control of the Company; (B) a merger or reorganization of the Company with one or more other entities in which the Company is not the surviving entity; or (C) a sale of all or substantially all of the assets of the Company.

4.3 Integration. The Company shall not sell, offer for sale, or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

4.4 Securities Laws Disclosure; Publicity. The Company shall (a) by the Disclosure Time, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) furnish a Report on Form 6-K, including the Transaction Documents as exhibits thereto (if the Transaction Documents have not been previously filed with the Registration Statement), with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchasers that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company, or any of its officers, directors, employees, or agents, including, without limitation, the Placement Agent, in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the issuance of such press release, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, or any of its officers, directors, agents, or employees, on the one hand, and any of the Purchasers or any of their Affiliates, or the Placement Agent, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release or otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld, or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser, or include the name of any Purchaser in any filing or submission with or to the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except (i) as required by federal securities law in connection with the filing or submission of final Transaction Documents with or to the Commission and (ii) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause.

4.5 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement), or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchasers.

4.6 Non-Public Information. Except with respect to the existence of the Offering and the pricing terms and conditions of the transactions contemplated by the Transaction Documents, which shall be disclosed pursuant to Section 4.4, the Company covenants and agrees that neither it, nor any other Person acting on its behalf will provide any Purchaser or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes material, non-public information, unless prior thereto such Purchaser shall have consented in writing to the receipt of such information and agreed in writing with the Company to keep such information confidential. To the extent that the Company, or any of its respective officers, directors, agents, or employees delivers any material, non-public information to a Purchaser without such Purchaser's consent, the Company hereby covenants and agrees that such Purchaser shall not have any duty of confidentiality to the Company, or any of its respective officers, directors, agents, or employees, or a duty to the Company, or any of its officers, directors, agents, or employees not to trade on the basis of, such material, non-public information, *provided* that the Purchaser shall remain subject to all applicable law. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains material, non-public information regarding the Company, the Company shall simultaneously furnish such material non-public information with the Commission pursuant to a Report on Form 6-K or shall issue a press release containing such material non-public information. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.7 Use of Proceeds. The Company shall use the net proceeds from the sale of the Securities hereunder for general corporate purposes, including working capital, operating expenses and capital expenditures, and shall not use such proceeds: (i) for the satisfaction of any portion of the Company's debt (other than payment of trade payables in the ordinary course of the Company's business and prior practices or as disclosed in the Registration Statement), (ii) for the redemption of any Common Share or Common Share Equivalents, (iii) for the settlement of any outstanding litigation, or (iv) in violation of FCPA or OFAC regulations.

4.8 Indemnification of Purchasers. Subject to the provisions of this Section 4.8, the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, partners, employees, and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners, or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "Purchaser Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs, and expenses, including all judgments, amounts paid in settlements, court costs, and reasonable and documented attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (i) any breach of any of the representations, warranties, covenants, or agreements made by the Company in this Agreement or in the other Transaction Documents or (ii) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any shareholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is solely based upon a material breach of such Purchaser Party's representations, warranties, or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such shareholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which is finally judicially determined to constitute fraud, gross negligence or willful misconduct), the Company will indemnify each Purchaser Party, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable and documented attorneys' fees), and expenses, as incurred, arising out of or relating to (i) any untrue or alleged untrue statement of a material fact contained in such registration statement, any preliminary prospectus, any prospectus or in any amendment or supplement thereto, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that such untrue statements or omissions are based solely upon information regarding such Purchaser Party furnished in writing to the Company by such Purchaser Party expressly for use therein, or (ii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, or any state securities law, or any rule or regulation thereunder in connection therewith. If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and, the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (x) the employment thereof has been specifically authorized by the Company in writing, (y) the Company has failed after a reasonable period of time to assume such defense and to employ counsel, or (z) in such action there is, in the reasonable opinion of counsel a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable actual and documented fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (1) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (2) to the extent, but only to the extent that a loss, claim, damage, or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants, or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.8 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred provided, however, that if it is subsequently determined by a final, non-appealable judgment of a court of competent jurisdiction that such Purchaser Party was not entitled to receive such periodic payments, such Purchaser Party shall promptly (but in no event later than five (5) Business Days) return such payments to the Company. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.9 Reservation of Common Shares. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of Common Shares for the purpose of enabling the Company to issue Shares pursuant to this Agreement and Warrant Shares pursuant to any exercise of the Warrants, if applicable.

4.10 Listing of Common Shares. The Company hereby agrees to use commercially reasonable efforts to maintain the listing of the Common Shares on the Trading Market on which it is currently listed (or another Trading Market), and concurrently with the Closing, the Company shall apply to list all of the Shares and the Warrant Shares on such Trading Market and promptly secure the listing of all of the Shares and the Warrant Shares on such Trading Market. The Company further agrees, if the Company applies to have the Common Shares traded on any other Trading Market, it will then include in such application all of the Shares and the Warrant Shares, and will take such other action as is necessary to cause all of the Shares and the Warrant Shares to be listed or quoted on such other Trading Market as promptly as possible. The Company will use commercially reasonable efforts to maintain the listing and trading of its Common Shares on a Trading Market and will comply in all material respects with the Company's reporting, filing, and other obligations under the bylaws or rules of the Trading Market. For so long as the Company maintains a listing of its Common Shares on a Trading Market, the Company agrees to use commercially reasonable efforts to maintain the eligibility of the Common Share for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer. Notwithstanding the foregoing, this Section 4.10 shall not apply in the event that the Company consummates: (i) any transaction or series of related transactions as a result of which any Person (together with its Affiliates) acquires then outstanding securities of the Company representing more than fifty percent (50%) of the voting control of the Company; (ii) a merger or reorganization of the Company with one or more other entities in which the Company is not the surviving entity; or (iii) a sale of all or substantially all of the assets of the Company.

4.11 Subsequent Equity Sales.

(a) From the date hereof until ninety (90) days after the Closing Date, the Company shall not (i) issue, enter into any agreement to issue, or announce the issuance or proposed issuance of any Common Shares or Common Share Equivalents, or (ii) file any registration statement or amendment or supplement thereto, other than filing the final Prospectus, or a registration statement on Form S-8 in connection with any employee benefit plan, as necessary to maintain the effectiveness of existing registration statements which are effective as of the Closing Date.

(b) The 90-day restriction in Section 4.11(a) shall not apply in respect of an Exempt Issuance.

4.12 Equal Treatment of Purchasers. No consideration (including any modification of any Transaction Document) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of the Transaction Documents unless the same consideration is also offered to all of the parties to such Transaction Documents. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition, or voting of Shares or otherwise.

4.13 Certain Transactions and Confidentiality. Each Purchaser, severally and not jointly with the other Purchasers, covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it will execute any purchases or sales, including Short Sales, of any of the Company's securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4. Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.4, such Purchaser will maintain the confidentiality of the existence and terms of this transaction (other than as disclosed to its legal and other representatives involved in the transactions contemplated by this Agreement). Notwithstanding the foregoing and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) no Purchaser makes any representation, warranty, or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4, (ii) no Purchaser shall be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4, and (iii) no Purchaser shall have any duty of confidentiality or duty not to trade in the securities of the Company to the Company, or any of its respective officers, directors, employees, or agents, including, without limitation, the Placement Agent after the issuance of the initial press release as described in Section 4.4. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

4.14 Exercise Procedures. The form of Notice of Exercise included in the Warrants sets forth the totality of the procedures required of the Purchasers in order to exercise the Warrants. No additional legal opinion, other information, or instructions shall be required of the Purchasers to exercise their Warrants. Without limiting the preceding sentences, no ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required in order to exercise the Warrants. The Company shall honor exercises of the Warrants and shall deliver Warrant Shares in accordance with the terms, conditions, and time periods set forth in the Transaction Documents.

4.15 Lock-Up Agreements. The Company shall not amend, modify, waive, or terminate any provision of any of the Lock-Up Agreements except to extend the term of the lock-up period and shall enforce the provisions of each Lock-Up Agreement in accordance with its terms. If the Company becomes aware that any party to a Lock-Up Agreement breaches any provision of a Lock-Up Agreement, the Company shall promptly use its commercially reasonable efforts to seek specific performance of the terms of such Lock-Up Agreement.

ARTICLE V. MISCELLANEOUS

5.1 Termination. This Agreement may be terminated with respect to any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if the Closing has not been consummated on or before the fifth (5th) Trading Day following the date hereof; *provided*, *however*, that no such termination will affect the right of any party hereto to sue for any breach by any other party (or parties).

5.2 Fees and Expenses. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants, and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery, and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any exercise notice delivered by a Purchaser), stamp taxes, and other taxes and duties levied in connection with the delivery of any Securities to the Purchasers. For the avoidance of doubt, nothing contained herein shall obligate the Company to pay or reimburse for any taxes in respect of any capital gains or other income of any Purchaser.

5.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules hereto, the Preliminary Prospectus, and the Prospectus, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits, and schedules.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (i) the time of transmission, if such notice or communication is delivered via facsimile at the facsimile number or email attachment at the email address as set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (ii) the next Trading Day after the time of transmission, if such notice or communication is delivered via facsimile at the facsimile number or email attachment at the email address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company, the Company shall simultaneously furnish such notice with the Commission pursuant to a Report on Form 6-K or by issuing a press release containing such material non-public information.

5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented, or amended except in a written instrument signed, in the case of an amendment, by the Company and Purchasers which purchased at least 50.1% in interest of the Securities based on the initial Subscription Amounts hereunder (or, prior to the Closing, the Company and each Purchaser) or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought, *provided* that if any amendment, modification, or waiver disproportionately and adversely impacts a Purchaser (or group of Purchasers), the consent of such disproportionately impacted Purchaser (or group of Purchasers) shall also be required. No waiver of any default with respect to any provision, condition, or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition, or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right. Any proposed amendment or waiver that disproportionately, materially, and adversely affects the rights and obligations of any Purchaser relative to the comparable rights and obligations of the other Purchasers shall require the prior written consent of such adversely affected Purchaser. Any amendment effected in accordance with this Section 5.5 shall be binding upon each Purchaser and holder of Securities and the Company.

5.6 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger, amalgamation, arrangement or other business combination). No Purchaser may assign this Agreement or any rights or obligations hereunder without the prior written consent of the Company (other than by merger, amalgamation, arrangement or other business combination). Any Purchaser may, after the Closing, assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities, *provided* that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the "Purchasers."

5.8 No Third-Party Beneficiaries. The Placement Agent shall be the third-party beneficiary of the representations and warranties of the Company in Section 3.1 and the representations and warranties of the Purchasers in Section 3.2. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.8 and this Section 5.8.

5.9 Governing Law. All questions concerning the construction, validity, enforcement, and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal Proceedings concerning the interpretations, enforcement, and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, managers, employees, or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any Action or Proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such Action or Proceeding is improper or is an inconvenient venue for such Proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such Action or Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If any party shall commence an Action or Proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.8, the prevailing party in such Action or Proceeding shall be reimbursed by the non-prevailing party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation, and prosecution of such Action or Proceeding.

5.10 Survival. The representations and warranties contained herein shall survive the Closing and the delivery of the Securities for the applicable statute of limitations.

5.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof.

5.12 Severability. If any term, provision, covenant, or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void, or unenforceable, the remainder of the terms, provisions, covenants, and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired, or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant, or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants, and restrictions without including any of such that may be hereafter declared invalid, illegal, void, or unenforceable.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand, or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand, or election in whole or in part without prejudice to its future actions and rights; *provided*, *however*, that, in the case of a rescission of an exercise of a Warrant, the applicable Purchaser shall be required to return any Common Shares subject to any such rescinded exercise notice concurrently (if such shares were delivered to the applicable Purchaser) with the return to such Purchaser of the aggregate exercise price paid to the Company for such shares and the restoration of such Purchaser's right to acquire such shares pursuant to such Purchaser's Warrant (including, issuance of a replacement warrant certificate evidencing such restored right).

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen, or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft, or destruction, and the holder's provision of a customary indemnity to the Company and the Transfer Agent. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any Action for specific performance of any such obligation the defense that a remedy at law would be adequate. Each party hereto agrees that it shall not have a remedy of punitive or consequential damages against the other and hereby waives any right or claim to punitive or consequential damages it may now have or that may arise in the future.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by, or are required to be refunded, repaid, or otherwise restored to the Company, a trustee, receiver, or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law, or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture, or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, each Purchaser and its respective counsel have chosen to communicate with the Company through legal counsel to the Placement Agent. Legal counsel to the Placement Agent does not represent any of the Purchasers and only represents the Placement Agent. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and a Purchaser, solely, and not between the Company and the Purchasers collectively and not between and among the Purchasers.

5.18 Liquidated Damages. The Company's obligations to pay any liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such liquidated damages or other amounts are due and payable shall have been canceled.

5.19 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

5.20 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and Common Shares in any Transaction Document shall be subject to adjustment for reverse and forward share splits, share dividends, share combinations, and other similar transactions of the Common Shares that occur after the date of this Agreement.

5.21 **WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY, AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.**

[Signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

XORTX THERAPEUTICS INC.

By: _____
Name: Allen Davidoff
Title: Chief Executive Officer

Address for Notice:

3710 33rd Street NW
Calgary, Alberta, T2L 2M1
Canada
Email: adavidoff@xortx.com
Facsimile: (403) 260-3501

With a copy to (which shall not constitute notice):

Rick Pawluk
Dentons Canada LLP
850 - 2nd Street SW
15th Floor, Bankers Court
Calgary, Alberta T2P 0R8
Canada
Email: rick.pawluk@dentons.com
Facsimile: (403) 268-7042

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGES TO XORTX THERAPEUTICS INC.
SECURITIES PURCHASE AGREEMENT]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser:

Signature of Authorized Signatory of Purchaser:

Name of Authorized Signatory:

Title of Authorized Signatory:

Email Address of Authorized Signatory:

Address for Notice to Purchaser:

Address for Delivery of Securities to Purchaser (if not same as address for notice): Subscription Amount:

Shares:

Pre-Funded Warrant Shares:

Beneficial Ownership Blocker ☐ 4.99% or ☐ 9.99%

¨ Notwithstanding anything contained in this Agreement to the contrary, by checking this box (i) the obligations of the above-signed to purchase the securities set forth in this Agreement to be purchased from the Company by the above-signed, and the obligations of the Company to sell such securities to the above-signed, shall be unconditional and all conditions to Closing shall be disregarded, (ii) the Closing shall occur on the first (1st) Trading Day following the date of this Agreement (or the second (2nd) Trading Day following the date of this Agreement if this Agreement is signed on a day that is not a Trading Day or after 4:00 p.m. (New York City time) and before midnight (New York City time) on a Trading Day) and (iii) any condition to Closing contemplated by this Agreement (but prior to being disregarded by clause (i) above) that required delivery by the Company or the above-signed of any agreement, instrument, certificate or the like or purchase price (as applicable) shall no longer be a condition and shall instead be an unconditional obligation of the Company or the above-signed (as applicable) to deliver such agreement, instrument, certificate or the like or purchase price (as applicable) to such other party on the Closing Date.

EXHIBIT A

FORM OF PRE-FUNDED WARRANT

EXHIBIT B

FORM OF LOCK-UP AGREEMENT

Exhibit 23.1

DAVIDSON

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Post-Effective Amendment No.1 to the Registration Statement on Form F-1 of XORTX Therapeutics Inc. (the "Company"), of our report dated February 25, 2026, on the consolidated statements of financial position of the Company as of December 31, 2025 and 2024, and the related consolidated statements of loss and comprehensive loss, changes in shareholders' equity, and cash flows for the years ended December 31, 2025 and 2024, included in the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 20, 2026.

We also consent to the reference to us under the captions "Prospectus Summary – Recent Development" and "Experts".

/s/ DAVIDSON & COMPANY LLP
Chartered Professional Accountants

Vancouver, Canada

April 21, 2026

DAVIDSON & COMPANY LLP
1200 - 609 Granville Street
PO Box 10372, Pacific Centre
Vancouver, BC V7Y 1G6
604 687 0947
davidson-co.com

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption "Experts" and to the incorporation by reference in the Post-Effective Amendment No.1 to the Registration Statement on Form F-1 of XORTX Therapeutics Inc. (the "**Company**"), of our report dated April 1, 2024, on the consolidated statements of loss and comprehensive loss, changes in shareholders' equity and cash flows for the year ended December 31, 2023, and the related notes, included in the Company's Annual Report on Form 20-F for the year ended December 31, 2025 filed with the Securities and Exchange Commission.

/s/ Smythe LLP
Chartered Professional Accountants

Vancouver, Canada

April 21, 2026

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