XORTX THERAPEUTICS INC.

CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 and 2020

(Expressed in Canadian Dollars)

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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 the accompanying consolidated statements of financial position of XORTX Therapeutics Inc. (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of comprehensive loss, changes in shareholders' equity and cash flows for the years ended December 31, 2022, 2021 and 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years ended December 31, 2022, 2021 and 2020, in conformity with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board.

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.

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. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing a separate opinion on the critical audit matters or on the accounts or disclosures to which they relate. We determined that there are no critical audit matters.

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

Smythe LLP

Vancouver, Canada

March 29, 2023

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

	Note	December 31, 2022	December 31, 2021
		$	$
Assets			
Current			
Cash and cash equivalents	**5**	14,125,522	18,851,244
Accounts receivable		110,730	51,539
Prepaid expenses	**6**	514,160	1,270,556
		14,750,412	20,173,339
Non-current			
Contract payments	**7**	1,606,320	1,606,320
Intangible assets	**8**	270,668	256,243
Right-of-use asset	**9**	103,471	-
Equipment	**10**	22,058	-
Total Assets		**16,752,929**	**22,035,902**
Liabilities			
Current			
Accounts payable and accrued liabilities	**11,14**	1,960,745	700,999
Lease obligation – short-term	**12**	89,517	-
		2,050,262	700,999
Non-current			
Derivative warrant liability	**13(g)**	5,220,649	4,597,332
Lease obligation – long-term	**12**	15,588	-
Total Liabilities		**7,286,499**	**5,298,331**
Shareholders' Equity			
Share capital	**13**	20,606,705	20,009,154
Share-based payments, warrant reserve and other	**13**	8,003,076	6,386,459
Obligation to issue shares	**8(c)**	32,238	32,238
Deficit		(19,175,589)	(9,690,280)
Total Shareholders' Equity		**9,466,430**	**16,737,571**
Total Liabilities and Shareholders' Equity		**16,752,929**	**22,035,902**

Nature of Operations (Note 1)
Commitments (Note 18)

/s/ "Allen Davidoff"	*/s/ "Paul Van Damme"*
Director	Director

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

XORTX THERAPEUTICS INC.

Consolidated Statements of Comprehensive Loss
For the years ended December 31, 2022, 2021 and 2020
(Expressed in Canadian Dollars)

	Note	2022	2021	2020
		$	$	
Expenses				
Amortization	**8,9,10**	75,268	17,882	20,439
Consulting	**14**	309,156	724,272	102,880
Directors' fees	**14**	161,054	62,200	-
General and administrative		582,192	176,099	9,516
Investor relations		1,200,318	518,615	241,177
Listing fees		157,200	236,801	52,138
Professional fees	**14**	587,851	272,943	162,580
Research and development	**14**	8,807,992	853,124	277,455
Share-based payments	**13(e),14**	632,548	499,158	293,443
Travel		29,668	2,339	8,460
Wages and benefits	**14**	841,804	286,090	227,905
Loss before other items		(13,385,051)	(3,649,523)	(1,395,993)
Accretion		-	-	(846)
Fair value adjustment on derivative warrant liability	**13(f)**	4,470,276	3,299,768	-
Foreign exchange gain		549,637	326,751	2,961
Forgiveness of debt		-	-	91,014
Interest income (expense)		137,575	(5,598)	(12,666)
Impairment of intangible assets	**8**			(64,562)
Recovery of provision for patent acquisition	**8**	-	-	95,490
Transaction costs on derivative warrant liability	**13(b)**	(1,257,746)	(1,623,680)	-
Net loss and comprehensive loss for the year		(9,485,309)	(1,652,282)	(1,284,602)
Basic and diluted loss per common share		(0.71)	(0.17)	(0.19)
Weighted average number of common shares outstanding				
Basic and diluted		13,319,226	9,847,641	6,664,025

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, 2022, 2021 and 2020
(Expressed in Canadian Dollars)

	Number of common shares	Share capital	Reserves	Obligation to issue shares	Share subscriptions received in advance	Equity component on convertible loans	Deficit	Total
		$	$	$	$	$	$	$
Balance, December 31, 2019	5,359,444	5,863,872	607,803	-	70,000	5,202	(6,758,598)	(211,721)
					(70,000)			
Shares issued pursuant to private placement	1,555,314	2,465,023	91,297	-		-	-	2,486,320
Share issuance costs	-	(70,500)	11,066	-	-	-	-	(59,434)
Convertible loan debt forgiveness	-	-	-	-	-	(5,202)	5,202	-
Obligation to issue shares	-	-	-	32,238	-	-	-	32,238
Share-based payments	-	-	293,443	-	-	-	-	293,443
Net loss for the year	-	-	-	-	-	-	(1,284,602)	(1,284,602)
Balance, December 31, 2020	**6,914,758**	**8,258,395**	**1,003,609**	**32,238**	**-**		**(8,037,998)**	**1,256,244**
Shares issued pursuant to private placement	2,085,687	763,572	-	-	-	-	-	763,572
Shares issued pursuant to public listing	3,261,000	9,252,009	-	-	-	-	-	9,252,009
Reclassification of derivative warrant liability	-	-	4,460,000	-	-	-	-	4,460,000
Share issuance costs	-	(1,377,364)	521,251	-	-	-	-	(856,113)
Options exercised	51,106	149,172	(65,172)	-	-	-	-	84,000
Warrants exercised	651,583	2,888,370	(32,387)	-	-	-	-	2,855,983
Shares issued for services	25,553	75,000	-	-	-	-	-	75,000
Share-based payments	-	-	499,158	-	-	-	-	499,158
Net loss for the year	-	-	-	-	-	-	(1,652,282)	(1,652,282)
Balance, December 31, 2021	**12,989,687**	**20,009,154**	**6,386,459**	**32,238**	**-**	**-**	**(9,690,280)**	**16,737,571**
Shares issued pursuant to private placement	1,400,000	493,474	-	-	-	-	-	493,474
Pre-funded warrants issued	-	-	1,268,439					1,268,439
Share issuance costs	-	(121,852)	(58,528)	-	-	-	-	(180,380)
Pre-funded warrants exercised	641,000	225,929	(225,842)	-	-	-	-	87
Share-based payments	-	-	632,548	-	-	-	-	632,548
Net loss for the year	-	-	-	-	-	-	(9,485,309)	(9,485,309)
Balance, December 31, 2022	**15,030,687**	**20,606,705**	**8,003,076**	**32,238**	**-**	**-**	**(19,175,589)**	**9,466,430**

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, 2022, 2021 and 2020
(Expressed in Canadian Dollars)

	2022	2021	2020
	$	$	$
Cash provided by (used in):			
Operating activities			
Net loss for the year	(9,485,309)	(1,652,282)	(1,284,602)
Items not affecting cash:			
Accretion	-	-	846
Amortization	75,268	17,882	20,439
Fair value adjustment on derivative warrant liability	(4,470,276)	(3,299,768)	-
Fair value of finders' warrants allocated to derivative liability	189,230	-	-
Forgiveness of debt	-	-	(91,014)
Impairment of intangible assets	-	-	64,562
Lease Interest expense	5,024	-	-
Recovery of provision for patent acquisition	-	-	(95,490)
Share-based payments	632,548	499,158	293,443
Shares issued for services	-	75,000	-
Unrealized foreign exchange (gain)	(881,468)	(325,741)	1,201
Changes in non-cash operating assets and liabilities:			
Accounts receivable	(59,191)	(37,188)	-
Prepaid expenses	762,798	(1,006,357)	(42,998)
Accounts payable and accrued liabilities	1,263,174	(333,214)	405,212
	(11,968,202)	(6,062,510)	(728,401)
Investing activities			
Acquisition of intangible assets	(34,237)	(39,809)	(14,350)
Acquisition of equipment	(25,779)	-	-
	(60,016)	(39,809)	(14,350)
Financing activities			
Proceeds from issuance of equity instruments	6,855,506	22,798,581	900,000
Cash share issuance costs	(369,608)	(856,113)	(44,592)
Options exercised	-	84,000	-
Pre-funded warrants and warrants exercised	87	2,430,083	-
Payment of lease obligation	(55,125)	-	-
	6,430,860	24,456,551	855,408
Effect of foreign exchange (gain) on cash and cash equivalents	871,636	325,741	-
(Decrease) increase in cash and cash equivalents	(4,725,722)	18,679,973	112,657
Cash and cash equivalents, beginning of year	18,851,244	171,271	58,614
Cash and cash equivalents, end of year	14,125,522	18,851,244	171,271
Supplemental Cash Flow and Non-Cash Investing and Financing Activities Disclosure			
Recognition of derivative warrant liabilities	-	12,783,000	-
Fair value of agent's warrants	254,684	-	-
Derivative warrant liability reclassified to reserves	-	4,460,000	-
Derivative warrant liability reclassified to share capital on exercise of warrants	-	425,900	-
Recognition of right-of-use asset	155,206	-	-
Transfer of funds held in trust	-	-	70,000
Shares issued for deposit	-	-	1,606,320
Shares issued to settle debt	-	-	50,000
Obligation to issue shares	-	-	32,238
Application of deposits against accounts payable	-	-	436,240

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

1. Nature of operations

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 progressive kidney disease modulated by aberrant purine and uric acid metabolism in orphan disease indications such as autosomal dominant polycystic kidney disease, and larger, more prevalent type 2 diabetic nephropathy, as well as acute kidney injury associated with respiratory virus infection. The Company's current focus is on developing products to slow and/or reverse the progression of kidney disease in patients at risk of end stage kidney failure.

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.

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak adversely affected workforces, economies, and financial markets globally. To date, COVID-19 has had little impact on the Company's operations. The extent to which the COVID-19 pandemic may impact our business and clinical trials will depend on future developments. Although it is difficult for the Company to accurately predict the extent to which it might be so affected, the Company will continue to monitor all developments regarding COVID-19 on an ongoing basis.

2. Basis of preparation

Statement of Compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting 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.

2. Basis of preparation (continued)

Basis of Measurement and Presentation (continued)

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 29, 2023.

3. 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, 2022:

	Classification
Cash and cash equivalents	FVTPL
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 less any impairment.

3. Accounting policies (continued)

Financial Instruments (continued)

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.

b) 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 and cash equivalents

Cash and cash equivalents 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. 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. 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 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 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 the consolidated statement of comprehensive 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. Derivatives are accounted for at fair value with changes in fair value recorded in profit or loss. In accordance with IAS 32 Financial Instrument: 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 liabilities 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 outlay of any cash by 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 13(f).

Share-based payments

The Company has a stock option plan that is described in Note 13 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. The offset to the recorded expense is to reserve.

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. 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 issue 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 both 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 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 Company's presentation currency is the Canadian dollar. The functional currency of the Company and its subsidiary is the Canadian dollar. Foreign currency transactions are translated into Canadian 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.

3. Accounting policies (continued)

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 enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

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.

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 on the date they are granted. Warrant liabilities are accounted for as derivative liabilities as the proceeds from exercise are not fixed given they are denominated in USD. 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, volatility and dividend yield and making assumptions about them.

The assumptions and models used for estimating fair value for share-based payment transactions and warrant liabilities are disclosed in Note 13.

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. During the year ended December 31, 2022, management assessed that the future regulatory and clinical trial programs would not be completed within 12 months from period end and therefore reclassified contract payments as a non-current asset.

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.

4. Critical accounting judgments and estimates (Continued)

Determination of functional currency
In concluding that the Canadian 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, 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, 2022.

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.

(Expressed in Canadian Dollars)

5. Cash and cash equivalents

The Company's cash and cash equivalents consist of cash held of $5,178,223 (2021 - $18,851,244) and redeemable interest-bearing deposits with the Company's bank totaling $8,947,299 (2021 - $nil). The current annual interest rate earned on these deposits is 3.90% (2021 - 0%).

6. Prepaid expenses

The Company's prepaid expenses relate to the following:

	December 31, 2022	December 31, 2021
	$	$
Research and development	-	714,716
Insurance	322,842	441,388
Investor relations conferences and services	89,804	60,254
Consulting	16,667	50,000
Administrative services	84,847	4,198
	514,160	1,270,556

7. Contract payments

During the year ended December 31, 2020, the Company entered into an agreement with Prevail InfoWorks Inc. to provide regulatory and clinical trial services. As part of the agreement, the Company paid $1,606,320 through the issuance of units in the private placement (US$1,200,000) to be applied to future regulatory and clinical trial programs. The 977,318 units issued were measured by reference to their fair value on the issuance date, equal to $1.64 per unit in a concurrent private placement.

8. Intangible assets

Cost	**Total**
	$
Balance, December 31, 2020	325,182
Additions	39,809
Balance, December 31, 2021	364,991
Additions	34,237
Balance, December 31, 2022	**399,228**

Accumulated amortization	**Total**
	$
Balance, December 31, 2020	90,866
Amortization	17,882
Balance, December 31, 2021	108,748
Amortization	19,812
Balance, December 31, 2022	**128,560**

Carrying values	**Total**
	$
At December 31, 2021	256,243
At December 31, 2022	**270,668**

8. Intangible assets (continued)

The Company has licensed intellectual property from various third parties. Annually costs incurred to prosecute patents related to the Company's intellectual property is also capitalized. The intangible assets are as described below:

a) The Company has licensed from a third party (the "Licensor"), under 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 $42,460 (US$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.

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 issued 143,100 common shares at $0.35 per common share for a total instalment price of $50,400. The Company also had the option to pay the Vendors an additional US$75,000 to purchase the patents which was set up as a provision in the year ended December 31, 2018.

During the year ended December 31, 2020, the Company determined that it was no longer feasible to complete the purchase and as such, indicators of impairment existed leading to a test of recoverable amount of the license, which resulted in an impairment loss of $64,562. As this valuation technique requires management's judgment and estimates of the recoverable amount, it is classified within level 3 of the fair value hierarchy. During the year ended December 31, 2020, the purchase provision was reversed resulting in a gain of $95,490 on recovery of provision.

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.

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 certain intellectual property related to the use of all uric acid lowering agents to treat insulin resistance. The Company has paid or is obligated to pay UFRF the following:

i) An annual license fee of US$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, 2022. Remaining shares to be issued are included in obligation to issue shares);
iv) Milestone payments of US$500,000 upon receipt of FDA approval to market licensed product in the United States of America and US$100,000 upon receipt of regulatory approval to market each licensed product in each of the other jurisdictions;

(Expressed in Canadian Dollars)

8. Intangible assets (continued)

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 US$100,000 per year; 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.

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

9. Right-of-use asset

The Company entered into an office lease (note 12) during the year ended December 31, 2022 for which a right-of-use asset was recognized. The carrying value of the right-of-use asset is as follows:

Cost	**Total**
	$
Balance, December 31, 2021 and 2020	-
Additions	155,206
Balance, December 31, 2022	**155,206**

Accumulated amortization	**Total**
	$
Balance, December 31, 2021 and 2020	-
Amortization	51,735
Balance, December 31, 2022	**51,735**

Carrying values	**Total**
	$
At December 31, 2021 and 2020	-
At December 31, 2022	**103,471**

10. Equipment

Cost	**Total**
	$
Balance, December 31, 2021	-
Additions	25,779
Balance, December 31, 2022	**25,779**

Accumulated amortization	**Total**
	$
Balance, December 31, 2021 and 2020	-
Amortization	3,721
Balance, December 31, 2022	**3,721**

Carrying values	**Total**
	$
At December 31, 2021 and 2020	-
At December 31, 2022	**22,058**

(Expressed in Canadian Dollars)

11. Accounts payable and accrued liabilities

	December 31, 2022	December 31, 2021
	$	$
Trade payables	1,758,486	410,701
Accrued liabilities	202,259	290,298
Total	1,960,745	700,999

12. Lease obligation

The Company entered into an office lease during the year ended December 31, 2022. A reconciliation of the outstanding lease obligation as at December 31, 2022 is as follows:

	$
Balance, December 31, 2021	-
Additions	155,206
Lease payments	(55,125)
Interest expense	5,024
Balance, December 31, 2022	**105,105**

Total lease obligations	105,105
Less: current portion	(89,517)
Non-current portion	15,588

The office lease requires monthly payments of $7,875 and an end date of February 29, 2024. The right-of-use asset and lease obligation were measured at the present value of the lease payments and discounted using an incremental borrowing rate of 7.71%.

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

	$
2023	94,500
2024	15,750
Total minimum lease payments	110,250
Less: imputed interest	(5,145)
Total present value of minimum lease payments	105,105
Less: current portion	(89,517)
Non-current portion	15,588

13. Share capital and reserves

a) Authorized and issued

Unlimited common shares with no par value – 15,030,687 issued as at December 31, 2022 (2021 - 12,989,687).

b) Issuances

Year ended December 31, 2022:

On October 7, 2022, the Company closed a private placement of: (i) 1,400,000 common share units ("Common Share Units") at a price of US$1.00 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) 3,600,000 pre-funded warrant units (“Pre-Funded Units”) at a price of US$0.9999 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 $6,855,506 (US$4,999,640). The Pre-Funded Warrants have an exercise price of US$0.0001 per share, and will terminate once exercised in full. The Warrants are exercisable at an exercise price of US$1.22 per share expiring five years from the date of issuance.

The proceeds were allocated $5,093,593 to the derivative warrant liability (Note 13(g)) and the residual amounts of $493,474 and $1,268,439 were allocated to common shares and pre-funded warrants respectively.

In connection with the private placement, the Company incurred issuance costs of $1,438,127 and issued 250,000 finders’ warrants with a fair value of $254,684. The costs were allocated between common shares and derivative warrant liability in proportion to their initial carrying amounts with $435,065 recorded as a reduction of equity and $1,257,746 recorded as transaction costs on derivative warrant liability and pre-funded warrants.

On December 29, 2022, the Company issued 641,000 common shares for the exercise of Pre-Funded Warrants at US$0.0001 per share in the amount of $87 (US$64). An amount of $225,842 was transferred from reserves to share capital as a result.

Year ended December 31, 2021:

On February 9, 2021, the Company closed a private placement with the issuance of 2,085,687 units at a subscription price of $2.935 per unit for gross proceeds of $6,121,572. Each unit comprised one common share and one common share purchase warrant. Each warrant entitles the holder, on exercise, to purchase one additional common share in the capital of the Company, at a price of $4.70 for a period of five years from the issuance of the units, provided, however, that, if, at any time following the expiry of the statutory four month hold period, the closing price of the common shares is greater than $14.09 for 10 or more consecutive trading days, the warrants will be accelerated upon notice and the warrants will expire on the 30th calendar day following the date of such notice. In addition, the Warrants were subject to typical anti-dilution provisions and a ratchet provision that provided for an adjustment in the exercise price should the Company issue or sell common shares or securities convertible into common shares at a price (or conversion price, as applicable) less than the exercise price such that the exercise price would be amended to match such lower price.

The proceeds were allocated $5,358,000 to the derivative warrant liability (Note 13(g)) and the residual $763,572 was allocated to common shares.

13. Share capital and reserves (continued)

b) Issuances (continued)

In connection with the private placement, the Company paid $171,347 in cash commissions, incurred additional issuance costs of $7,897 and issued 58,288 finders' warrants with a fair value of $150,000 (Note 13(e)). Each finders' warrant is exercisable into one common share at a price of $4.70 and having the same expiry, acceleration and anti-dilution provisions as the warrants included in the private placement. The costs were allocated between common shares and derivative warrant liability in proportion to their initial carrying amounts with $41,068 recorded as a reduction of equity and $287,946 recorded as transaction costs on derivative warrant liability.

On October 15, 2021, the Company listed its common shares on the Nasdaq Stock Market ("Nasdaq") under the symbol "XRTX" and closed an underwritten public offering of 2,906,000 units (the "US IPO Offering"), with each unit consisting of one common share, no par value, and one warrant to purchase one common share at a public offering price of US$4.13 per Unit, for gross proceeds of $14,851,850 (US$12,001,780). The proceeds were allocated $7,425,000 to the derivative warrant liability (Note 13(g)) and the residual $7,426,850 was allocated to common shares.

The warrants have an initial exercise price of US$4.77 per share and have a term of five years. In addition, the Company granted the underwriters a 45-day option to purchase up to an additional 435,900 common shares and/or warrants to purchase up to an additional 435,900 common shares at the US IPO Offering price less the underwriting discounts. On October 15, 2021, the underwriter exercised its option to purchase additional warrants to purchase up to an additional 435,900 common shares.

On November 8, 2021, the underwriter partially exercised its 45-day option for 355,000 common shares at US$4.13 per share, resulting in additional gross proceeds to the Company of $1,825,159 (US$1,466,150) which increased the US IPO Offering to 3,261,000 common shares and 3,341,900 warrants.

In connection with the US IPO Offering, the Company incurred issuance costs of $2,300,549 and issued 145,300 finders' warrants with a fair value of $371,251. The costs were allocated between common shares and derivative warrant liability in proportion to their initial carrying amounts with $1,336,066 recorded as a reduction of equity and $1,335,734 recorded as transaction costs on derivative warrant liability.

The Company issued 51,106 common shares for the exercise of options in the amount of $84,000. A value of $65,172 was transferred from reserves to share capital as a result.

The Company issued 651,583 common shares for the exercise of warrants in the amount of $2,430,083. A value of $32,387 was transferred from reserves to share capital and a value of $425,900 was transferred from the derivative warrant liability to share capital as a result.

Pursuant to the terms of a consulting agreement, the Company issued 25,553 common shares with a fair value of $75,000 in exchange for services.

(Expressed in Canadian Dollars)

13. Share capital and reserves (continued)

c) Common Share Purchase Warrants

A summary of the changes in warrants for the years ended December 31, 2022 and 2021 is presented below:

	Number of Warrants	Weighted Average Exercise price
Balance, December 31, 2020	1,555,317	$2.94
Granted – February 9, 2021	2,085,687	$4.70
Granted – October 15, 2021	2,431,900	US$4.77
Granted – October 15, 2021	910,000	(1)US$1.17
Exercised	(640,012)	$3.34
Expired	(1,215,816)	$2.94
Balance, December 31, 2021	5,127,076	$5.58
Granted – October 7, 2022	5,000,000	US$1.22
Balance, December 31, 2022	**10,127,076**	**$3.34**

(1) On October 7, 2022, the Company entered into an agreement to reduce the exercise price of outstanding warrants to purchase up to 910,000 shares of common stock issued in the 2021 public offering and held by investors in this Offering from US$4.77 per share to US$1.17 per share.

At December 31, 2022, the weighted average contractual remaining life of the unexercised warrants was 4.15 years (2021 - 4.56 years).

The following table summarizes information on warrants outstanding at December 31, 2022:

Exercise Price	Number Outstanding	Expiry date	Remaining Contractual Life
$4.70	1,785,176	February 9, 2026	3.11 years
US$4.77	2,431,900	October 15, 2026	3.79 years
US$1.17	910,000	October 15, 2026	3.79 years
US$1.22	5,000,000	October 7, 2027	4.77 years

d) Pre-Funded Warrants

A summary of the changes in Pre-Funded Warrants for the years ended December 31, 2022 and 2021 is presented below:

	Number of Warrants	Weighted Average Exercise price
Balance, December 31, 2020 and 2021	-	-
Granted – October 7, 2022	3,600,000	US$0.0001
Exercised	(641,000)	US$0.0001
Balance, December 31, 2022	**2,959,000**	**US$0.0001**

The remaining 2,959,000 pre-funded warrants were exercised subsequent to year end.

(Expressed in Canadian Dollars)

13. Share capital and reserves (continued)

e) Finders' Warrants

A summary of the changes in finders' warrants for the years ended December 31, 2022 and 2021 is presented below:

	Number of Warrants	Weighted Average Exercise price
Balance, December 31, 2020	11,896	$1.64
Granted – February 9, 2021	58,288	$4.70
Granted – October 15, 2021	145,300	US$4.77
Exercised	(11,571)	$1.87
Expired	(1,193)	$1.64
Balance, December 31, 2021	202,720	$5.66
Granted – October 7, 2022 – finders' warrants	250,000	US$1.22
Balance, December 31, 2022	**452,720**	**$3.58**

At December 31, 2022, the weighted average contractual remaining life of the unexercised finders' warrant was 4.25 years (2021 - 4.60 years).

The following table summarizes information on finders' warrants outstanding at December 31, 2022:

Exercise Price	Number Outstanding	Expiry date	Remaining Contractual Life
$4.70	57,420	February 9, 2026	3.11 years
US$4.77	145,300	October 15, 2026	3.79 years
US$1.22	250,000	October 7, 2027	4.77 years

The fair value of the finders' warrants issued on February 9, 2021 was estimated at $150,000 on the date of grant using the Black-Scholes option pricing model with the following assumptions: expected life of 5.0 years; expected volatility of 100%; risk free rate of 0.58%; and expected dividend yield of 0%.

The fair value of the finders' warrants issued on October 15, 2021 was estimated at $371,251 on the date of grant using the Black-Scholes option pricing model with the following assumptions: expected life of 5.0 years; expected volatility of 100%; risk free rate of 1.5%; and expected dividend yield of 0%.

The fair value of the finders' warrants issued on October 7, 2022 was estimated at $254,684 on the date of grant using the Black-Scholes option pricing model with the following assumptions: expected life of 5.0 years; expected volatility of 100%; risk free rate of 3.66%; and expected dividend yield of 0%.

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 available historical volatility of the Company's share price or historical share price of comparable companies, 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.

(Expressed in Canadian Dollars)

13. Share capital and reserves (continued)

f) 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 fair value of stock options granted was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	2022	2021
Dividend yield	Nil	Nil
Annualized volatility	100%	100%
Risk-free interest rate	1.44%-3.32%	0.36% - 1.19%
Expected life	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 available historical volatility of the Company's share price or historical share price of comparable companies, 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.

The share-based payment expense recognized was $632,548 during the year ended December 31, 2022 (2021 - $499,158; 2020 - $293,493).

A summary of the changes in stock options for the years ended December 31, 2022 and 2021 is presented below:

	Number of Options	Weighted Average
Balance, December 31, 2020	464,207	$3.29
Granted – January 11, 2021	59,624	$3.29
Granted – May 12, 2021	42,588	$1.88
Granted – June 16, 2021	21,294	$1.76
Granted – July 14, 2021	63,882	$2.41
Granted – December 21, 2021	86,495	$2.54
Exercised	(51,106)	$1.64
Expired	(80,917)	$3.40
Balance, December 31, 2021	**606,067**	**$3.10**
Granted – January 12, 2022	127,500	$2.54
Granted – June 6, 2022	394,822	$1.60
Granted – November 25, 2022	70,000	$1.38
Expired	(44,070)	$3.19
Balance, December 31, 2022	**1,154,319**	**$2.42**
Vested and exercisable, December 31, 2022	**872,055**	**$2.58**

The weighted average contractual remaining life of the unexercised options was 3.43 years (2021 - 3.42 years).

(Expressed in Canadian Dollars)

13. Share capital and reserves (continued)

f) Stock Options (continued)

The following table summarizes information on stock options outstanding at December 31, 2022:

Exercise Price	Number Outstanding	Number Exercisable	Expiry Date	Remaining Contractual Life
$5.87	114,984	114,984	March 19, 2023	0.21 years
$5.87	21,294	21,294	November 5, 2023	0.85 years
$1.64	170,354	150,479	June 23, 2025	2.48 years
$2.82	12,776	12,776	August 27, 2025	2.66 years
$3.29	59,624	59,624	January 11, 2026	3.03 years
$1.88	21,294	21,294	May 12, 2026	3.36 years
$1.76	21,294	21,294	June 16, 2026	3.46 years
$2.41	63,882	30,166	July 14, 2026	3.54 years
$2.54	86,495	86,495	December 21, 2026	3.98 years
$2.54	117,500	35,902	January 12, 2027	4.04 years
$1.60	394,822	315,803	June 6, 2027	4.43 years
$1.38	70,000	1,944	November 25, 2027	4.90 years
	1,154,319	**872,055**		

g) Derivative warrant liability

During the year ended December 31, 2022, the Company issued warrants which are recorded as a derivative financial liability as the exercise price is denominated in a currency other than the functional currency of the Company and therefore may be settled other than by the exchange of a fixed amount of cash. The fair value of the warrants was estimated at $5,093,593 on the date of grant using the Black-Scholes option pricing model with the following assumptions: share price on date of grant of US$1.01; exercise price of the warrant of US$1.22; expected life of 5.0 years; expected volatility of 100%; risk free rate of 3.66%; and expected dividend yield of 0%.

During the year ended December 31, 2021, the Company issued 2,085,687 warrants pursuant to a financing in February 2021 as described above. The warrants contained a ratchet provision that provides for an adjustment in the exercise price if shares or securities convertible to shares are sold at a price lower than the exercise price. Therefore, since the warrants (not including compensation warrants) may be settled other than by the exchange of a fixed amount of cash, they meet the definition of a derivative financial liability.

The fair value of the warrants was estimated at $5,358,000 on the date of grant using the Black-Scholes option pricing model with the following assumptions: share price on date of grant of $3.64; exercise price of the warrant of $4.70; expected life of 5.0 years; expected volatility of 100%; risk free rate of 0.58%; and expected dividend yield of 0%.

During the year ended December 31, 2021, 640,012 of these warrants were exercised and a value of $425,900 was transferred from the derivative warrant liability to share capital as a result. On October 15, 2021, the ratchet provision expired when the Company listed its common shares on the Nasdaq. As a result of the expiry, the warrants would now be settled by a fixed amount of cash and were reclassified as equity instruments. The fair value of the derivative warrant liability as of October 15, 2021 of $4,460,000 was reclassified to reserves.

During the year ended December 31, 2021, the Company issued warrants pursuant to the US IPO Offering discussed above. These warrants were recorded as a derivative financial liability as the exercise price of the warrants is denominated in a currency other than the functional currency of the

(Expressed in Canadian Dollars)

13. Share capital and reserves (continued)

g) Derivative warrant liability (continued)

Company and therefore may be settled other than by the exchange of a fixed amount of cash. The fair value of the warrants was estimated at $7,425,000 on the date of grant using the Black-Scholes option pricing model with the following assumptions: share price on date of grant of US$3.02; exercise price of the warrant of US$4.77; expected life of 5.0 years; expected volatility of 100%; risk free rate of 1.50%; and expected dividend yield of 0%.

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

Balance at December 31, 2020	**$**	**-**
Warrants issued February 9, 2021		5,358,000
Warrants exercised		(425,900)
Fair value reclassified to reserves		(4,460,000)
Warrants issued October 15, 2021		7,425,000
Fair value adjustment		(3,299,768)
Balance at December 31, 2021	**$**	**4,597,332**
Warrants issued October 7, 2022		5,093,593
Fair value adjustment		(4,470,276)
Balance at December 31, 2022	**$**	**5,220,649**

Significant assumptions used in determining the fair value of the derivative warrant liabilities at December 31 2022 and 2021 are as follows:

		December 31, 2022		**December 31, 2021**
Share price	**$**	**0.81**	**$**	**2.05**
Risk-free interest rate		**3.55%**		**1.23%**
Dividend yield		**0%**		**0%**
Expected volatility		**100%**		**100%**
Remaining term (in years)		**3.8-4.8**		**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.

14. Related party transactions

All related party transactions were measured at the amount of consideration established and agreed to by the related parties. 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, 2022, 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"), Amar Keshri, the Chief Financial Officer ("CFO"), and David MacDonald, former Chief Technology Officer ("CTO") of the Company in the amount of $775,259 (2021 - $311,840; 2020 - $196,097).

(Expressed in Canadian Dollars)

14. Related party transactions (continued)

b) Professional fees were paid to 1282803 Ontario Inc., a company owned by Jim Fairbairn, a former CFO of the Company in the amount of $nil (2021 - $58,500; 2020 - $30,000).

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 $312,412 (2021 - $106,366; 2020 - $nil).

d) Consulting fees were paid or accrued to Stacy Evans, the Chief Business Officer ("CBO") of the Company in the amount of $115,644 (2021 - $nil; 2020 - $nil).

e) Consulting fees were paid to Bruce Rowlands and Allan Williams, former directors of the Company in the amount of $nil (2021 - $54,950; 2020 - $36,000).

f) Consulting fees were paid to a private entity controlled by the spouse of the Company's CEO in the amount of $4,750 (2021 - $nil; 2020 - $nil).

g) Directors' fees were paid or accrued to the directors of the Company in the amount of $161,054 (2021 - $62,200). The amount includes director fees payment of $90,871 for the year ended December 31, 2022 (2021 - $nil) to Anthony Giovinazzo, Chairman of the Company.

h) As at December 31, 2022, $20,200 (2021 - $81,104) was payable to directors of the Company, $39,069 (2021 - $25,000) was accrued to the CEO of the Company, for CEO services, $14,769 (2021 - $nil) was accrued to the CFO of the Company, for CFO services, $67,720 (2021 - $47,543) was payable and accrued to the CMO of the Company, for consulting services, and $33,860 (2021 - $nil) 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 compensation transactions for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	Short-term employee benefits	Directors' fees	Share-based payments	Total
	$	$	$	$
Year ended December 31, 2020				
Directors and officers	226,097	-	217,816	443,913
Year ended December 31, 2021				
Directors and officers	531,656	62,200	331,809	925,665
Year ended December 31, 2022				
Directors and officers	**1,153,439**	**161,054**	**519,741**	**1,840,103**

(Expressed in Canadian Dollars)

15. 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:

	2022	2021	2020
	$	$	$
Net loss for the year	(9,485,000)	(1,652,000)	(1,285,000)
Statutory tax rate	27%	27%	27%
Expected income tax recovery	(2,561,000)	(446,000)	(347,000)
Decrease to income tax recovery due to:			
Non-deductible permanent differences	172,000	135,000	79,000
Temporary differences	(361,000)	(516,000)	6,000
(Over) under provided in prior years	(722,000)	-	(278,000)
Change in tax assets not recognized	3,472,000	827,000	540,000
Income tax recovery	-	-	-

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

	December 31, 2022	December 31, 2021
	$	$
Share issuance costs	700,000	529,000
Cumulative eligible capital	112,000	105,000
Operating losses carried forward	4,975,000	1,652,000
Total deferred tax assets	5,787,000	2,286,000
Deferred tax assets not recognized	(5,787,000)	(2,286,000)
	-	-

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 $18,427,000 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	9,634,000
Total	18,427,000

(Expressed in Canadian Dollars)

16. Financial instruments and risk management

The Company's financial instruments consist of cash and cash equivalents, accounts payable and accrued liabilities, lease obligation, and derivative warrant liability. The fair values of cash and cash equivalents and accounts payable and accrued liabilities approximate their carrying values at December 31, 2022, due to their short-term nature. The lease liability is classified as level 2 in the fair value hierarchy as the fair value is determined based on market interest rates.

The following table presents the Company's financial instruments, measured at fair value on the consolidated statements of financial position as at December 31, 2022 and 2021 and categorized into levels of the fair value hierarchy:

		December 31, 2022		December 31, 2021	
	Level	**Carrying Value**	**Estimated Fair Value**	**Carrying Value**	**Estimated Fair Value**
		$	**$**	**$**	**$**
FVTPL					
Cash and cash equivalents	1	14,125,522	14,125,522	18,851,244	18,851,244
Financial liabilities at amortized cost					
Accounts payable and accrued liabilities	1	1,960,745	1,960,745	700,999	700,999
Lease liability	2	105,105	105,105	-	-
FVTPL					
Derivative warrant liability	3	5,220,649	5,220,649	4,597,332	4,597,332

There were no transfers for levels of change in the fair value measurements of financial instruments for the years ended December 31, 2022 and 2021.

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, 2022	**December 31, 2021**
	$	**$**
Cash and cash equivalents	14,125,522	18,851,244

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, 2022 and 2021 is the carrying value of its financial assets.

16. Financial instruments and risk management (continued)

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 and cash equivalents, and the financial liabilities are comprised of its accounts payable and accrued liabilities, lease liability and derivative warrant liability.

The contractual maturities of these financial liabilities as at December 31, 2022 and 2021 are summarized below:

	Payments due by period as of December 31, 2022			
	Total	Less than 3 months	Between 3 months and 1 year	1-3 years
	$	$	$	$
Accounts payable and accrued liabilities	1,960,745	1,960,745	-	-
Lease liability	105,105	22,379	67,138	15,588
	2,065,850	1,983,124	67,138	15,588

	Payments due by period as of December 31, 2021			
	Total	Less than 3 months	Between 3 months and 1 year	1-3 years
	$	$	$	$
Accounts payable and accrued liabilities	700,999	700,999	-	-
	700,999	700,999	-	-

b) 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 and cash equivalents is minimal.

ii) Foreign Currency Risk

As at December 31, 2022, the Company is exposed to currency risk on the following financial assets and liabilities denominated in US Dollars ("USD"), British Pounds ("GBP"), and European Euro ("EUR"). The sensitivity of the Company's net earnings due to changes in the exchange rate between the USD, GBP and EUR against the Canadian dollar is included in the table below in Canadian dollar equivalents:

(Expressed in Canadian Dollars)

16. Financial instruments and risk management (continued)

	USD	GBP	EUR	Total
	$	$	$	$
Cash	12,907,255	-	-	12,907,255
Accounts payable and accrued liabilities	(1,466,309)	(45,755)	(11,747)	(1,523,811)
Net exposure	11,440,946	(45,755)	(11,747)	11,383,444
Effect of +/- 10% change in currency	1,144,095	(4,576)	(1,175)	

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, 2022.

17. 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, 2022. The Company is not exposed to external requirements by regulatory agencies regarding its capital.

18. Commitments

The Company has long-term arrangements with commitments that are not recognized as liabilities as at December 31, 2022 and 2021 as follows:

a) Employment Agreements

	December 31, 2022	December 31, 2021
	$	$
Management services – officers	502,320	476,000

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, 2022 and 2021, equated to an annual salary of US$300,000.

The CFO 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, 2022 and 2021, equated to an annual salary of $192,000.

18. Commitments (continued)

b) Payments

In the normal course of business, the Company has committed to payments totaling $2,701,114 (2021 - $1,613,142) 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.

19. Segmented information

The Company operates in one reportable operating segment, being the development and commercialization of therapies to treat 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.