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

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of March 2025

Commission File Number: 001-40858

XORTX Therapeutics Inc.

3710 – 33rd Street NW, Calgary, Alberta, T2L 2M1

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.
Form 20-F ☒ Form 40-F☐

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

XORTX THERAPEUTICS INC.
(Registrant)

Date: March 25, 2025

By: */s/ Allen Davidoff*
Name: Allen Davidoff
Title: Chief Executive Officer

EXHIBIT INDEX

99.1	Consolidated Financial Statements for the years ended December 31, 2024, 2023 and 2022
99.2	Management Discussion and Analysis for the year ended December 31, 2024

CONSOLIDATED FINANCIAL STATEMENTS

AS AT AND FOR THE YEARS ENDED DECEMBER 31, 2024, 2023 AND 2022

(Expressed in U.S. Dollars)

DAVIDSON & COMPANY LLP —— Chartered Professional Accountants ——

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Directors of
XORTX Therapeutics Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statement of financial position of XORTX Therapeutics Inc. (the "Company") as of December 31, 2024, and the related consolidated statements of loss and comprehensive loss, changes in shareholders' equity, and cash flows for the year ended December 31, 2024, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024, and the results of its operations and its cash flows for the year ended December 31, 2024, in conformity with IFRS Accounting Standards as issued by the International Accounting Standards Board ("IFRS").

The financial statements of the Company for the years ended December 31, 2023 and 2022, were audited by other auditors, whose report dated April 1, 2024, expressed an unqualified opinion on those statements. We have also audited the adjustments to retrospectively apply the change in accounting policy described in Notes 3 and 12 to the financial statements. In our opinion, the retrospective adjustments are appropriate and have been properly applied. Additionally, as discussed in Note 12(h), the December 31, 2022 statement of cash flows has been revised to correct certain immaterial misstatements. We have audited the revision described in Note 12(h) to the statement of cash flows. In our opinion, such revisions are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the December 31, 2023 and 2022 financial statements other than with respect to the adjustments and revision above and, accordingly, we do not express an opinion on any other form of assurance on the December 31, 2023 and 2022 financial statements as a whole.

Going Concern

The accompanying financial statements have been prepared assuming that the entity will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

We have served as the Company's auditor since 2025.

/s/ DAVIDSON & COMPANY LLP

Vancouver, Canada

Chartered Professional Accountants

March 21, 2025

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TO THE SHAREHOLDERS AND DIRECTORS OF XORTX THERAPEUTICS INC.

Opinion on the Consolidated Financial Statements

We have audited, before the effects of the adjustments for the change in accounting policy and the revision of previously issued financial statements as described in Note 12, the accompanying consolidated statement of financial position of Xortx Therapeutics Inc. (the "Company") and its subsidiaries as of December 31, 2023, and the related consolidated statements of comprehensive loss, changes in shareholders' equity and cash flows for the years ended December 31, 2023 and 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements, before the effects of the adjustments for the change in accounting policy and the revision of previously issued financial statements as described in Note 12, present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of its operations and its cash flows for the years ended December 31, 2023 and 2022, in conformity with IFRS Accounting Standards as issued by the International Accounting Standards Board.

We were not engaged to audit, review, or apply any procedures to the adjustments for the change in accounting policy and the revision of previously issued financial statements as described in Note 12 and accordingly, we do not express an opinion or make any other form of assurance about whether the adjustments are appropriate and have been properly applied. Those adjustments were audited by the successor auditor.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

We have served as the Company's auditor since 2018.

Smythe LLP
Chartered Professional Accountants
Vancouver, Canada
April 1, 2024

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XORTX THERAPEUTICS INC.
Consolidated Statements of Financial Position
(Expressed in U.S. Dollars)

	Note	December 31, 2024	December 31, 2023
		$	$
Assets			
Current			
Cash	5	2,473,649	3,447,665
Accounts receivable		17,637	60,711
Prepaid expenses	6	185,412	236,966
Deferred share issuance costs	12	-	323,441
Total Current Assets		**2,676,698**	**4,068,783**
Non-current			
Contract payments	7	1,200,000	1,200,000
Intangible assets	8	183,108	175,254
Property and equipment	9	34,721	23,927
Total Assets		**4,094,527**	**5,467,964**
Liabilities			
Current			
Accounts payable and accrued liabilities	10,13	147,205	283,428
Derivative warrant liability	12(h)	572,000	531,000
Lease obligation	11	38,785	11,510
Total Liabilities		**757,990**	**825,938**

Shareholders' Equity			
Share capital	**12**	18,493,571	17,056,535
Reserves	**12**	6,039,078	5,468,257
Obligation to issue shares	**8(c)**	24,746	24,746
Accumulated other comprehensive loss		(52,605)	(52,605)
Accumulated deficit		(21,168,253)	(17,854,907)
Total Shareholders' Equity		**3,336,537**	**4,642,026**
Total Liabilities and Shareholders' Equity		**4,094,527**	**5,467,964**

Nature of operations and going concern (Note 1)
Commitments (Note 17)
Subsequent events (Note 19)

/s/ "Allen Davidoff"
Director

/s/ "Paul Van Damme"
Director

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

XORTX THERAPEUTICS INC.
Consolidated Statements of Loss and Comprehensive Loss
For the years ended December 31, 2024, 2023 and 2022
(Expressed in U.S. Dollars)

	Note	**2024**	**2023**	**2022**
		$	**$**	**$**
Expenses				
Research and development	**13**	183,830	2,418,715	6,761,818
Consulting, wages and benefits	**13**	1,055,247	1,037,558	885,460
Directors' fees	**13**	168,143	179,406	122,572
Investor relations		1,360,170	919,490	928,424
Professional fees	**13**	616,859	514,263	454,071
General and administrative		320,949	375,505	448,824
Public company costs		141,404	170,184	120,813
Travel		31,916	170,187	22,538
Amortization of property and equipment	**9**	86,204	73,062	41,069
Amortization of intangible assets	**8**	31,070	66,632	17,077
Share-based payments	**12(g),13**	122,527	120,984	487,940
Loss before other items		**(4,118,319)**	**(6,045,986)**	**(10,290,606)**
Fair value adjustment on derivative warrant liability	**12(h)**	1,035,105	3,641,403	3,396,137
Foreign exchange loss		(73,009)	(7,025)	(1,546)
Interest income		121,908	253,543	103,589
Transaction costs on derivative warrant liability	**12(b)**	(279,031)	-	(926,456)
Net loss for the year		**(3,313,346)**	**(2,158,065)**	**(7,718,882)**
Other comprehensive loss:				
Items that may be subsequently reclassified to profit or loss:				
Currency translation differences		-	-	(128,145)
Total loss and comprehensive loss for the year		**(3,313,346)**	**(2,158,065)**	**(7,847,027)**
Basic and diluted loss per common share		(1.15)	(1.09)	(5.22)
Weighted average number of common shares outstanding - Basic and diluted		2,878,514	1,981,734	1,479,914

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

XORTX THERAPEUTICS INC.
Consolidated Statements of Changes in Shareholders' Equity
For the years ended December 31, 2024, 2023 and 2022
(Expressed in U.S. Dollars)

	Number of common shares	Share capital	Reserves	Obligation to issue shares	Accumulated Deficit	Accumulated other comprehensive loss	Total
		$	$	$	$	$	$
Balance, December 31, 2021	**1,443,293**	**16,088,677**	**4,991,594**	**24,746**	**(7,977,960)**	**75,540**	**13,202,597**
Shares issued pursuant to public offering	155,555	359,868	-	-	-	-	359,868
Pre-funded warrants issued	-	-	925,015	-	-	-	925,015
Share issuance costs	-	(88,959)	(42,687)	-	-	-	(131,646)
Pre-funded warrants exercised	71,223	164,768	(164,704)	-	-	-	64
Share-based payments	-	-	487,940	-	-	-	487,940
Comprehensive loss for the year	-	-	-	-	(7,718,882)	(128,145)	(7,847,027)
Balance, December 31, 2022	**1,670,071**	**16,524,354**	**6,197,158**	**24,746**	**(15,696,842)**	**(52,605)**	**6,996,811**
Reclassification of derivative warrant liability	-	-	(318,000)	-	-	-	(318,000)
Pre-funded warrants exercised	328,777	532,181	(531,885)	-	-	-	296
Share-based payments	-	-	120,984	-	-	-	120,984
Comprehensive loss for the year	-	-	-	-	(2,158,065)	-	(2,158,065)
Balance, December 31, 2023	**1,998,848**	**17,056,535**	**5,468,257**	**24,746**	**(17,854,907)**	**(52,605)**	**4,642,026**
Shares issued pursuant to private placement	1,219,717	1,387,549	-	-	-	-	1,387,549
Pre-funded warrants issued	-	-	907,994	-	-	-	907,994
Reclassification of derivative warrant liability	-	-	123,651	-	-	-	123,651
Share issuance costs	-	(331,541)	(224,140)	-	-	-	(555,681)
Pre-funded warrants exercised	257,810	359,214	(359,211)	-	-	-	3
Warrants exercised	5,000	21,814	-	-	-	-	21,814
Share-based payments	-	-	122,527	-	-	-	122,527
Comprehensive loss for the year	-	-	-	-	(3,313,346)	-	(3,313,346)
Balance, December 31, 2024	**3,481,375**	**18,493,571**	**6,039,078**	**24,746**	**(21,168,253)**	**(52,605)**	**3,336,537**

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

XORTX THERAPEUTICS INC.
Consolidated Statements of Cash Flows
For the years ended December 31, 2024, 2023 and 2022
(Expressed in U.S. Dollars)

	2024	2023	2022 Revised[1]
	$	$	$
Cash provided by (used in):			
Operating activities			
Net loss for the year	(3,313,346)	(2,158,065)	(7,718,882)
Items not affecting cash:			
Amortization	117,274	139,694	58,146
Fair value adjustment on derivative warrant liability	(1,035,105)	(3,641,403)	(3,396,137)
Fair value of finders' warrants allocated to derivative liability	-	-	138,005
Share-based payments	122,527	120,984	487,940
Transaction costs on derivative warrant liability	279,031	-	797,598
Unrealized foreign exchange (gain) loss	34,178	(13,634)	(6,391)
Changes in non-cash operating assets and liabilities:			
Accounts receivable	43,074	21,041	(41,098)
Prepaid expenses	208,166	142,654	622,595
Accounts payable and accrued liabilities	(134,447)	(1,194,436)	892,265
	(3,678,648)	(6,583,165)	(8,165,959)
Investing activities			
Acquisition of intangible assets	(38,924)	(42,052)	(26,005)
Acquisition of equipment	-	(4,311)	(19,696)
	(38,924)	(46,363)	(45,701)
Financing activities			
Pre-funded warrants and warrants exercised	16,573	296	64
Payment of lease obligation	(69,723)	(66,089)	(20,410)
Cash share issuance costs	(667,883)	(295,251)	(1,067,153)
Proceeds from issuance of equity instruments	3,500,542	-	4,999,640
	2,779,509	(361,044)	3,912,141
Effect of foreign exchange (gain) loss on cash	(35,953)	4,041	(136,146)
Decrease in cash	(974,016)	(6,986,531)	(4,435,665)
Cash, beginning of year	3,447,665	10,434,196	14,869,861

(Expressed in U.S. Dollars)

Cash, end of year	2,473,649	3,447,665	10,434,196

Supplemental Cash Flow and Non-Cash Investing and Financing Activities Disclosure			
Fair value of agent's warrants	-	-	185,738
Derivative warrant liability reclassified to share capital on exercise of warrants	5,244	-	-
Recognition of right-of-use asset	96,998	-	114,588
Deferred financing costs reclassified to share capital and transaction costs on derivative warrant liability	166,344	-	-

[1] The Company revised certain transaction costs on derivative warrant liability from financing activities to operating activities (Note 12(h)).

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

1. Nature of operations and going concern

XORTX Therapeutics Inc. (the "Company" or "XORTX") was incorporated under the laws of Alberta, Canada on August 24, 2012.

XORTX is a public company listed on the TSX Venture Exchange (the "TSXV") and on the Nasdaq Stock Market ("Nasdaq") under the symbol "XRTX". 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.

XORTX is a late-stage clinical pharmaceutical company focused on developing innovative therapies to treat gout and progressive kidney disease modulated by aberrant purine and uric acid metabolism in orphan disease indications such as allopurinol intolerant gout and autosomal dominant polycystic kidney disease, as well as more prevalent type 2 diabetic nephropathy, and fatty liver disease. The Company's current focus is on developing products to slow and/or reverse the progression of these diseases.

The Company is subject to a number of risks associated with the successful development of new products and their marketing and the conduct of its clinical studies and their results. The Company will have to finance its research and development activities and its clinical studies. To achieve the objectives in its business plan, the Company plans to raise the necessary capital and to generate revenues. Although there is no certainty, management is of the opinion that additional funding for future projects and operations can be raised as needed. The products developed by the Company will require approval from the U.S. Food and Drug Administration and equivalent organizations in other countries before their sale can be authorized. If the Company is unsuccessful in obtaining adequate financing in the future, research activities will be postponed until market conditions improve. These circumstances and conditions indicate the existence of a material uncertainty that casts significant doubt about the Company's ability to continue as a going concern.

2. Basis of preparation

Statement of Compliance

These consolidated financial statements have been prepared in accordance with IFRS Accounting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Basis of Measurement and Presentation

These consolidated financial statements have been prepared using the historical cost convention except for financial instruments which have been measured at fair value. These consolidated financial statements were prepared on an accrual basis except for cash flow information.

These consolidated financial statements incorporate the financial statements of the Company and its 100% owned subsidiary. The accounts of the Company's subsidiary are prepared for the same reporting period as the parent company, using consistent accounting policies. Inter-company transactions, balances and unrealized gains or losses on transactions are eliminated. The Company's subsidiary is the following:

Name	Place of Incorporation	Ownership
XORTX Pharma Corp.	Canada	100%

These consolidated financial statements were approved for issue by the Board of Directors on March 21, 2025.

3. Material Accounting policies

These consolidated financial statements have been prepared using the following accounting policies:

Financial Instruments

a) Classification

The Company classifies its financial instruments in the following categories: at fair value through profit or loss ("FVTPL"), at fair value through other comprehensive income (loss) ("FVTOCI") or at amortized cost. The Company determines the classification of financial assets at initial recognition. The classification of debt instruments is driven by the Company's business model for managing the financial assets and their contractual cash flow characteristics.

Equity instruments that are held for trading are classified as FVTPL. For other equity instruments, on the day of acquisition the Company can make an irrevocable election (on an instrument-by-instrument basis) to designate them as at FVTOCI. Financial liabilities are measured at amortized cost, unless they are required to be measured at FVTPL (such as instruments held for trading or derivatives) or if the Company has opted to measure them at FVTPL.

The following are the Company's financial instruments as at December 31, 2024 and 2023:

	Classification
Cash	Amortized cost
Accounts payable and accrued liabilities	Amortized cost
Derivative warrant liability	FVTPL
Lease obligations	Amortized cost

b) Measurement

Financial assets at FVTOCI
Elected investments in equity instruments at FVTOCI are initially recognized at fair value plus transaction costs. Subsequently they are measured at fair value, with gains and losses recognized in other comprehensive income (loss).

Financial assets and liabilities at amortized cost
Financial assets and liabilities at amortized cost are initially recognized at fair value plus or minus transaction costs, respectively, and subsequently carried at amortized cost using the effective interest rate, less any impairment.

Financial assets and liabilities at FVTPL
Financial assets and liabilities carried at FVTPL are initially recorded at fair value and transaction costs are expensed in the consolidated statements of comprehensive loss. Realized and unrealized gains and losses arising from changes in the fair value of the financial assets and liabilities held at FVTPL are included in the consolidated statements of comprehensive loss in the period in which they arise. Where management has opted to recognize a financial liability at FVTPL, any changes associated with the Company's own credit risk will be recognized in other comprehensive loss.

3. Material Accounting policies (continued)

Financial Instruments (continued)

Impairment of financial assets at amortized cost

The Company recognizes a loss allowance for expected credit losses on financial assets that are measured at amortized cost.

At each reporting date, the Company measures the loss allowance for the financial asset at an amount equal to the lifetime expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition. If at the reporting date, the financial asset has not increased significantly since initial recognition, the Company measures the loss allowance for the financial asset at an amount equal to the twelve month expected credit losses. The Company shall recognize in the consolidated statements of comprehensive loss, as an impairment gain or loss, the amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognized.

c) Derecognition

Financial assets
The Company derecognizes financial assets only when the contractual rights to cash flows from the financial assets expire, or when it transfers the financial assets and substantially all of the associated risks and rewards of ownership to another entity. Gains and losses on derecognition are generally recognized in profit or loss. However, gains and losses on derecognition of financial assets classified as FVTOCI remain within accumulated other comprehensive income (loss).

Financial liabilities
The Company derecognizes financial liabilities only when its obligations under the financial liabilities are discharged, cancelled or expired. Generally, the difference between the carrying amount of the financial liability derecognized and the consideration paid and payable, including any non-cash assets, is recognized in the consolidated statements of comprehensive loss.

Cash
Cash include cash on hand, held at banks, or held with investment brokers as well as short-term investments with an original maturity of 90 days or less, which are readily convertible into known amounts of cash.

Equipment
Equipment is recorded at cost less accumulated amortization and accumulated impairment losses. The cost of an item of equipment includes expenditures that are directly attributable to the acquisition thereof. Amortization is calculated on bases and rates designed to amortize the cost of the assets over their estimated useful lives. Amortization is recorded using the straight-line method with an expectation of the following useful life estimates:

Computer equipment	3 years

3. Material Accounting policies (continued)

Leases
At inception of a contract, the Company assesses whether a contract is, or contains, a lease determining whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, we assess whether:

- the contract involves the use of an identified asset;

- the Company has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use; and
- the Company has the right to direct the use of the identified asset.

The right-of-use asset and corresponding lease obligation is recognized at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease obligation adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term or its useful life, whichever is shorter. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. In addition, the right-of-use asset is reduced by impairment losses and adjusted for certain remeasurements of the lease obligation, if any.

The lease obligation is initially measured at the present value of the lease payments that are not paid at the commencement date. The lease payments are discounted using the implicit interest rate in the lease. If the rate cannot be readily determined, the Company's incremental rate of borrowing is used. The lease obligation is subsequently measured at amortized cost using the effective interest method. The lease obligation is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in our estimate of the amount expected to be payable under a residual value guarantee, if we change our assessment of whether we will exercise a purchase, extension or termination option, or if the underlying lease contract is amended.

The Company has elected not to separate fixed non-lease components from lease components and instead account for each lease component and associated fixed non-lease components as a single lease component.

The Company has elected not to recognize right-of-use assets and lease obligations for short-term leases that have a lease term of 12 months or less and for leases of low value assets. The lease payments associated with those leases are recognized as an expense on a straight-line basis over the lease term.

Research and development costs
Research costs including clinical trial costs are expensed as incurred, net of recoveries until a drug product receives regulatory approval. Development costs that meet specific criteria related to technical, market and financial feasibility will be capitalized. To date, all research and development costs have been expensed.

Intangible assets
Intangible assets are measured at cost less accumulated amortization and accumulated impairment losses. Costs incurred for patents, patents pending and licenses are capitalized and amortized from the date of capitalization on a straight-line basis over the shorter of their respective remaining estimated lives or 20 years.

3. Material Accounting policies (continued)

Government assistance
Amounts received or receivable resulting from government assistance programs, including grants and investment tax credits for research and development, are recognized where there is reasonable assurance that the amount of government assistance will be received and all attached conditions will be complied with. Investment tax credits and grants relating to qualifying scientific research and experimental development expenditures that are recoverable are recognized as a reduction of expenses.

Impairment of long-lived assets
Intangible assets and equipment are tested for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. For the purpose of measuring recoverable amounts, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units or CGUs). The recoverable amount is the higher of an asset's fair value less costs to sell, and its value in use (being the present value of the expected future cash flows of the relevant asset or CGU). An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The Company evaluates impairment losses for potential reversals when events or circumstances warrant such consideration.

Derivative warrant liabilities
Derivative warrant liabilities issued in relation to equity offerings that fail to meet the definition of equity are classified as derivative liabilities and measured at fair value with changes in fair value recognized in profit or loss at each period end. In instances where units consisting of a common share and a warrant classified as a derivative liability are issued, the Company recognizes the unit as a compound financial instrument. In accordance with IAS 32 Financial Instruments: Presentation, when a compound instrument has been determined to contain a financial liability and an equity component, the fair value of the instrument is bifurcated by first determining the fair value of the liability, and then allocating any residual value to the equity instrument.

The derivative warrants will ultimately be converted into the Company's equity (common shares) when the warrants are exercised or will be extinguished on the expiry of the outstanding warrants and will not result in the inflow of any cash to the Company. Immediately prior to exercise, the warrants are remeasured at their intrinsic value (the intrinsic value being the share price at the date the warrant is exercised less the exercise price of the warrant), and this value is transferred to Share Capital on exercise. Any remaining fair value is recorded through profit or loss as part of the change in estimated fair value of the derivative warrant liabilities.

The Company uses the Black-Scholes option pricing model to estimate fair value at each period end date. The key assumptions used in the model are described in Note 12(h).

Share-based payments
The Company has a stock option plan that is described in Note 12 and grants share options to acquire common shares of the Company to directors, officers, employees and consultants. Share-based payments to employees are measured at the fair value of the instruments granted. Share-based payments to non-employees are measured at the fair value of the goods or services received or the fair value of the equity instruments issued as calculated using the Black-Scholes option pricing model if the fair value of the goods or services cannot be reliably measured. The offset to the recorded expense is to reserves.

Consideration received on the exercise of stock options is recorded as share capital and the recorded amount in reserves is transferred to share capital.

3. Material Accounting policies (continued)

Share capital
Common shares are classified as equity. Costs directly identifiable with share capital financing are charged against share capital. Share issuance costs incurred in advance of

share subscriptions are recorded as deferred assets. Share issuance costs related to uncompleted share subscriptions are charged to operations in the period they are incurred.

The Company's common shares, pre-funded warrants, warrants (other than derivative warrants) and options are classified as equity instruments. Incremental costs directly related to the issue of new shares or options are shown in equity as a deduction from the proceeds. For equity offerings of units consisting of a common share and warrant, when both instruments are classified as equity, the Company allocates proceeds first to common shares based on the estimated fair value of the common shares at the time the units are issued, with any excess value allocated to warrants.

From time to time in connection with private placements and other equity offerings, the Company issues compensatory warrants ("Finders' Warrants") or warrant units ("Finders' Warrant Units") to agents as commission for services. Awards of Finders' Warrants and Finders' Warrant Units are accounted for in accordance with the fair value method of accounting and result in share issuance costs and a credit to reserves when Finders' Warrants and Finders' Warrant Units are issued. The fair value of Finders' Warrants is measured using the Black-Scholes option pricing model and the fair value of the Finders' Warrant Units is measured using the Geske compound option pricing model that requires the use of certain assumptions regarding the risk-free market interest rate, expected volatility in the price of the underlying stock, and expected life of the instruments.

Earnings (loss) per common share
Basic earnings (loss) per common share is computed by dividing the net income (loss) available to common shareholders by the weighted average number of common shares outstanding during the period and the diluted loss per share assumes that the outstanding vested stock options and share purchase warrants had been exercised at the beginning of the year. Diluted earnings per share reflect the potential dilution that could share in the earnings of an entity. In the periods where a net loss is incurred, potentially dilutive common shares (outstanding vested stock options and share purchase warrants) are excluded from the loss per share calculation as the effect would be anti-dilutive and basic and diluted loss per common share are the same. In a profit year, the weighted average number of common shares outstanding used for the calculation of diluted earnings per share assumes that the proceeds to be received on the exercise of dilutive stock options and warrants are used to repurchase the common shares at the average price per period.

Foreign currency translation
The presentation and functional currency of the Company and its subsidiary is the U.S. dollar. Foreign currency transactions are translated into U.S. dollars using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the rate of exchange in effect as of the financial position date. Gains and losses are recognized in profit or loss on a current basis.

Income taxes
The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

3. Material Accounting policies (continued)

Deferred income tax assets also result from unused loss carry forwards, resource related pools and other deductions. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

New and recent accounting pronouncements
In October 2022, IASB issued amendments to IAS 1, Presentation of Financial Statements. The amendments aim to clarify the criteria for classifying liabilities with covenants as current or non-current. Liabilities are required to be classified as non-current if an entity has a substantive right to defer settlement for at least 12 months at the end of the reporting period. The amendments were adopted by the Company as of January 1, 2024. These amendments to standards resulted in the reclassification of the derivative warrant liability from non-current to current liability as described in Note 12(h).

In April 2024, IASB issued IFRS 18, Presentation and Disclosure in Financial Statements to replace IAS 1, Presentation of Financial Statements. The aim of IFRS 18 is to set out requirements for presentation and disclosure of financial statements to ensure the entity provides relevant and accurate information about its assets, liabilities, equity, income and expenses. IFRS 18 is effective for the Company as of January 1, 2027. The Company is assessing the impact of this standard on the consolidated financial statements.

4. Critical accounting judgments and estimates

The preparation of consolidated financial statements requires management to make judgments and estimates that affect the amounts reported in the consolidated financial statements and notes. By their nature, these judgments and estimates are subject to change and the effect on the consolidated financial statements of changes in such judgments and estimates in future periods could be material. These judgments and estimates are based on historical experience, current and future economic conditions, and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results could differ from these judgments and estimates.

Revisions to accounting estimates are recognized in the period in which the estimate is revised and may affect both the period of revision and future periods. Information about critical accounting judgments in applying accounting policies that have the most significant risk of causing material adjustment to the carrying amounts of assets and liabilities recognized in the consolidated financial statements within the next financial year are discussed below:

Share-based payment transactions and warrant liabilities
The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Warrant liabilities are accounted for as derivative liabilities as the proceeds from exercise are either not fixed, denominated in a currency other than the functional currency, or can be settled on a net basis, and therefore do not meet the fixed for fixed criteria. Estimating fair value for share-based transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the instrument. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the share option or warrant, volatility and dividend yield and making assumptions about them.

Classification of contract payments
In concluding that contract payments are a non-current asset, management considered when future regulatory and clinical trial programs are anticipated to be completed. Management assessed that the future regulatory and clinical trial programs would not be completed within 12 months from period end and therefore classified contract payments as a non-current asset.

(Expressed in U.S. Dollars)

4. Critical accounting judgments and estimates (continued)

Impairment of intangible assets
Patents (obtained and pending) and licenses are reviewed for impairment at each financial reporting date. If, in the judgment of management, future economic benefits will not flow to the Company, then the Company will assess the recoverable value of the asset. If the carrying value is greater than the recoverable value, the asset will be impaired to the recoverable value.

Determination of functional currency
In concluding that the U.S. dollar is the functional currency of the Company and its subsidiary, management considered the currency that mainly influences the cost of providing goods and services in the primary economic environment in which each entity operates and the currency in which funds from financing are generated, or if there has been a change in events or conditions that determined the primary economic environment.

Treatment of research and development costs
Costs to develop products are capitalized to the extent that the criteria for recognition as intangible assets in IAS 38 Intangible Assets are met. Those criteria require that the product is technically and economically feasible, the Company has the intention and ability to use the asset, and how the asset will generate future benefits. Management assessed the capitalization of development costs based on the attributes of the development project, perceived user needs, industry trends and expected future economic conditions. Management considers these factors in aggregate and applies significant judgment to determine whether the product is feasible. The Company has not capitalized any development costs as at December 31, 2024.

Leases
Value of right-of-use assets and lease obligations require judgement in determining lease terms such as extension options, determining whether a lease contract contains an identified asset to which the Company has the right to use substantially all of the economic benefits from the use of that asset and the incremental borrowing rate applied. The Company estimates the incremental borrowing rate based on the lease term, collateral assumptions and the economic environment in which the lease is denominated. Renewal options are only included if management is reasonably certain that the option will be renewed.

Classification of pre-funded warrants
Management applied judgment when determining the appropriate classification of pre-funded warrants included in unit offerings. Management considered the characteristics of derivative instruments and concluded that the pre-funded warrants should be classified as an equity instrument.

Current and deferred taxes
The measurement of income taxes payable and deferred income tax assets and liabilities requires management to make judgments in the interpretation and application of the relevant tax laws. Such differences may result in eventual tax payments differing from amounts accrued. Reported amounts for deferred tax assets and liabilities are based on management's expectation for the timing and amounts of future taxable income or loss, as well as future taxation rates. Changes to these underlying estimates may result in changes to the carrying value, if any, of deferred income tax assets and liabilities.

5. Cash

The Company's cash consists of cash held and interest-bearing deposits with the Company's bank and brokerage accounts. The current annual interest rate earned on these deposits is 3.62% (2023 – 5.15%).

	December 31, 2024	December 31, 2023
	$	$
Cash	53,686	94,999
Interest-bearing deposits	2,419,963	3,352,666
	2,473,649	3,447,665

6. Prepaid expenses

The Company's prepaid expenses relate to the following:

	December 31, 2024	December 31, 2023
	$	$
Research and development	1,167	-
Insurance	158,007	204,302
Investor relations conferences and services	19,490	25,309
Administrative services and other	6,748	7,355
	185,412	236,966

7. Contract payments

During the year ended December 31, 2020, the Company entered into an agreement with Prevail InfoWorks Inc. As part of the agreement, the Company paid $1,200,000 through the issuance of units in the private placement that closed February 28, 2020, to be applied to future regulatory and clinical trial programs. The 108,590 units issued were measured by reference to their fair value on the issuance date, which is equal to CAD $14.76 per unit.

8. Intangible assets

Cost	Total
	$
Balance, December 31, 2022	294,751
Additions	42,052

(Expressed in U.S. Dollars)

Balance, December 31, 2023	**336,803**
Additions	38,924
Balance, December 31, 2024	**375,727**

Accumulated amortization	**Total**
	$
Balance, December 31, 2022	94,917
Amortization	66,632
Balance, December 31, 2023	**161,549**
Amortization	31,070
Balance, December 31, 2024	**192,619**

8. Intangible assets (continued)

Carrying values	**Total**
	$
At December 31, 2023	175,254
At December 31, 2024	**183,108**

The Company has licensed intellectual property from various third parties. The intangible assets relate solely to licensed intellectual property and there are no other classes of intangible assets. The intangible assets are as described below:

a) The Company has licensed from a third party (the "Licensor"), under a patent rights purchase agreement dated July 9, 2013 and amended April 15, 2014, certain patents relating to allopurinol for the treatment of hypertension. The Company paid a total of $40,000 to the Licensor per the terms of the agreement.

The Company will also pay the Licensor royalties on the cumulative net revenues from the sale or sublicense of the product covered under the patent license until the later of (i) the expiration of the last patent right covering the product; and (ii) the expiration of ten years from the date of the first commercial sales of a product. As of December 31, 2024, no royalties have been accrued or paid.

b) In December 2012, the Company entered into an agreement to license certain intellectual property relating to the use of all uric acid lowering agents to improve the treatment of metabolic syndrome. Under this patent rights purchase agreement, between the Company and Dr. Richard Johnson and Dr. Takahiko Nakagawa (the "Vendors"), the Company will pay the Vendors a royalty based on the cumulative net revenues from the sale or sublicense of the product covered under the licensed intellectual property until the later of (i) the expiration of the last patent right covering the product; and (ii) the expiration of 10 years from the date of the first commercial sales of a product. As of December 31, 2024, no royalties have been accrued or paid.

c) Pursuant to a license agreement dated October 9, 2012 as amended on June 23, 2014, between the Company and the University of Florida Research Foundation, Inc. ("UFRF"), the Company acquired the exclusive license to a patent that claims the use of any uric acid lowering agent to treat insulin resistance. The Company has paid or is obligated to pay UFRF the following:

i) An annual license fee of $1,000;
ii) Reimburse UFRF for United States and/or foreign costs associated with the maintenance of the licensed patents;
iii) The issuance to UFRF of 180,397 shares of common stock of the Company. 160,783 have been issued to UFRF as at December 31, 2024 and December 31, 2023. The remaining shares to be issued are included in obligation to issue shares ($24,746);
iv) Milestone payments of $500,000 upon receipt of FDA approval to market licensed product in the United States of America and $100,000 upon receipt of regulatory approval to market each licensed product in each of other agreed-upon jurisdictions;
v) Royalty payments of up to 1.5% of net sales of products covered by the license until the later of (i) the expiration of any patent claims; or (ii) 10 years from the date of the first commercial sale of any covered product in each country. Following commencement of commercial sales, the Company will be subject to certain annual minimum royalty payments that will increase annually to a maximum of $100,000 per year. As at December 31, 2024, no royalties have been accrued or paid; and
vi) UFRF is entitled to receive a royalty of 5% of amounts received from any sub-licensee that are not based directly on product sales, excluding payments received for research and development or purchases of the Company's securities at not less than fair market value. As at December 31, 2024, no royalties have been accrued or paid.

UFRF may terminate the agreement if the Company fails to meet the above-specified milestones.

9. Property and equipment

Cost	**Right-of-use asset**	**Equipment**	**Total**
	$	**$**	**$**
Balance, December 31, 2022	114,588	19,033	133,621
Additions	-	4,311	4,311
Balance, December 31, 2023	**114,588**	**23,344**	**137,932**
Additions	96,998	-	96,998
Balance, December 31, 2024	**211,586**	**23,344**	**234,930**

Accumulated amortization	**Right-of-use asset**	**Equipment**	**Total**
	$	**$**	**$**
Balance, December 31, 2022	38,195	2,748	40,943
Amortization	65,480	7,582	73,062

(Expressed in U.S. Dollars)

Balance, December 31, 2023	**103,675**	**10,330**	**114,005**
Amortization	78,525	7,679	86,204
Balance, December 31, 2024	**182,200**	**18,009**	**200,209**

Carrying values	**Right-of-use asset**	**Equipment**	**Total**
	$	**$**	**$**
At December 31, 2023	10,913	13,014	23,927
At December 31, 2024	**29,386**	**5,335**	**34,721**

The Company entered into an office lease during the year ended December 31, 2022 for which a right-of-use asset was recognized (Note 11). During the year ended December 31, 2024, the Company extended its office lease. A $96,998 right-of-use asset addition was recognized with a corresponding $96,998 increase to the lease liability.

10. Accounts payable and accrued liabilities

	December 31, 2024	**December 31, 2023**
	$	**$**
Trade payables	84,020	195,814
Accrued liabilities	63,185	87,614
Total	147,205	283,428

11. Lease obligation

The Company has entered into an office lease expiring in 2025, with an imputed interest rate of 8% per annum. A reconciliation of the outstanding lease obligation as at December 31, 2024 is as follows:

	$
Balance, December 31, 2022	77,599
Lease payments	(66,089)
Balance, December 31, 2023	11,510
Additions	96,998
Lease payments	(69,723)
Balance, December 31, 2024	**38,785**

11. Lease obligation (continued)

The $96,998 lease obligation addition recognized in the year ended December 31, 2024 relates to an extension of the office lease to May 31, 2025.

The following is a schedule of the Company's future minimum lease payments related to the office lease obligation:

	December 31, 2024	**December 31, 2023**
	$	**$**
2024	-	11,628
2025	39,535	-
Total minimum lease payments	39,535	11,628
Less: imputed interest	(750)	(118)
Total present value of minimum lease payments	38,785	11,510
Less: current portion	(38,785)	(11,510)
Non-current portion	-	-

Share capital and reserves

a) Authorized and issued

Unlimited common shares – 3,481,375 issued at December 31, 2024 (2023 – 1,998,848, 2022 – 1,670,071).

On November 10, 2023, the shares of the Company were consolidated on a 9:1 basis. Common shares, options, warrants and per share amounts have been adjusted for the 9:1 share consolidation unless otherwise noted.

b) Issuances

Year ended December 31, 2024:

On February 15 and March 4, 2024, the Company closed two tranches of a non-brokered offering of 899,717 common share units at a price of CAD $3.00 per common share unit for aggregate gross proceeds of $2,000,549 (CAD $2,699,151). Each common share unit consists of one common share and one warrant to purchase one common share at CAD $4.50 per common share for a period of two years, provided, however that, if, the common shares on the TSXV trade at greater than CAD $6.00 for 10 or more consecutive trading days, the warrants will be accelerated and the warrants will expire on the 30th business day following the date of notice.

The proceeds were allocated $1,205,000 to the derivative warrant liability (Note 12(h)) and the residual $795,549 was allocated to common shares.

In connection with the offering, the Company paid finder's fees of $97,241, representing a 5% finder's fee on certain subscriptions to qualified finders. The Company incurred additional cash share issuance costs of $367,195 including $166,344 deferred at December 31, 2023. The costs were allocated between common shares and derivative warrant liability in proportion to their initial carrying amounts with $185,405 recorded as a reduction of equity and $279,031 recorded as transaction costs on derivative warrant liability.

(Expressed in U.S. Dollars)

On March 25, 2024, the Company issued 5,000 common shares for the exercise of warrants at CAD $4.50 per share in the amount of $16,570 (CAD $22,500). An amount of $5,244 was transferred from derivative warrant liability to share capital as a result.

12. Share capital and reserves (continued)

b) Issuances (continued)

On October 18, 2024, the Company closed its registered direct offering and concurrent private placement for the purchase and sale of: (i) 320,000 common share units at a price of $1.85 per unit, with each unit consisting of one common share and one warrant to purchase one common share; and (ii) 490,810 pre-funded warrant units at a price of $1.84999 per pre-funded unit, with each pre-funded unit consisting of one pre-funded warrant to purchase one common share and one warrant to purchase one common share. Aggregate gross proceeds amounted to $1,499,993. The pre-funded warrants have an exercise price of $0.00001 per share and will terminate once exercised in full. The unit warrants are exercisable at an exercise price of $2.18 are immediately exercisable and expire five years from issuance.

In connection with the private placement, the Company incurred issuance costs of $370,276. The costs were recorded as a reduction of equity.

On November 21, 2024, the Company issued 257,810 common shares for the exercise of pre-funded warrants at US$0.00001 per share in the amount of $3. An amount of $359,211 was transferred from reserves to share capital as a result.

Year ended December 31, 2023:

On January 19, 2023, the Company issued 328,777 common shares for the exercise of pre-funded warrants at $0.0009 per share in the amount of $296. An amount of $531,885 was transferred from reserves to share capital as a result.

Year ended December 31, 2022:

On October 7, 2022, the Company closed a public offering of: (i) 155,555 common share units ("Common Share Units") at a price of $9.00 per Common Share Unit, with each Common Share Unit consisting of one common share and one warrant ("Warrant") to purchase one common share; and (ii) 400,000 pre-funded warrant units ("Pre-Funded Units") at a price of $8.9991 per Pre-Funded Unit, with each Pre-Funded Unit consisting of one pre-funded warrant ("Pre-Funded Warrant") to purchase one common share and one Warrant to purchase one common share. Aggregate gross proceeds amounted to $4,999,640. The Pre-Funded Warrants have an exercise price of $0.0009 per share, and will terminate once exercised in full. The Warrants are exercisable at an exercise price of $10.98 per share expiring five years from the date of issuance.

The proceeds were allocated $3,714,757 to the derivative warrant liability (Note 12(h)) and the residual amounts of $359,868 and $925,015 were allocated to common shares and pre-funded warrants respectively.

In connection with the public offering, the Company incurred issuance costs of $1,067,153 and issued 27,777 underwriters warrants with a fair value of $185,738. The costs were allocated between common shares and derivative warrant liability in proportion to their initial carrying amounts with $317,301 recorded as a reduction of equity and $926,456 recorded as transaction costs on derivative warrant liability and pre-funded warrants.

On December 29, 2022, the Company issued 71,223 common shares for the exercise of Pre-Funded Warrants at $0.0009 per share in the amount of $64. An amount of $164,704 was transferred from reserves to share capital as a result.

12. Share capital and reserves (continued)

c) Diluted Weighted Average Number of Shares Outstanding

		Year ended	
	December 31, 2024	December 31, 2023	December 31, 2022
Basic weighted average shares outstanding	**2,878,514**	1,981,734	1,479,914
Effect of outstanding securities	**-**	-	-
Diluted weighted average shares outstanding	**2,878,514**	1,981,734	1,479,914

During the years ended December 31, 2024, 2023 and 2022, the Company had a net loss, as such, the diluted loss per share calculation excludes any potential conversion of options and warrants that would decrease loss per share.

d) Common Share Purchase Warrants

A summary of the changes in warrants for the years ended December 31, 2024, 2023 and 2022 is presented below:

	Number of Warrants	**Weighted Average Exercise price**
Balance, December 31, 2021	569,655	$ 33.10
Granted – October 7,2022	555,555	10.98
Balance, December 31, 2023 and 2022	**1,125,210**	**$ 22.31**
Granted – February 9, 2024	824,767	3.13(1)
Granted – February 23, 2024	74,950	3.13(1)
Granted – October 18, 2024	810,810	2.18
Exercised	(5,000)	3.13(1)

(Expressed in U.S. Dollars)

Balance, December 31, 2024	**2,830,737**	**$**	**3.60**

(1) Exercise price of CAD $4.50.

During the year ended December 31, 2024, the Company amended the exercise price of 1,125,210 common share purchase warrants that were issued pursuant to private placements that closed in February 2021, October 2021 and October 2022. Pursuant to the polices of the TSXV the terms of the warrants, as amended, will be subject to an acceleration expiry provision such that if for any 10 consecutive trading dates during the unexpired term of the warrants, the closing price of the Company's shares on the exchange exceeds $6.50, the exercise period of the warrants will be reduced to 30 days, starting seven days after the last premium trading day. All other terms of the warrants remain unchanged.

At December 31, 2024, the weighted average contractual remaining life of the unexercised warrants was 2.58 years (2023 – 3.15 years).

12. Share capital and reserves (continued)

d) Common Share Purchase Warrants (continued)

The following table summarizes information on warrants outstanding at December 31, 2024:

	Exercise Price	Number Outstanding	Expiry date	Remaining Contractual Life
$	5.00	198,333	February 9, 2026	1.11 years
$	5.00	270,211	October 15, 2026	1.79 years
$	5.00	101,111	October 15, 2026	1.79 years
$	5.00	555,555	October 7, 2027	2.77 years
CAD $	4.50	819,767	February 9, 2026	1.11 years
CAD $	4.50	74,950	February 23, 2026	1.15 years
$	2.18	810,810	October 18, 2029	4.80 years
	Total	2,830,737		2.58 years

e) Pre-Funded Warrants

A summary of the changes in pre-funded warrants for the years ended December 31, 2024, 2023 and 2022 is presented below:

	Number of Warrants		Weighted Average Exercise price
Balance, December 31, 2021	-		-
Granted – October 7, 2022	400,000	$	0.0009
Exercised	(71,223)	$	0.0009
Balance, December 31, 2022	**328,777**	**$**	**0.0009**
Exercised	(328,777)	$	0.0009
Balance, December 31, 2023	**-**		**-**
Granted – October 18, 2024	490,810	$	0.00001
Exercised	(257,810)	$	0.00001
Balance, December 31, 2024	**233,000**	**$**	**0.00001**

f) Finders' and Underwriters Warrants

A summary of the changes in finders' and underwriters warrants for the years ended December 31, 2024, 2023 and 2022 is presented below:

	Number of Warrants		Weighted Average Exercise price
Balance, December 31, 2024, 2023 and 2022	50,298	$	23.57

At December 31, 2024, the weighted average contractual remaining life of the unexercised finders' and underwriters warrants was 2.24 years (2023 – 3.25 years).

12. Share capital and reserves (continued)

f) Finders' and Underwriters Warrants (continued)

The following table summarizes information on finders' and underwriters warrants outstanding at December 31, 2024:

	Exercise Price	Number Outstanding	Expiry date	Remaining Contractual Life
CAD$	42.30	6,377	February 9, 2026	1.11 years
$	42.93	16,144	October 15, 2026	1.79 years
$	10.98	27,777	October 7, 2027	2.77 years

(Expressed in U.S. Dollars)

Total	50,298		2.24 years

g) Stock Options

The Company has an incentive Stock Option Plan (the "Plan") for directors, officers, employees, and consultants, under which the Company may issue stock options to purchase common shares of the Company provided that the amount of incentive stock options which may be granted and outstanding under the Plan at any time shall not exceed 10% of the then issued and outstanding common shares of the Company.

The weighted average grant fair value of stock options granted was estimated on the date of grant using the Black-Scholes option pricing model with the following data and assumptions:

	2024	2023	2022
Dividend yield	Nil	Nil	Nil
Annualized volatility	100%	100%	100%
Share price	CAD $3.82	CAD $2.90	CAD $15.50
Risk-free interest rate	3.47%	3.25%	2.81%
Expected life	5 years	5 years	5 years

The risk-free interest rate is the yield on zero-coupon Canadian Treasury Bills of a term consistent with the assumed option life. The expected life of the option is the average expected period to exercise.

Volatility is based on the available historical volatility of the Company's share price, excluding specific time frames in which volatility was affected by specific transactions that are not considered to be indicative of the Company's expected share price volatility. The Company has not declared dividends in the past.

During the year ended December 31, 2024, the Company recorded share-based payments of $122,527 (2023 - $120,984; 2022 - $487,940), in respect of the vesting of granted options and options issued in prior years.

A summary of the changes in stock options for the years ended December 31, 2024, 2023 and 2022 is presented below:

12. Share capital and reserves (continued)

g) Stock Options (continued)

	Number of Options		Weighted Average Exercise price (CAD)
Balance, December 31, 2021	67,332	$	27.89
Granted – January 12, 2022	14,162		22.86
Granted – June 6, 2022	43,866		14.40
Granted – November 25, 2022	7,776		12.42
Expired	(4,896)		28.67
Balance, December 31, 2022	**128,240**	**$**	**21.75**
Granted – December 31, 2023	8,000		2.90
Expired	(32,318)		33.65
Balance, December 31, 2023	**103,922**	**$**	**16.60**
Granted – March 4, 2024	39,483		4.50
Granted – April 8, 2024	8,000		5.00
Granted – December 18, 2024	13,000		1.75
Expired	(16,642)		22.22
Balance, December 31, 2024	**147,763**	**$**	**10.80**
Vested and exercisable, December 31, 2024	**109,807**	**$**	**12.98**

The weighted average contractual remaining life of the unexercised options was 3.02 years (2023 - 3.04 years).

The following table summarizes information on stock options outstanding at December 31, 2024:

	Exercise Price (CAD)	Number Outstanding	Number Exercisable	Expiry Date	Remaining Contractual Life
$	14.76	14,669	14,669	June 23, 2025	0.48 years
$	16.92	2,366	2,366	May 12, 2026	1.36 years
$	21.69	4,732	4,732	July 14, 2026	1.53 years
$	22.86	7,262	7,262	December 21, 2026	1.97 years
$	22.86	9,163	8,908	January 12, 2027	2.03 years
$	14.40	37,200	35,444	June 6, 2027	2.43 years
$	12.42	5,554	3,856	November 25, 2027	2.90 years
$	2.90	8,000	8,000	December 31, 2028	4.00 years
$	4.50	37,817	16,570	March 4, 2029	4.18 years
$	5.00	8,000	8,000	April 8, 2029	4.27 years
$	1.75	13,000	-	December 18, 2029	4.97 years
		147,763	**109,807**		

12. Share capital and reserves (continued)

h) Derivative Warrant Liability

During the years ended December 31, 2024, 2022 and 2021, the Company issued warrants which were recorded as derivative financial liabilities as the exercise price was denominated in a currency other than the functional currency of the Company and in certain situations allow the holder to exercise the warrants on a cashless basis and therefore may be settled other than by the exchange of a fixed amount of cash. Under the cashless exercise option, the holders of these warrants may elect to settle the warrants on a cashless basis if the common shares are not subject to an effective registration statement at the time the holder wishes to exercise them. A contract that may be settled by a single net payment (generally referred to as net cash settled or net equity settled) is a financial liability and not an equity instrument.

These warrants are revalued at each reporting period and any gain or loss is recorded in profit or loss.

Effective January 1, 2023, with the change in functional currency of the Company to USD, the exercise price of warrants denominated in CAD is now denominated in a currency different than the functional currency of the Company and therefore these warrants now meet the definition of a derivative financial liability. Accordingly, all CAD denominated warrants recorded as equity instruments on January 1, 2023, were reclassified to derivative warrant liabilities at their estimated fair value as of that date.

The fair value of the warrants issued during the year ended December 31, 2024 with an exercise price denominated in CAD was estimated at $1,205,000 on the date of grant using the Black-Scholes option pricing model with the following data and assumptions:

	2024
Dividend yield	Nil
Annualized volatility	130-135%
Share price	CAD $3.03 – CAD$3.40
Risk-free interest rate	4.28% – 4.33%
Expected life	2 years

The balance of the derivative warrant liabilities (level 3) is as follows:

Balance at December 31, 2022	**$**	**3,854,403**
Reclassified from reserves		318,000
Fair value adjustment		(3,641,403)
Balance at December 31, 2023	**$**	**531,000**
Warrants issued February 9, 2024		1,102,000
Warrants issued February 23, 2024		103,000
Warrants exercised		(5,244)
Reclassified to reserves		(123,651)
Fair value adjustment		(1,035,105)
Balance at December 31, 2024	**$**	**572,000**

Significant assumptions used in determining the fair value of the derivative warrant liabilities at December 31, 2024, 2023 and 2022 are as follows:

12. Share capital and reserves (continued)

h) Derivative Warrant Liability (continued)

		December 31, 2024		December 31, 2023		December 31, 2022
Share price	$	**1.13**	$	**2.31**	$	**7.29**
Risk-free interest rate		**2.92%**		**3.25%-3.91%**		**3.55%**
Dividend yield		**0%**		**0%**		**0%**
Expected volatility		**94%-134%**		**100%**		**100%**
Remaining term (in years)		**1.1-2.8**		**2.1-3.8**		**3.8-4.8**

The fair value is classified as level 3 as expected volatility is determined using historical volatility and is therefore not an observable input.

Management has assessed the revised interpretive guidance in accordance with IAS 1 Presentation of Financial Statements Amendments effective for annual periods beginning on or after January 1, 2024 with respect to its derivative warrant liability and determined those instruments meet the requirement to be classified as a current liability. Accordingly, the Company has reclassified derivative warrant liabilities of $531,000 on the consolidated statement of financial position as at December 31, 2023 to conform to the current period's presentation. The change in presentation had no impact on net and comprehensive loss, or cash flows, or loss per share for the years ended December 31, 2024 and 2023. The change in presentation had no impact on total assets, total liabilities or shareholders equity as at December 31, 2023.

The Company identified an immaterial error and revised the consolidated statement of cash flows for the year ended December 31, 2022 by $797,598 between operating activities and financing activities for cash share issuance costs. The change in presentation had no impact on net and comprehensive loss, or loss per share for the year ended December 31, 2022. The change in presentation had no impact on total assets, total liabilities or shareholders equity as at December 31, 2022.

13. Related party transactions

All related party transactions were measured at fair value. All amounts due from/payable to related parties are unsecured, non-interest bearing and have no fixed terms of repayment.

During the year ended December 31, 2024, the Company incurred the following transactions with related parties:

(Expressed in U.S. Dollars)

a) Wages and benefits and professional fees were paid or accrued to Allen Davidoff, the Chief Executive Officer ("CEO"), in the amount of $391,655 (2023 - $337,794; 2022 - $369,494).

b) Fees were paid or accrued to Michael Bumby, the Chief Financial Officer ("CFO") of the Company in the amount of $6,515 and to 1282803 Ontario Inc., a company owned by James Fairbairn, the former Chief Financial Officer of $149,820 (2023 - $156,217; 2022 - $164,547 (paid or accrued to the former CFO)).

c) Research and development fees were paid or accrued to Haworth Biopharmaceutical, a company owned by Stephen Haworth, the Chief Medical Officer ("CMO") of the Company in the amount of $110,445 (2023 - $200,229; 2022 - $238,813).

d) Consulting fees were paid or accrued to Stacy Evans, the Chief Business Officer ("CBO") of the Company in the amount of $157,500 (2023 - $280,000; 2022 - $44,946).

e) Wages and benefits were paid or accrued to the former Chief Technology Officer ("CTO") in the amount of $nil (2023 - $nil, 2022 - $59,075).

13. Related party transactions (continued)

f) Consulting fees were paid to a private entity controlled by the spouse of the Company's CEO in the amount of $nil (2023 - $nil; 2022 - $3,512).

g) Directors' fees were paid or accrued to the directors of the Company in the amount of $172,229 (2023 - $182,675; 2022 - $127,053). The amount includes director fees payment of $123,133 for the year ended December 31, 2024 (2023 - $133,967; 2022 - $68,617) to Anthony Giovinazzo, Chairman of the Company.

h) As at December 31, 2024, $11,120 (2023 - $6,805) was payable to directors of the Company, $7,705 (2023 - $14,631 (was payable or accrued to the former CFO)) was payable and accrued to the CFO of the Company for CFO services, $8,000 (2023 - $8,000) was payable and accrued to the CMO of the Company for consulting services, and $12,500 (2023 - $15,000) was payable and accrued to the CBO of the Company for consulting services. The balances are unsecured, non-interest bearing, and have no fixed terms of repayment.

i) Management and directors' key management compensation transactions for the years ended December 31, 2024, 2023, and 2022 are summarized as follows:

	Management Compensation	Directors' fees	Share-based payments	Total
	$	$	$	$
Year ended December 31, 2022				
Directors and officers	880,387	127,053	404,573	1,412,013
Year ended December 31, 2023				
Directors and officers	974,240	182,675	77,779	1,234,694
Year ended December 31, 2024				
Directors and officers	**815,935**	**172,229**	**85,680**	**1,073,845**

14. Income taxes

The income taxes shown in the consolidated statements of comprehensive loss differ from the amounts obtained by applying statutory rates to the loss before income taxes due to the following:

	2024	2023	2022
	$	$	$
Net loss for the year	(3,313,346)	(2,158,065)	(7,718,882)
Statutory tax rate	27%	27%	27%
Expected income tax recovery	**(895,000)**	**(583,000)**	**(2,084,000)**
Decrease to income tax recovery due to:			
Non-deductible permanent differences	(246,000)	45,000	131,000
Temporary differences	312,000	(25,000)	276,000
(Over) under provided in prior years	(1,099,000)	(559,000)	(552,000)
Change in tax assets not recognized	1,928,000	1,122,000	2,229,000
Income tax recovery	—	—	—

14. Income taxes (continued)

The significant components of the Company's deferred tax assets are as follows:

	December 31, 2024	December 31, 2023
	$	$
Share issuance costs	292,000	229,000
Cumulative eligible capital	95,000	117,000
Operating losses carried forward	6,706,000	4,819,000
Total deferred tax assets	7,093,000	5,165,000
Deferred tax assets not recognized	(7,093,000)	(5,165,000)
	—	—

(Expressed in U.S. Dollars)

The realization of income tax benefits related to these deferred potential tax deductions is not probable. Accordingly, no deferred income tax assets have been recognized for accounting purposes. The Company has Canadian non-capital losses carried forward of approximately CAD $36,039,000 that may be available for tax purposes. The losses expire as follows:

Expiry date	$
2032	44,000
2033	748,000
2034	325,000
2035	286,000
2036	365,000
2037	618,000
2038	1,089,000
2039	554,000
2040	1,116,000
2041	3,648,000
2042	12,628,000
2043	8,084,000
2044	6,534,000
Total	36,039,000

15. Financial instruments and risk management

The Company's financial instruments consist of cash, accounts receivable, accounts payable and accrued liabilities,lease obligation and derivative warrant liability. The fair values of cash and accounts payable and accrued liabilities and lease liability approximate their carrying values at December 31, 2024, due to their short-term nature.

The following table presents the Company's financial instruments, measured at fair value on the consolidated statements of financial position as at December 31, 2024 and 2023 and categorized into levels of the fair value hierarchy:

		December 31, 2024		December 31, 2023	
	Level	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
		$	$	$	$
FVTPL					
Derivative warrant liability	3	572,000	572,000	531,000	531,000

15. Financial instruments and risk management (continued)

There were no transfers for levels of change in the fair value measurements of financial instruments for the years ended December 31, 2024 and 2023.

Risk management is carried out by the Company's management team with guidance from the Board of Directors. The Company's risk exposures and their impact on the Company's financial instruments were as follows:

a) Credit risk

Credit risk is the risk of financial loss to the Company if a customer of counterparty to a financial instrument fails to meet its obligations. The Company's maximum exposure to credit risk at the financial position date under its financial instruments is summarized as follows:

	December 31, 2024	December 31, 2023
	$	$
Cash	2,473,649	3,447,665

All of the Company's cash is held with major financial institutions in Canada and management believes the exposure to credit risk with such institutions is minimal. The Company considers the risk of material loss to be significantly mitigated due to the financial strength of the major financial institutions where cash is held. The Company has no exposure to the ongoing banking crisis. The Company's maximum exposure to credit risk as at December 31, 2024 and 2023 is the carrying value of its financial assets.

b) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its obligations associated with financial liabilities. The Company has a planning and budgeting process in place by which it anticipates and determines the funds required to support normal operation requirements as well as the growth and development of its intellectual property portfolio.

The Company's financial assets are comprised of its cash, accounts receivable and the financial liabilities are comprised of its accounts payable and accrued liabilities, and lease liability.

The contractual maturities of these financial liabilities as at December 31, 2024 and 2023 are summarized below:

	Payments due by period as of December 31, 2024			
	Total	Less than 3 months	Between 3 months and 1 year	1-3 years
	$	$	$	$
Accounts payable and accrued liabilities	147,205	147,205	—	—
Lease liability	38,785	23,124	15,661	—
	185,990	170,329	15,661	—

15. Financial instruments and risk management (continued)

	Payments due by period as of December 31, 2023			
	Total	**Less than 3 months**	**Between 3 months and 1 year**	**1-3 years**
	$	**$**	**$**	**$**
Accounts payable and accrued liabilities	283,428	283,428	—	—
Lease liability	11,510	11,510	—	—
	294,938	294,938	—	—

c) Market risk

i) Interest Rate Risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company's bank accounts bear interest. Management believes that the credit risk concentration with respect to financial instruments included in cash is minimal.

ii) Foreign Currency Risk

As at December 31, 2024, the Company is exposed to currency risk on the following financial assets and liabilities denominated in Canadian Dollars ("CAD") and European Euro ("EUR"). The sensitivity of the Company's net earnings due to changes in the exchange rate between the CAD and EUR against the U.S. dollar is included in the table below in U.S. dollar equivalents:

	CAD	**EUR**	**Total**
	$	**$**	**$**
Cash	684,491	—	684,491
Accounts payable and accrued liabilities	(111,155)	—	(111,155)
Net exposure	573,336	—	573,336
Effect of +/- 10% change in currency	57,334	—	

The Company thoroughly examines the various financial instruments and risks to which it is exposed and assesses the impact and likelihood of those risks. These risks include foreign currency risk, interest rate risk, market risk, credit risk, and liquidity risk. Where material, these risks are reviewed and monitored by the Board of Directors

There have been no changes in any risk management policies since December 31, 2023.

16. Capital management

The Company defines capital that it manages as shareholders' equity. The Company manages its capital structure in order to have funds available to support its research and development and sustain the future development of the business. When managing capital, the Company's objective is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. Management adjusts the capital structure as necessary in order to support its activities.

Since inception, the Company's objective in managing capital is to ensure sufficient liquidity to finance its research and development activities, general and administrative expenses, expenses associated with intellectual property protection, and its overall capital expenditures. There were no changes during the year ended December 31, 2024. The Company is not exposed to external requirements by regulatory agencies regarding its capital.

17. Commitments

The Company has long-term arrangements with commitments that are not recognized as liabilities as at December 31, 2024 and December 31, 2023 are as follows:

a)Employment Agreements

	December 31, 2024	**December 31, 2023**
	$	**$**
Management services – officers	321,000	321,000

The President, CEO, and a director of the Company has a long-term employment agreement with the Company. The agreement has a termination clause whereby he is entitled to the equivalent of 12 times his then current monthly salary which, as of December 31, 2024 and 2023, equated to an annual salary of $321,000.

b)Payments

In the normal course of business, the Company has committed to payments totaling $323,000 (December 31, 2023 - $446,000) for activities related to its clinical trial, manufacturing, collaboration programs, and other regular business activities which are expected to occur over the next two years.

18. Segmented information

The Company operates in one reportable operating segment, being the development and commercialization of therapies to treat gout and progressive kidney disease. As the operations comprise a single reporting segment, amounts disclosed also represent segment amounts. All long-term assets of the Company are located in Canada.

19. Subsequent events

Subsequent to the year ended December 31, 2024, the Company:

a) issued 233,000 common shares for exercise of pre-funded warrants; and
b) issued 73,871 common shares in an at-the-market offering for net proceeds of $109,666.

XORTX THERAPEUTICS INC.
Management Discussion and Analysis
For the year ended December 31, 2024

This management discussion and analysis of financial position and results of operations **(“MD&A”)** is prepared as at March 21, 2025 and should be read in conjunction with the audited consolidated financial statements and related notes thereto of XORTX Therapeutics Inc. (the **“Company”** or **“XORTX”**) for the year ended December 31, 2024, which have been prepared in accordance with IFRS Accounting Standards (**“IFRS”**) as issued by the International Accounting Standards Board (**“IASB”**) and interpretations of the International Financial Reporting Interpretations Committee (**“IFRIC”**). All dollar figures in this MD&A are expressed in US dollars unless stated otherwise.

In this discussion, unless the context requires otherwise, references to “we” or “our” are references to XORTX Therapeutics Inc.

CORPORATE INFORMATION

XORTX was incorporated under the laws of Alberta, Canada on August 24, 2012, under the name ReVasCor Inc. and 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, the Company changed its name to “XORTX Therapeutics Inc.” and XORTX Pharma Corp. became a wholly-owned subsidiary. The Company’s operations and mailing address is 3710 – 33rd Street NW, Calgary, Alberta, Canada T2L 2M1 and its registered address is located at 250 Howe Street, 20th Floor, Vancouver, British Columbia, V6C 3R8. The Company’s shares trade on the TSX Venture Exchange (“**TSXV**”) and on the Nasdaq Stock Exchange (“**Nasdaq**”) under the symbol “XRTX”, and on the Börse Frankfurt under the symbol “ANU”.

FORWARD LOOKING STATEMENTS

This MD&A contains certain statements, other than statements of historical fact that are forward-looking statements, which reflect the current view of the Company with respect to future events including corporate developments, financial performance and general economic conditions which may affect the Company.

All statements other than statements of historical fact contained in this MD&A, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward- looking statements include, among other things, statements about:

- our ability to obtain additional financing;
- the accuracy of our estimates regarding expenses, costs associated with clinical trials, regulatory and commercial activities, 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 ADPKD, and any other product candidates we may develop, and the labeling under any approval we may obtain;
- regulatory approvals and other regulatory developments in the United States and other countries;

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

XORTX relies on certain key expectations and assumptions in making the forecasts, projections, predictions or estimations set out in forward-looking information. These factors and assumptions are based on information available at the time that the forward-looking information is provided. These include, but are not limited to, expectations and assumptions concerning:

- the availability of capital on acceptable terms to fund planned expenditures;
- prevailing regulatory, tax and environmental laws and regulations; and
- the ability to secure necessary personnel, equipment and services.

Undue reliance should not be placed on forward-looking information because a number of risks and factors may cause actual results to differ materially from those set out in such forward-looking information. These include:

- the availability of capital on acceptable terms;
- incorrect assessments of the value of acquisitions, licenses and development programs;
- technical, manufacturing and processing problems;
- actions by governmental authorities, including increases in taxes;
- fluctuations in foreign exchange, currency, or interest rates and stock market volatility;
- failure to realize the anticipated benefits from licenses or acquisitions;
- the other factors specifically identified as risk factors in this MD&A; and
- potential labour unrest.

Readers are cautioned that the foregoing list of factors should not be construed as exhaustive. Further information relating to risks is included in this MD&A under Risks Related to the Business.

Except as may be required by applicable law or stock exchange regulation, XORTX undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events. Accordingly, readers should not place undue reliance on forward-looking statements. If XORTX does update one or more forward-looking statements, no inference should be drawn that additional updates will be made with respect to those or other forward-looking statements. Additional information relating to the Company is available by accessing the SEDAR+ website at www.sedarplus.ca.

BUSINESS OVERVIEW

XORTX is a late-stage clinical pharmaceutical company, focused on developing and potentially commercializing innovative 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.

Our focus is on developing unique therapeutic products to:

1/ treat gout patients, specifically those that have shown an intolerance to treatment with allopurinol;
2/ slow or reverse the progression of chronic kidney disease in patients at risk of end stage kidney failure;

3/ address the immediate need of individuals facing AKI associated with respiratory virus infection; and
4/ 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 product candidates that include new or existing drugs that can be adapted to address 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 formulation 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 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.

At XORTX, we aim to develop medications to improve the quality of life of patients with life threatening diseases by modulating aberrant purine and uric acid metabolism.

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. These are a complementary suite of therapeutic formulations and new chemical entities designed to provide unique solutions for acute and chronic disease. Our therapeutic platforms can be used alone, or in combination, with synergistic activity for a tailored approach to a variety of indications. We continue to leverage these therapeutic platforms to expand our pipeline of novel and next generation drug-based product candidates. We believe these 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. Some of these key advantages are:

Highly Modular and Customizable

Our platforms can be combined in multiple ways and 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 xanthine oxidase inhibitors ("**XOI**"), decreasing production of uric acid. We believe that our formulation technology allow 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 and then maintain purine metabolism at a low level during viral infection and target management of acute organ injury.

Fit-for-purpose

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 proprietary formulations to maximize their clinical potential and importantly their therapeutic effects, while minimizing their side effect profile.

Readily Scalable and Transferable

Our in-house small molecule and formulations design expertise can 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 in uric acid lowering agents, specifically in the development and use of xanthine oxidase inhibitors, has enabled the development of our therapeutic product candidates to treat the symptoms of, and potentially delay the progression of gout, ADPKD, AKI associated with respiratory virus infection, and T2DN.

We note that there is no guarantee that the United States Food and Drug Administration ('**FDA**") will approve our proposed uric acid lowering agent(s) and product candidates.

Product Candidate Pipeline

Our product candidates include XRx-026, XRx-008, XRx-101, and XRx-225. Our lead program, XRx-026 is designed to treat gout. This program has recently been elevated in status as it represents a near-term opportunity for marketing approval and revenue generation. The company believes that this program has sufficiently advanced through required chemistry, manufacturing pharmacology, toxicology and clinical work and is ready for NDA submission. XORTX has requested a Type C meeting with the FDA to review status prior to preparing to file an NDA. The Company's second program, XRx-008, has reported topline 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. Discussions with the FDA have confirmed that a single clinical trial with a one-year treatment period would be sufficient to make this program eligible for accelerated approval once the benefit of XORLO™ on decreasing the rate of decline of glomerular filtration rate was demonstrated. Our reported study XRX-OXY-101 supports 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.

Products

The Company's lead and most advanced development program, XRx-026, has a pending type C meeting request with the FDA, to review program status and confirm readiness for filing an NDA for marketing approval for gout patients. XORTX intends to advance this drug to marketing approval pending its FDA discussions. The company believes that peak net sales revenue for this product could reach more than $500 million USD 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 and/or associated co-morbidities including 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.

Patents

XORTX is the exclusive licensee of two U.S. granted patents with claims to the use of all uric acid lowering agents to treat insulin resistance and diabetic nephropathy. Counterparts for some of these patent applications have also been submitted in Europe. In both the US and Europe, XORTX wholly owns composition of matter patent applications for unique proprietary formulations of xanthine oxidase inhibitors – U.S. and European patents have been granted. 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.

OUR STRATEGY

The Company's goal is to apply our interdisciplinary expertise and pipeline-in-a-product strategy to further identify, develop and commercialize novel treatments in orphan and broader indications, with an initial focus on gout patients with significant unmet medical needs.

Our ability to implement our business strategy is subject to numerous risks. These risks include, among others (see "Risks Related to the Business"):

- we will require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to alter, delay, scale back, or cease our product development programs or operations;
- we have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future;
- we have not generated any revenue to date and may never be profitable;
- we have a limited number of product candidates, all of which are still in preclinical or clinical development, and we may fail to obtain regulatory approval or experience significant delays in doing so;
- our product candidates may have undesirable side effects that may delay or prevent marketing approval or, if approved, require them to be taken off the market, require them to include contraindications, warnings and precautions, limitations of use, or otherwise limit their sales;
- we may be unable to obtain regulatory approval for our product candidates under applicable regulatory requirements, and the denial or delay of any such approval would delay commercialization of our product candidates, if approved, and adversely impact our potential to generate revenue, our business and our results of operations;
- security breaches, loss of data and other disruptions could compromise sensitive information related to our business or protected health information or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation;
- our existing strategic partnerships are important to our business, and future strategic partnerships may also be important to us; if we are unable to maintain any of these strategic partnerships, or if these strategic partnerships are not successful, we may not realize the anticipated benefits of our strategic partnerships and our business could be adversely affected;
- we rely on third parties to monitor, support, conduct and oversee clinical trials of the product candidates that we are developing and, in some cases, to maintain regulatory files for those product candidates;
- our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties;
- our patents covering one or more of our products or product candidates could be found invalid or unenforceable if challenged;

- if we are unable to obtain, maintain and enforce patent and trade secret protection for our product candidates and related technology, our business could be materially harmed; and
- if we are unable to protect the confidentiality of our proprietary information, the value of our technology and products could be adversely affected.

Funding Requirements

The Company has not generated any revenue from product sales to date and does not expect to do so until such time as XORTX obtains regulatory approval for and commercializes one or more of our product candidates. As the Company is currently in clinical and preclinical stages of development, it will be some time before we expect to achieve commercialization of one or more of our products and it is uncertain that we ever will. We expect that we will continue to increase our operating expenses in connection with ongoing clinical trials and preclinical activities and the development of product candidates in our pipeline. We also expect to continue our strategic partnerships and we continue to seek additional collaboration opportunities. Further, we expect to continue our efforts to pursue additional grants and refundable tax credits from the Canadian government in order to further our research and development. Although it is difficult to predict our funding requirements, based upon our current operating plan, the Company anticipates that our existing cash and cash equivalents as of December 31, 2024, combined with the net proceeds of future financings, will enable us to advance the development of the XRx-026 and XRx-008 product candidates. XRx-026 will be the Company's focus short term, subject to available funds. The remaining XRx-008, XRx-101 and XRx-225 programs will not be advanced until sufficient additional funding is available. A small portion of the Company's resources will be allocated to intellectual property development. XORTX may also be eligible to receive certain research, development, and commercial milestone payments in the future. However, because the successful development of our product candidates and the achievement of milestones by our strategic partners are uncertain, we are unable to estimate the actual funds required to complete the research, development, and commercialization of our product candidates.

RECENT DEVELOPMENTS

Financing Activities

On October 18, 2024, the Company closed its registered direct offering and concurrent private placement for the purchase and sale of: (i) 320,000 common share units at a price of $1.85 per unit, with each unit consisting of one common share and one warrant to purchase one common share; and (ii) 490,810 pre-funded warrant units at a price of $1.8499 per pre-funded unit, with each pre-funded unit consisting of one pre-funded warrant to purchase one common share and one warrant to purchase one common share. Aggregate gross proceeds amounted to $1,499,993. The pre-funded warrants have an exercise price of $0.00001 per share, and will terminate once exercised in full. As at the date of this MD&A, all Pre-Funded Warrants have been exercised. The unit warrants are immediately exercisable at an exercise price of $2.18 and expire five years from issuance. The Company intends to use the net proceeds from the offering for working capital and general corporate purposes.

On February 15 and March 4, 2024, the Company closed two tranches of a non-brokered offering of 899,717 common share units at a price of CAD $3 per common share unit for aggregate gross proceeds of $2,000,549 (CAD $2,699,151). Each common share unit consisted of one common share and one warrant to purchase one common share at CAD $4.50 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 $6.00 for ten (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 $97,241 (CAD $132,551), representing a 5% finder's fee on certain subscriptions to qualified finders.

During the year ended December 31, 2024, the Company announced it had received TSXV approval to amend the terms of an aggregate of 1,125,210 outstanding common share purchase warrants as follows:

- 198,333 of the 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 $0.40 per share, adjusted to reflect the 2021 and 2023 Share Consolidations), the TSXV has approved an amended exercise price of $5.00.
- 270,211 of the warrants issued pursuant to the prospectus offering that closed on October 15, 2021 and which had an original exercise price of $42.93 per share ($4.77 per share, adjusted to reflect the 2023 Share Consolidation), the TSXV has approved an amended exercise price of $5.00.
- 101,111 of the warrants issued pursuant to the prospectus offering that closed on October 15, 2021 and which had an original exercise price of $10.53 per share ($1.17 per share, adjusted to reflect the 2023 Share Consolidation), the TSXV has approved an amended exercise price of $5.00.
- 555,555 of the warrants issued pursuant to the prospectus offering that closed on October 7, 2022 and which had an original exercise price of $10.98 per share ($1.22 per share, adjusted to reflect the 2023 Share Consolidation), the TSXV has approved an amended exercise price of $5.00.

If the volume weighted average price for the Company's common shares on TSXV is greater than $6.50 (approximately CAD $8.7562) per common share for a period of ten (10) consecutive trading days, then the Company may give notice to the Holders of the Warrant by way of a news release (the **"Notice"**) notifying such Holder that the warrants must be exercised within thirty (30) calendar days from the date of delivery of such Notice, otherwise the warrants will expire at 4:30 p.m. (Calgary time) on the 30th day after the date of delivery of the Notice (the **"Forced Conversion Right"**). Notwithstanding anything herein to the contrary, the Forced Conversion Right shall only be available to the Company on or after such time in which such forced exercise of the warrants will result in the issuance of free trading shares to the Holder.

Regulatory Advancements

On January 3, 2024, the Company announced the submission of a new patent for the treatment of chronic kidney disease (**"CKD"**). This patent is designed to protect new discoveries and strategies for the treatment of individuals with varied degrees of kidney function in the setting of CKD.

Changes in Officers and Directors

On March 27, 2024, the Company announced Dr. Ronald Perrone has joined the Company's Clinical Advisory Board.

On April 8, 2024, the Company announced the appointment of Ms. Abigail Jenkins to the Board of Directors.

On December 19, 2024, the Company announced the appointment of Dr. Michael Bumby as Chief Financial Officer to replace James Fairbairn.

FUTURE PLANS AND OUTLOOK

XORTX intends to grow its business by developing four programs, one focused on the treatment of gout and three on the treatment of kidney disease.

Recent independent peer-reviewed research that reported that genetic factors are linked to the over-expression of xanthine oxidase ("**XO**") and play a role in several diseases, including kidney disease, have provided the Company with the opportunity to develop diagnostics that identify specific genetic factors. These diagnostic tools alongside the Company's expertise at developing unique formulations of uric acid lowering agents and XO inhibitors will permit XORTX to tailor treatments to subpopulations of individuals that have common susceptibility or similar response to a particular drug. The Company will begin evaluating individuals as early as our planned registration clinical trial in patients with ADPKD providing XORTX with an opportunity to better understand the role these genetic factors play in progressive kidney disease.

In 2025, XORTX will focus on advancing its XRx-026 program to provide a therapeutic option to patients with allopurinol intolerant gout, by preparing an US FDA marketing approval application. The Company will also continue to advance a proprietary formulation of oxypurinol in the XRx-008 program for ADPKD and for efficacy testing during a Phase 2/3 "registration" clinical trial program – XRX-OXY-201. Discussions with the FDA and initiation of commercialization activities for XORLO ™ will be a priority as will advancing research in other kidney disease applications. To achieve these objectives, XORTX's action plan includes:

1. **Under the XRx-026 program, for treatment of gout, with a specific focus on allopurinol intolerant gout.** The Company has submitted a Type C meeting request with the FDA using the 505(b)2 development pathway. This request references the clinical development history including phase 1, 2 clinical study results, a prior approvable l letter for oxypurinol for gout. The meeting request presents comprehensive chemistry, pharmacology, toxicology and clinical data, and seeks confirmation that the company has completed development activities sufficient to warrant submission of an NDA for the treatment of gout. Pending the results of the Type C meeting, the Company anticipates initiating commercial supply of drug product, preparing an NDA for submission in fiscal 2025, entering discussions with potential marketing and selling partners in the US and in other major global markets, and preparing for commercialization in late 2026. (Estimated cost - $9 to $18 million.)

2. **Under the XRx-008 program, initiate the Pivotal Registration clinical trial named "XRX-OXY-201", to support an application for "Accelerated Approval" of a proprietary formulation of oxypurinol for individuals with ADPKD.** The XRX-OXY-201 Clinical Trial is a Phase 2b/3a, Multi-Centre, Double-Blind, Placebo Controlled, Randomized Withdrawal Design Study to Evaluate the Efficacy and Safety of a Novel Oxypurinol Formulation in Patients with Progressing Stage 3-4 ADPKD and Coexistent Hyperuricemia. The XRX-OXY-201 Clinical Trial will provide data for future "Accelerated Approval" NDA submissions to the FDA and MAA to the EMA. Subject to available financing, the XRX-OXY-201 Clinical Trial is planned to start in the first half of 2025 and enroll individuals with stage 3 or 4 ADPKD and presenting with chronically high uric acid. The objective of the XRX-OXY-201 Clinical Trial is to evaluate the ability of XORLO™ to slow rate of decline of glomerular filtration rate and/or the expansion of total kidney volume over a 12-month treatment period. An estimated 150 patients will be enrolled with 120 patients completing the study. (Estimated cost - $5 million to $30 million.)

3. **Under the XRx-008 program, prepare and communicate with the FDA and EMA regarding a second phase clinical trial named "XRX-OXY-301", a Full Registration trial in ADPKD.** The XRX-OXY-301 Clinical Trial is a Phase 3, Multi-Centre, Double-Blind, Placebo Controlled, Randomized Withdrawal Design Study to Evaluate the Efficacy and Safety of a Novel Oxypurinol Formulation in Patients with Progressing Stage 2-4 ADPKD and Coexistent Hyperuricemia with progressing stage 2, 3, or 4 kidney disease. The objective of the XRX-OXY-301 Clinical Trial is to evaluate the safety and effectiveness of XORLO™ for the XRx-008 program over a 24-month treatment period and obtain "full FDA marketing approval". The aim of the XRX-OXY-301 Clinical Trial is to characterize the ability of XORLO™ to potentially decrease the rate of decline of glomerular filtration rate. An estimated 300 patients will be enrolled. Subject to available financing, the XRX-OXY-301 Clinical Trial will not be scheduled or budgeted until XRX-OXY-201 is well underway, and may be subject to SPA review by FDA.

4. **Ongoing CMC Work.** In parallel with XRx-026 and the XRX-OXY-201 and XRX-OXY-301 Clinical Trials, XORTX will focus on scale-up, validation and stability testing of clinical drug product supplies of XORLO™ under the Company's granted IND, as well as building, validating and characterizing the stability of future clinical and commercial supplies. All development will be performed according to current GMP methodology. This work will be ongoing throughout 2025 to 2027. (Estimated cost of Clinical and Commercial drug supply - $5 million to $15 million.)

5. **Activities Related to Potential Commercial Launch.** In preparation for a possible commercial launch of the XORLO™ product associated with the XRx-026 development program. XORTX will conduct commercialization studies to support in-depth analysis of pricing and/or reimbursement, as well as evaluate product brand name selection and prepare related filings and conduct other launch preparation activities. In addition, similar work will be conducted for the XRx-008 program. This work will be ongoing throughout 2025 to 2027. (Estimated cost - $1 and $8 million.)

6. **Activities Related to European Registration.** XORTX will continue to work with and seek out guidance from the EMA to facilitate the path to potential approval of its XRx-026 and XRx-008 programs in the EU, including required clinical studies and reimbursement conditions. This work will be ongoing in 2025 through 2027 and will include continued pursuit of orphan drug status. In addition, XORTX is updating its information dossier to support an orphan drug designation from the EMA. (Estimated cost - $1 and $8 million.)

To achieve the above goals, XORTX will continue to pursue non-dilutive and dilutive funding and expand discussions to partner with major pharma / biotech companies with a global reach. XORTX will also increase financial and healthcare conference participation to further strengthen and expand its investor base.

SUMMARY OF QUARTERLY RESULTS

The following table sets forth unaudited quarterly results prepared by management for the eight previous quarters to December 31, 2024:

(unaudited)	2024 Q4	2024 Q3	2024 Q2	2024 Q1
Research and development	7,763	34,741	67,683	73,643
Consulting, wages and benefits	256,569	213,340	360,617	224,721
Directors' fees	42,467	40,144	46,371	39,161
Investor relations	181,897	236,603	502,265	439,405
Professional fees	26,487	195,527	274,635	120,210
General and administrative	72,006	81,765	92,258	74,920
Public company costs	24,845	30,823	56,053	29,683
Travel	13,581	-	16,728	1,607
Amortization of property and equipment	19,513	19,560	26,885	20,246
Amortization of intangible assets	6,631	6,389	6,164	11,886
Share based payments (1)	9,505	15,857	44,031	53,134
Loss/(gain) on derivative warrant liability	(870,349)	(244,000)	(1,645,548)	1,724,792
Foreign exchange (gain) loss	57,336	(14,715)	17,744	12,644
Interest income	(25,331)	(29,023)	(35,952)	(31,602)
Transaction costs on derivative warrant liability	54,545	-	-	224,486
Total (loss) income	122,535	(587,011)	170,066	(3,018,936)
(Loss) income per share	0.04	(0.20)	0.06	(1.24)

(unaudited)	2023 Q4	2023 Q3	2023 Q2	2023 Q1
Research and development	134,132	569,713	667,913	1,046,957
Consulting, wages and benefits	260,607	249,033	343,606	184,312
Directors' fees	45,495	46,469	43,204	44,238
Investor relations	278,934	236,934	223,334	180,288
Professional fees	56,363	102,617	214,425	140,858
General and administrative	93,567	90,140	90,299	101,499
Public company costs	29,630	45,822	47,371	47,361
Travel	31,771	14,267	68,765	55,384
Amortization of property and equipment	18,300	18,329	18,328	18,105
Amortization of intangible assets	6,060	(1,862)	13,692	48,742
Share based payments (1)	28,815	21,850	30,769	39,550
Gain on derivative warrant liability	(3,641,403)	-	-	-
Foreign exchange (gain) loss	8,320	3,668	3,494	(8,457)
Interest income	(49,815)	(63,614)	(73,312)	(66,802)
Transaction costs on derivative warrant liability	-	-	-	-
Total (loss) income	2,699,224	(1,333,366)	(1,691,888)	(1,832,035)
(Loss) income per share	1.38	(0.67)	(0.85)	(0.95)

Note: (1) Share based payments relate to the vesting of options over the period.

Three months ended December 31, 2024

The Company has a net income of $122,535 ($0.04 per share) for the three months ended December 31, 2024, compared to a net income of $2,699,224 ($1.38 per share) in the three months ended December 31, 2023.

Variances within the loss items are as follows:

Foreign Exchange loss - $57,336 (2023 – $8,320) – Foreign exchange loss $57,336 for the three months ended December 31, 2024 as compared to a loss of $8,320 in the prior year quarter primarily due to an unrealized translation loss on the U.S. dollar denominated cash balance in the current quarter as compared to unrealized translation loss on the CAD dollar denominated cash balance in the previous year quarter.

Investor relations - $181,897 (2023 - $278,934) – Investor relations expense decreased during the three months ended December 31, 2024 as the Company decreased its marketing and promotional activities.

Research and development - $7,763 (2023 - $134,132) – Research and development expenses decreased in the three months ended December 31, 2024 compared to the same period last year as detailed in the following table:

The table below presents combined research and development costs for XRx-026, XRx-008, XRx-101, and XRx-225 as the Company's projects are presently run concurrently and in combination.

	Q4 2024	Q4 2023	Change $	Change %
Clinical trials expenses [1]	(32,400)	5,675	(38,075)	(671%)
Manufacturing and related process expenses [2]	12,948	48,588	(35,640)	(73%)
Intellectual property expenses [3]	1,540	23,740	(22,200)	(94%)
External consultants' expenses [4]	25,675	56,129	(30,454)	(54%)
Total Research and development	$ 7,763	$ 134,132	$ (126,369)	(94%)

Notes:

(1) Clinical trials expenses include those costs associated with our clinical trial program which primarily included expenses related to the XRx-008 and XRx-101 projects. Included in clinical trials expenses are regulatory and consulting activities, contract research organization expenses, data management expenses, and other costs associated with our clinical trial program. Clinical trials expenses decreased mainly as the bridging pharmacokinetics study was mostly completed at the end of 2022 as compared to the comparative period when the XRX-OXY-101 PK Clinical Trial was starting as a new expense. In Q4 2024, a recovery of $32,452 was due to the write-off of pre-existing accounts payable.

(2) Manufacturing and related process expenses includes third party direct manufacturing costs, quality control testing and packaging costs. In Q4 2024, manufacturing costs primarily related to the Company's oxypurinol quality control and stability related costs.
(3) Intellectual property expenses include legal and filing fees associated with our patent portfolio.
(4) External consultants' expenses include third party consultants engaged in the activities of research and development, including chemistry, manufacturing, drug product development, regulatory, non-clinical and clinical study execution. The decrease in external consultants' expenses was attributed to decreased activity associated with completion of the XRX-OXY-101 PK Clinical Trial in Q4 2024 versus external consultants' expenses in Q4 2023 which were associated with the initiation of the Company's bridging study and a single registration trial associated to the XRx-008 program in individuals.

Gain on derivative warrant liability - $870,349 (2023 - $3,641,403) – During the three months ended December 31, 2024, the gain relates to a decrease in the Company's share price and a decrease in the remaining terms of the warrants which decrease the value of the derivative warrant liability. The warrants included in the units issued under the offering in Q1-2024 have an exercise price in CAD dollars and are considered a derivative financial liability as the exercise price is in a different currency than the functional currency of the entity. The warrants are initially recognized at fair value and subsequently remeasured at fair value with changes recognized through profit or loss.

Year ended December 31, 2024

The Company incurred a loss of $3,313,346 ($1.15 per share) for the year ended December 31, 2024, compared to a loss of $2,158,065 ($1.09 per share) in the year ended December 31, 2023.

Variances within the loss items are as follows:

Consulting, wages and benefits - $1,055,247 (2023 - $1,037,558) – Consulting expenses were broadly consistent from the same period last year.

General and administrative - $320,949 (2023 - $375,505) – General and administrative expenses decreased due to lower directors' and officers' insurance premiums.

Investor relations - $1,360,170 (2023 - $919,490) – Investor relations expense increased as the Company increased its marketing, and promotional efforts with additional investor relations consultants.

Professional fees - $616,859 (2023 - $514,263). Professional fees, which consists mainly of accounting, audit and legal fees, increased during the year ended December 31, 2024 as compared with the 2023 period, due to the Company's increased corporate activity in relation to financings and various compliance requirements for the SEC.

Research and development - $183,830 (2023 - $2,418,715) – Research and development expenses decreased in the year ended December 31, 2024, compared to the same period last year as detailed in the following table (future expenditures will depend upon financial resource available):

The table below presents combined research and development costs for XRx-026, XRx-008, XRx-101, and XRx-225 as the Company's projects are presently run concurrently and in combination.

	Q4 2024	Q4 2023	Change $	Change %
Clinical trials expenses [1]	(19,282)	1,057,307	(1,076,589)	(102%)
Manufacturing and related process expenses [2]	62,722	460,697	(397,975)	(86%)
Intellectual property expenses [3]	12,406	53,106	(40,700)	(77%)
Translational science expenses [4]	-	219,729	(219,729)	(100%)
External consultants' expenses [5]	127,984	627,876	(499,892)	(80%)
Total Research and development	$ 183,830	$ 2,418,715	$ (2,234,885)	(92%)

Notes:

(1) Clinical trials expenses include those costs associated with our clinical trial program which primarily included expenses related to the XRx-008 and XRx-101 projects. Included in clinical trials expenses are regulatory and consulting activities, contract research organization expenses, data management expenses, and other costs associated with our clinical trial program. Clinical trials expense decreased mainly as the bridging pharmacokinetics study was mostly completed at the end of 2022 as compared to the comparative period when the XRX-OXY-101 PK Clinical Trial was starting as a new expense. In Q4 2024, a recovery of $32,452 was due to the write-off of pre-existing accounts payable.

(2) Manufacturing and related process expenses includes third party direct manufacturing costs, quality control testing and packaging costs. In Q4 2024, manufacturing costs primarily related to the Company's oxypurinol quality control and stability related costs.

(3) Intellectual property expenses include legal and filing fees associated with our patent portfolio. No significant change in intellectual property expenses in Q4 2024 as compared to Q4 2023.

(4) Translational science expenses include various research studies conducted to expand our intellectual knowledge base related to oxypurinol and our proprietary formulations of oxypurinol, pharmacokinetic testing, non-clinical bioavailability studies, pharmacology and toxicology testing and identify potential licensing opportunities.

(5) External consultants' expenses include third party consultants engaged in the activities of research and development, including chemistry, manufacturing, drug product development, regulatory, non-clinical and clinical study execution. The decrease in external consultants' expenses was attributed to decreased activity associated with completion of the XRX-OXY-101 PK Clinical Trial in Q4 2024 versus external consultants' expenses in Q4 2023 which were associated with the initiation of the Company's bridging study and a single registration trial associated to the XRx-008 program in individuals.

Travel - $31,916 (2023 - $170,187) – Travel decreased during the year ended December 31, 2024, as compared with the 2023 period due to a decrease in travel to investor conferences.

Gain on derivative warrant liability - $1,035,105 (2023 - $3,641,403) – During the year ended December 31, 2024, the gain relates to a decrease in the Company's share price and a decrease in the remaining terms of the warrants which decrease the value of the derivative warrant liability. The warrants included in the units issued under the offering in Q1-2024 have an exercise price in CAD dollars and are considered a derivative financial liability as the exercise price is in a different currency than the functional currency of the entity. The warrants are initially recognized at fair value and subsequently remeasured at fair value with changes recognized through profit or loss.

Selected Annual Financial Information

The financial information reported herein has been prepared in accordance with IFRS. The Company uses the U.S. dollar as its presentation currency. The following table represents selected financial information for the Company's fiscal years 2024, 2023 and 2022.

Selected Statements of Comprehensive Loss Data

	2024	2023	2022
Revenue	$ Nil	$ Nil	$ Nil
Loss and comprehensive loss for the year	$ 3,313,346	$ 2,158,065	$ 7,847,027
Weighted average shares outstanding	2,878,514	1,981,734	1,479,914
Loss per share, basic and diluted	$ 1.15	$ 1.09	$ 5.22

Selected Statements of Financial Position Data

	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2022
Cash and cash equivalents	$ 2,473,649	$ 3,447,665	$ 10,434,196
Net working capital	$ 1,918,708	$ 3,242,845	$ 9,384,265
Total assets	$ 4,094,527	$ 5,467,964	$ 12,374,026

Long-term liabilities	$ Nil	$ Nil	$ 3,865,912

Comparison of Operations for the 2024 and 2023 Financial Years

	2024	2023	Change $	Change %
Research and development	183,830	2,418,715	(2,234,885)	(92%)
Consulting, wages and benefits	1,055,247	1,037,558	17,689	2%
Directors' fees	168,143	179,406	(11,263)	(6%)
Investor relations	1,360,170	919,490	440,680	48%
Professional fees	616,859	514,263	102,596	20%
General and administrative	320,949	375,505	(54,556)	(15%)
Public company costs	141,404	170,184	(28,780)	(17%)
Travel	31,916	170,187	(138,271)	(81%)
Amortization	117,274	139,694	(22,420)	(16%)
Share-based payments	122,527	120,984	1,543	1%
Gain on derivative warrant liability	(1,035,105)	(3,641,403)	2,606,298	(72%)
Foreign exchange	73,009	7,025	65,984	939%
Interest and other expenses	(121,908)	(253,543)	131,635	(52%)
Transaction costs on derivative warrant liability	279,031	-	279,031	100%
Loss for the Year	3,313,346	2,158,065	1,155,281	54%
Loss per Share	1.15	1.09	(0.06)	6%

Comparison of cash flows for the years ended December 31, 2024 and 2023

The Company realized a net cash outflow of $974,016 for the year ended December 31, 2024, compared to a cash outflow of $6,986,531 for the year ended December 31, 2023. The variances in the cash flow for the year ended December 31, 2024, compared to December 31, 2023 were as follows:

Operating activities – Cash used in operating activities for the year ended December 31, 2024, was $3,678,648 (2023 - $6,583,165). The cash used in operating activities was related to the net loss during the year and non-cash items.

Investing activities – Cash used in investing activities for the year ended December 31, 2024, was $38,924 (2023 - $46,363). The cash used was related to the acquisition of intangible assets and equipment during the periods.

Financing activities – Cash provided by financing activities in the year ended December 31, 2024, was $2,779,509 (2023 – cash used of $361,044). The cash provided was primarily related to i) the non-brokered offerings that took place in February and March raising gross proceeds of CAD $2,699,151 through the issuance of 899,717 units at a subscription price of CAD $3.00 per unit and to (ii) the October 2024 offering and private placement for the purchase and sale of 320,000 common shares 490,810 pre-funded warrant units for aggregate gross proceeds of $1,499,993.

LIQUIDITY AND CAPITAL RESOURCES

As at December 31, 2024, the Company had a cash balance of $2,473,649 and working capital of $1,918,708 as compared to a cash balance of $3,447,665 and working capital of $3,242,845 as at December 31, 2023. Working capital included a non-cash component related to derivative warrant liability of $572,000 (2023 - $531,000) if this non-cash amount was excluded, working capital would have been $2,490,708 (2023 - $3,773,845). During the year ended December 31, 2024, the Company (i) closed two offerings that consisted of 899,717 common share units at CAD $3.00 per unit for aggregate gross proceeds of CAD $2,699,151 and (ii) closed a direct offering and private placement for the purchase and sale of 320,000 common share units at $1.85 per unit and 490,810 pre-funded warrant units at $1.8499 per unit for aggregate gross proceeds of $1,499,993.

Although there is no certainty, management is of the opinion that additional funding for its projects and operations can be raised as needed. The Company is subject to a number of risks associated with the successful development of new products and their marketing and the conduct of its clinical studies and their results. The Company will have to finance its research and development activities and its clinical studies. To achieve the objectives in its business plan, the Company plans to raise the necessary capital and to generate revenues. It is anticipated that the products developed by the Company will require approval from the FDA and equivalent organizations in other countries before their sale can be authorized. If the Company is unsuccessful in obtaining adequate financing in the future, corporate initiatives may be affected or postponed. The Company's current cash burn is approximately $250,000 per month, however dependent on the timing of financing activities, expenditures will be adjusted to ensure a 12-month cash runway.

USE OF FINANCING PROCEEDS

The proceeds that the Company has used have been for funding operations and general corporate purposes, including further research and development and manufacture of active pharmaceutical ingredients and drug product to support clinical trials. The Company intends to continue to use the remaining net proceeds of the offering, together with existing cash, for funding operations and general corporate purposes, which may include further research and development, clinical trials, manufacture of active pharmaceutical ingredients and drug product to support clinical trials.

COMMITMENTS

The Company has long-term arrangements with commitments that are not recognized as liabilities as at December 31, 2024 and 2023 as follows:

Employment Agreements

	December 31, 2024	December 31, 2023
	$	$
Management services – officers	321,000	321,000

The President, CEO and a director of the Company has a long-term employment agreement with the Company. The agreement has a termination clause whereby he is entitled to the equivalent of 12 times his current monthly salary which, as of December 31, 2024 and 2023, equated to an annual salary of $321,000.

Payments

In the normal course of business, the Company has committed to payments totaling $323,000 (December 31, 2023 - $446,000) for activities related to its clinical trials, manufacturing, collaboration programs and other regular business activities which are expected to occur over the next two years.

OFF BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements.

TRANSACTIONS WITH RELATED PARTIES

All related party transactions were measured at fair value. All amounts due from/payable to related parties are unsecured, non-interest bearing and have no fixed terms of repayment.

During the year ended December 31, 2024, the Company incurred the following transactions with related parties:

a) Wages and benefits and professional fees were paid or accrued to Allen Davidoff, the Chief Executive Officer ("CEO"), in the amount of $391,655 (2023 - $337,794; 2022 - $369,494).

b) Fees were paid or accrued to Michael Bumby, the Chief Financial Officer ("CFO") of the Company in the amount of $6,515 and to 1282803 Ontario Inc., a company owned by James Fairbairn, the former Chief Financial Officer of $149,820 (2023 - $156,217; 2022 - $164,547 (paid or accrued to the former CFO)).

c) Research and development fees were paid or accrued to Haworth Biopharmaceutical, a company owned by Stephen Haworth, the Chief Medical Officer ("CMO") of the Company in the amount of $110,445 (2023 - $200,229; 2022 - $238,813).

d) Consulting fees were paid or accrued to Stacy Evans, the Chief Business Officer ("CBO") of the Company in the amount of $157,500 (2023 - $280,000; 2022 - $44,946).

e) Wages and benefits were paid or accrued to the former Chief Technology Officer ("CTO") in the amount of $nil (2023 - $nil, 2022 - $59,075)

f) Consulting fees were paid to a private entity controlled by the spouse of the Company's CEO in the amount of $nil (2023 - $nil; 2022 - $3,512).

g) Directors' fees were paid or accrued to the directors of the Company in the amount of $172,229 (2023 - $182,675; 2022 - $127,053). The amount includes payment of director fees of $123,133 for the year ended December 31, 2024 (2023 - $133,967; 2022 - $68,617) to Anthony Giovinazzo, Chairman of the Company.

h) As at December 31, 2024, $11,120 (2023 - $6,805) was payable to directors of the Company, $7,705 (2023 - $14,631 was payable or accrued to the former CFO) was payable and accrued to the CFO of the Company for CFO services, $8,000 (2023 - $8,000) was payable and accrued to the CMO of the Company for consulting services, and $12,500 (2023 - $15,000) was payable and accrued to the CBO of the Company for consulting services. The balances are unsecured, non-interest bearing, and have no fixed terms of repayment.

i) Management and directors' compensation transactions for the years ended December 31, 2024, 2023, and 2022 are summarized as follows:

	Management Compensation	Directors' fees	Share-based payments	Total
	$	$	$	$
Year ended December 31, 2022				
Directors and officers	880,387	127,053	404,573	1,412,013
Year ended December 31, 2023				
Directors and officers	974,240	182,675	77,779	1,234,898
Year ended December 31, 2024				
Directors and officers	**815,935**	**172,229**	**85,680**	**1,073,845**

FINANCIAL AND CAPITAL RISK MANAGEMENT

The Company's financial instruments consist of cash, accounts receivable, accounts payable and accrued liabilities,lease obligation and derivative warrant liability. The fair values of cash and accounts payable and accrued liabilities approximate their carrying values at December 31, 2024, due to their short-term nature.

The following table presents the Company's financial instruments, measured at fair value on the consolidated statements of financial position as at December 31, 2024 and 2023 and categorized into levels of the fair value hierarchy:

		December 31, 2024		December 31, 2023	
	Level	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
		$	$	$	$
FVTPL					

Derivative warrant liability	3	572,000	572,000	531,000	531,000

There were no transfers for levels of change in the fair value measurements of financial instruments for the years ended December 31, 2024 and 2023.

Risk management is carried out by the Company's management team with guidance from the Board of Directors. The Company's risk exposures and their impact on the Company's financial instruments were as follows:

a) Credit risk

Credit risk is the risk of financial loss to the Company if a customer of counterparty to a financial instrument fails to meet its obligations. The Company's maximum exposure to credit risk at the financial position date under its financial instruments is summarized as follows:

	December 31, 2024	December 31, 2023
	$	$
Cash	2,473,649	3,447,665

All of the Company's cash is held with major financial institutions in Canada and management believes the exposure to credit risk with such institutions is minimal. The Company considers the risk of material loss to be significantly mitigated due to the financial strength of the major financial institutions where cash is held. The Company's maximum exposure to credit risk as at December 31, 2024 and 2023 is the carrying value of its financial assets.

b) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its obligations associated with financial liabilities. The Company has a planning and budgeting process in place by which it anticipates and determines the funds required to support normal operation requirements as well as the growth and development of its intellectual property portfolio.

The Company's financial assets are comprised of its cash, accounts receivable and the financial liabilities are comprised of its accounts payable and accrued liabilities, and lease liability.

The contractual maturities of these financial liabilities as at December 31, 2024 and 2023 are summarized below:

	Payments due by period as of December 31, 2024			
	Total	Less than 3 months	Between 3 months and 1 year	1-3 years
	$	$	$	$
Accounts payable and accrued liabilities	147,205	147,205	-	-
Lease liability	38,785	23,124	15,661	-
	185,990	170,329	15,661	-

	Payments due by period as of December 31, 2023			
	Total	Less than 3 months	Between 3 months and 1 year	1-3 years
	$	$	$	$
Accounts payable and accrued liabilities	283,428	283,428	-	-
Lease liability	11,510	11,510	-	-
	294,938	294,938	-	-

c) Market risk

i) Interest Rate Risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company's bank accounts bear interest. Management believes that the credit risk concentration with respect to financial instruments included in cash is minimal.

ii) Foreign Currency Risk

As at December 31, 2024, the Company is exposed to currency risk on the following financial assets and liabilities denominated in CAD Dollars ("CAD"). The sensitivity of the Company's net earnings / (loss) due to changes in the exchange rate between the CAD and EUR against the U.S. dollar is included in the table below in U.S. dollar equivalents:

	CAD	EUR	Total
	$	$	$
Cash	684,491	-	684,491
Accounts payable and accrued liabilities	(111,155)	-	(111,155)
Net exposure	573,336	-	573,336
Effect of +/- 10% change in currency	57,334	-	

The Company thoroughly examines the various financial instruments and risks to which it is exposed and assesses the impact and likelihood of those risks. These risks include foreign currency risk, interest rate risk, market risk, credit risk, and liquidity risk. Where material, these risks are reviewed and monitored by the Board of Directors

There have been no changes in any risk management policies since December 31, 2023.

Capital Management

The Company defines capital that it manages as shareholders' equity. The Company manages its capital structure in order to have funds available to support its research and development and sustain the future development of the business. When managing capital, the Company's objective is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. Management adjusts the capital structure as necessary in order to support its activities.

The Company includes the following items in its managed capital as at the following periods:

Equity is comprised of:	**December 31, 2024**	**December 31 2023**
	$	**$**
Share capital	18,493,571	17,056,535
Reserves	6,039,078	5,468,257
Obligation to issue shares	24,746	24,746
Accumulated other comprehensive loss	(52,605)	(52,605)
Deficit	(21,168,253)	(17,854,907)

Since inception, the Company's objective in managing capital is to ensure sufficient liquidity to finance its research and development activities, general and administrative expenses, expenses associated with intellectual property protection and its overall capital expenditures. There were no changes during the year ended December 31, 2024. The Company is not exposed to external requirements by regulatory agencies regarding its capital.

OUTSTANDING SHARE DATA

The Company has an unlimited number of unauthorized common shares without par value.

Type of Security	**Common shares**
As of March 21, 2025	(number)
Issued and outstanding	3,788,246
Stock options	147,763
Share purchase warrants	2,881,035
Fully diluted shares outstanding	6,817,044

RISKS RELATED TO THE BUSINESS

An investment in the Company is speculative and involves a high degree of risk. Accordingly, prospective investors should carefully consider the specific risk factors set out below, in addition to the other information contained in this MD&A, before making any decision to invest in the Company. The Directors consider the following risks and other factors to be the most significant for potential investors in the Company, but the risks listed do not necessarily comprise all those associated with an investment in the Company and are not set out in any particular order of priority. Additional risks and uncertainties not currently known to the Directors may also have an adverse effect on the Company's business. If any of the following risks actually occur, the Company's business, financial condition, capital resources, results or future operations could be materially adversely affected. In such a case, the price of the common shares could decline, and investors may lose all or part of their investment.

For additional discussion on XORTX's risks, refer to the "Risk Factors" section of the Company's Annual Information Form and the Form 20-F for the year ended December 31, 2024, and the "Forward Looking Statements" section of this MD&A.

Speculative Nature of Investment Risk

An investment in the common shares of the Company carries a high degree of risk and should be considered as a speculative investment by purchasers. The Company has limited cash reserves, a limited operating history, has not paid dividends, and is unlikely to pay dividends in the immediate or near future. The Company is in the development stage. Operations are not yet sufficiently established such that the Company can mitigate the risks associated with planned activities.

Limited Operating History

The Company has no present prospect of generating revenue from the sale of products. The Company is therefore subject to many of the risks common to early-stage enterprises, including under-capitalization, cash shortages, limitations with respect to personnel, financial, and other resources and lack of revenues. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered in light of the early stage of operations.

Negative Cash Flow for the Foreseeable Future

The Company has a no history of earnings or cash flow from operations. The Company does not expect to generate material revenue or achieve self-sustaining operations for several years, if at all. To the extent that the Company has negative cash flow in future periods, the Company may need to allocate a portion of its cash reserves to fund such negative cash flow.

Reliance on Management

The success of the Company is dependent upon the ability, expertise, judgment, discretion and good faith of its management. While employment agreements are customarily used as a primary method of retaining the services of key employees, these agreements cannot assure the continued services of such employees. Any loss of the services of such individuals could have a material adverse effect on the Company's business, operating results or financial condition.

Clinical trials for potential drug candidates will be expensive and time consuming, and their outcomes uncertain.

Before the Company can obtain regulatory approval for the commercial sale of any drug candidate or attract major pharmaceutical companies with which to collaborate, it will be required to complete extensive clinical trials to demonstrate safety and efficacy. Clinical trials are expensive and are difficult to design and implement. The clinical trial process is also time-consuming and can often be subject to unexpected delays. The timing and completion of clinical trials may be subject to significant delays relating to various causes, including but not limited to: inability to manufacture or obtain sufficient quantities of materials for use in clinical trials; delays arising from collaborative partnerships; delays in obtaining regulatory approvals to commence a study, or government intervention to suspend or terminate a study; delays, suspensions or termination of clinical trials by the applicable institutional review board or independent ethics board responsible for overseeing the study to protect research subjects; delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites; slow rates of patient recruitment and enrollment; uncertain dosing issues; inability or unwillingness of medical investigators to follow clinical protocols; variability in the number and types of subjects available for each study and resulting difficulties in identifying and enrolling subjects who meet trial eligibility criteria; scheduling conflicts; difficulty in maintaining contact with subjects after treatment, resulting in incomplete data; unforeseen safety issues or side effects; lack of efficacy during clinical trials; reliance on clinical research organizations to efficiently and properly conduct clinical trials in accord with contracted arrangements and regulations, or other regulatory delays.

Risks Related to Food and Drug Administration (FDA) Approval

In the United States, the FDA regulates the approval of therapeutics and the FDA notification and approval process requires substantial time, effort and financial resources, and the Company cannot be certain that any approvals for its products will be granted on a timely basis, if at all. Foreign jurisdictions have similar government regulatory bodies and requirements that the Company must meet prior to selling products in those jurisdictions.

The Company must be considered in light of the risks, expenses, shifts, changes and difficulties frequently encountered with companies whose businesses are regulated by various federal, state and local governments. The health care, wellness, workers' compensation and similar companies are subject to a variety of regulatory requirements and the regulatory environment is ever changing particularly with recent legislation, the full impact of which is not yet understood as regulations have not been issued. Failure to follow applicable regulatory requirements will have a materially negative impact on the business of the Company. Furthermore, future changes in legislation cannot be predicted and could irreparably harm the business of the Company.

Intellectual Property Rights

The Company could be adversely affected if it does not adequately protect its intellectual property rights. The Company regards its marks, rights, and trade secrets and other intellectual property rights as critical to its success. To protect its investments and the Company's rights in these various intellectual properties, it may rely on a combination of patents, trademark and copyright law, trade secret protection and confidentiality agreements and other contractual arrangements with its employees, clients, strategic partners, acquisition targets and others to protect proprietary rights. There can be no assurance that the steps taken by the Company to protect proprietary rights will be adequate or that third parties will not infringe or misappropriate the Company's copyrights, trademarks and similar proprietary rights, or that the Company will be able to detect unauthorized use and take appropriate steps to enforce rights. In addition, although the Company believes that its proprietary rights do not infringe on the intellectual property rights of others, there can be no assurance that other parties will not assert infringement claims against the Company. Such claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

The Company will rely on trade secrets to protect technology where it does not believe patent protection is appropriate or obtainable. Trade secrets are difficult to protect. While commercially reasonable efforts to protect trade secrets will be used, strategic partners, employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose information to competitors.

If the Company is not able to defend patents or trade secrets, then it will not be able to exclude competitors from developing or marketing competing products, and the Company may not generate enough revenue from product sales to justify the cost of development of products and to achieve or maintain profitability.

The results of preclinical studies or initial clinical trials are not necessarily predictive of future favorable results.

Preclinical tests and initial clinical trials are primarily designed to test safety and to understand the side effects of drug candidates and to explore efficacy at various doses and schedules. Success in preclinical or animal studies and early clinical trials does not ensure that later large-scale efficacy trials will be successful nor does it predict final results. Favorable results in early trials may not be repeated in later ones.

Difficulty to Forecast

The Company must rely largely on its own market research to forecast sales as detailed forecasts are not generally obtainable from other sources at this early stage of the industry. A failure in the demand for its products to materialize as a result of competition, technological change or other factors could have a material adverse effect on the business, results of operations and financial condition of the Company.

Litigation

The Company may become party to litigation from time to time in the ordinary course of business which could adversely affect its business. Should any litigation in which the Company becomes involved be determined against the Company such a decision could adversely affect the Company's ability to continue operating and the market price for the Company's common shares. Even if the Company is involved in litigation and wins, litigation can redirect significant Company resources.

Commercial success of the Company will depend in part on not infringing upon the patents and proprietary rights of other parties and enforcing its own patents and proprietary rights against others. The research and development programs will be in highly competitive fields in which numerous third parties have issued patents and pending patent applications with claims closely related to the subject matter of the Company's programs. The Company is not currently aware of any litigation or other proceedings or claims by third parties that its technologies or methods infringe on their intellectual property.

While it is the practice of the Company to undertake pre-filing searches and analyses of developing technologies, it cannot guarantee that it has identified every patent or patent application that may be relevant to the research, development, or commercialization of its products. Moreover, it cannot assure that third parties will not assert valid, erroneous, or frivolous patent infringement claims.

Uninsurable Risks

The business of the Company may not be insurable or the insurance may not be purchased due to high cost. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the Company.

The market price of the Company's common shares may be subject to wide price fluctuations.

The market price of the Company's common shares may be subject to wide fluctuations in response to many factors, including variations in the operating results of the Company and its subsidiary, divergence in financial results from analysts' expectations, changes in earnings estimates by stock market analysts, changes in the business prospects for the Company and its subsidiary, general economic conditions, legislative changes, and other events and factors outside of the Company's control. In addition, stock markets have from time-to-time experienced extreme price and volume fluctuations, which, as well as general economic and political conditions, could adversely affect the market price for the Company's common shares.

Dividends

The Company has no earnings or dividend record and does not anticipate paying any dividends on the common shares in the foreseeable future.

Dilution

The financial risk of the Company's future activities will be borne to a significant degree by purchasers of the common shares. If the Company issues common shares from its treasury for financing purposes, control of the Company may change and purchasers may suffer additional dilution.

Rapid Technological Change

The business of the Company is subject to rapid technological changes. Failure to keep up with such changes may adversely affect the business of the Company. The Company is subject to the risks of companies operating in the medical and healthcare business. The market in which the Company competes is characterized by rapidly changing technology, evolving industry standards, frequent new service and product announcements, introductions and enhancements and changing customer demands. As a result, an investment in the stocks of the Company is highly speculative and is only suitable for investors who recognize the high risks involved and can afford a total loss of investment.

Risks Associated with Acquisitions

If appropriate opportunities present themselves, the Company may acquire businesses, technologies, services or products that the Company believes are strategic. The Company currently has no understandings, commitments or agreements with respect to any other material acquisition and no other material acquisition is currently being pursued. There can be no assurance that the Company will be able to identify, negotiate or finance future acquisitions successfully, or to integrate such acquisitions with its current business. The process of integrating an acquired business, technology, service or product into the Company may result in unforeseen operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of the Company's business. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities and/or amortization expenses related to goodwill and other intangible assets, which could materially adversely affect the Company's business, results of operations and financial condition. Any such future acquisitions of other businesses, technologies, services or products might require the Company to obtain additional equity or debt financing, which might not be available on terms favorable to the Company, or at all, and such financing, if available, might be dilutive.

Economic Environment

The Company's operations could be affected by the economic context should the unemployment level, interest rates or inflation reach levels that influence consumer trends and consequently, impact the Company's future sales and profitability.

Global Economy Risk

The ongoing economic problems and downturn of global capital markets has generally made the raising of capital by equity or debt financing more difficult. Access to financing has been negatively impacted by the ongoing global economic risks. As such, the Company is subject to liquidity risks in meeting its development and future operating cost requirements in instances where cash positions are unable to be maintained or appropriate financing is unavailable. These factors may impact the Company's ability to raise equity or obtain loans and other credit facilities in the future and on terms favorable to the Company. If uncertain market conditions persist, the Company's ability to raise capital could be jeopardized, which could have an adverse impact on the Company's operations and the trading price of the Company's Shares on the stock exchange.

International Conflict

International conflict and other geopolitical tensions and events, including war, military action, terrorism, trade disputes and international responses thereto have historically led to, and may in the future lead to, uncertainty or volatility in financial markets and supply chains. Russia's invasion of Ukraine in early 2022 has led to sanctions being levied against Russia by the international community and may result in additional sanctions or other international action, any of which may have a destabilizing effect on supply chain disruptions which may adversely affect the Company's business, financial condition and results of operations. The extent and duration of the current Russia-Ukraine conflict and related international action cannot be accurately predicted at this time and the effects of such conflict may magnify the impact of the other risks identified in this document, including those relating to global financial conditions. The situation is rapidly changing and unforeseeable impacts, including on our shareholders and counterparties on which we rely and transact, may materialize and may have an adverse effect on the Company's business, results of operations and financial condition.

Financial Risk Exposures

The Company may have financial risk exposure to varying degrees relating to the currency of each of the countries where it operates. The level of the financial risk exposure related to currency and exchange rate fluctuations will depend on the Company's ability to hedge such risk or use another protection mechanism.

Attracting and keeping senior management and key scientific personnel

The success of the Company depends on the continued ability to attract, retain, and motivate highly qualified management, clinical, and scientific personnel and to develop and maintain important relationships with leading academic institutions, companies, and thought leaders. Allen Davidoff, the Company's CEO, exercises significant control over the day-to-day affairs of the Company. The Company depends on Dr. Davidoff to engage with third parties and contractors to operate the business.

SEGMENT REPORTING

We view our operations and manage our business in one segment, which is the development and commercialization of biopharmaceuticals, initially focused on the treatment of gout and progressive kidney disease.

TREND INFORMATION

Other than as disclosed elsewhere we are not aware of any trends, uncertainties, demands, commitments, or events that are reasonably likely to have a material effect on our net revenues, income from continuing operations, profitability, liquidity or capital resources, or that would cause reported financial information not necessarily to be indicative of future operating results or financial condition.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

The Company's management is responsible for the presentation and preparation of the financial statements and the MD&A. The MD&A have been prepared in accordance with the requirements of securities regulators, including National Instrument 51-102 of the Canadian Securities Administrators.

The financial statements and information in the MD&A necessarily include amounts based on informed judgments and estimates of the expected effects of current events and transactions with appropriate consideration to materiality. In addition, in preparing the financial information, we must interpret the requirements described above, make determinations as to the relevancy of information included, and make estimates and assumptions that affect reported information. The MD&A also includes information regarding the impact of current transactions and events, sources of liquidity and capital resources, operating trends, risks and uncertainties. Actual results in the future may differ materially from our present assessment of this information because future events and circumstances may not occur as anticipated.

INTERNAL CONTROLS OVER FINANCIAL REPORTING

Disclosure controls and procedures

Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by the Company in its annual filings, interim filings, or other reports filed or submitted by it under securities legislation is recorded, processed, summarized, and reported within the time periods specified in the securities legislation and include controls and procedures designed to ensure that information required to be disclosed by the Company in its annual filings, interim filings or other reports filed or submitted under securities legislation is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Internal controls over financial reporting

Internal controls over financial reporting are designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS. Management is also responsible for the design of the Company's internal control over financial reporting in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

The Company's internal controls over financial reporting include policies and procedures that: pertain to the maintenance of records that, in reasonable detail accurately and fairly reflect the transactions and disposition of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with IFRS and that receipts and expenditures are being made only in accordance with the authorization of management and directors of the Company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

As at December 31, 2024, there has not been any material change to disclosure controls and procedures and internal controls over financial reporting for the period other than identification of a material weakness as discussed below. Management, including the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures and internal controls over financial reporting. As of December 31, 2024, the Chief Executive Officer and Chief Financial Officer have each concluded that the Company's disclosure controls and procedures and internal controls over financial reporting, as defined in National Instrument 52-109 – *Certification of Disclosure in Issuer's Annual and Interim Filings*, are not effective to achieve the purpose for which they have been designed because of a material weakness identified in the period end closing process and related management review controls. A material weakness is a deficiency or a combination of control deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis. Because of their inherent limitations, internal controls over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Furthermore, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. The control framework used to evaluate the effectiveness of the design and operation of the Company's internal controls over financial reporting is the 2013 Internal Control – *Integrated Framework* published by the Committee of Sponsoring Organizations of the Treadway Commission.

Changes in Internal Control Over Financial Reporting

There has been no change in the Company's design of internal controls and procedures over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting during the period covered by this MD&A, other than the identified material weakness discussed above.