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 November 2021

Commission File Number: 001-40858

XORTX Therapeutics Inc.

Suite 2400 - 745 Thurlow Street, Vancouver, British Columbia, Canada, V6E 0C5

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 □
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):
Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):
Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

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: November 26, 2021 By: /s/ Allen Davidoff

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

EXHIBIT INDEX

<u>99.1</u>	Condensed Interim Consolidated Financial Statements for the three and nine months ended September 30, 2021 and 2020
<u>99.2</u>	Management Discussion and Analysis for the nine months ended September 30, 2021
99.3	CEO Certificate
99.4	CFO Certificate



CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

NOTICE OF NO AUDITOR REVIEW OF

CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

Under National Instrument 51-102, Part 4, subsection 4.3(3) (a), if an auditor has not performed a review of the condensed interim consolidated financial statements they must be accompanied by a notice indicating that the financial statements have not been reviewed by an auditor.

The accompanying unaudited condensed interim consolidated financial statements of the Company have been prepared by management and reviewed by the Audit Committee and Board of Directors of the Company.

The Company's independent auditor has not performed a review of these condensed interim consolidated financial statements in accordance with the standards established by the Chartered Professional Accountants of Canada for a review of condensed interim consolidated financial statements by an entity's auditor.

Condensed Interim Consolidated Statements of Financial Position (Unaudited - expressed in Canadian Dollars)

		September 30,	December 31,
	Note	2021 \$	2020 \$
Assets		\$	•
xisotis			
Current			
Cash		4,997,607	171,271
Contract payments	5	1,826,404	1,826,404
Prepaid expenses and other	6	143,413	58,466
Deferred share issuance costs	6,14	621,408	
		7,588,832	2,056,141
Non-current		7,300,032	2,030,141
Intangible assets	7	243,956	234,316
Tradal Associa		7 022 700	2 200 457
Total Assets		7,832,788	2,290,457
Liabilities			
Current			
Accounts payable and accrued liabilities	8	716,842	1,034,213
Derivative warrant liability	9(g)	11,355,000	_
Total Liabilities		12,071,842	1,034,213
Shareholders' (Deficiency) Equity			
Share capital	9	13,056,507	8,258,395
Share-based payments, warrant reserve and other	9	1,456,712	1,003,609
Obligation to issue shares	7(c)	32,238	32,238
Deficit Deficit	, (c)	(18,784,511)	(8,037,998)
		(1.000.05.0)	
Total Shareholders' (Deficiency) Equity		(4,239,054)	1,256,244
Total Liabilities and Shareholders' (Deficiency) Equity		7,832,788	2,290,457
Nature of Operations (Note 1)			
Commitments (Note 13)			
Subsequent Events (Note 14)			
•			
/s/ "Allen Davidoff"		/s/ "Paul Van Damme"	
Director		Director	

Condensed Interim Consolidated Statements of Comprehensive Loss For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

		Three	months ended	Nine	e months ended
			September 30,		September 30,
	Note	2021	2020	2021	2020
		\$	\$	\$	\$
Expenses					
Amortization	7	4,526	5,154	13,143	15,299
Consulting	10	109,269	15,000	355,610	63,708
Directors' fees		39,500	_	39,500	_
General and administrative		6,263	1,742	30,087	7,583
Investor relations		118,947	52,848	384,072	131,204
Listing fees		36,858	10,802	88,314	36,628
Professional fees	10	(402,676)	37,819	201,697	87,580
Research and development		381,967	120,033	422,176	134,907
Share-based payments	9(f),10	62,221	90,443	355,662	286,695
Travel		_	_	2,100	8,460
Wages and benefits	10	48,000	48,000	148,412	148,097
Loss before other items		(404,875)	(381,841)	(2,040,773)	(920,161)
Accretion		_	_	_	(846)
Transaction costs on derivative warrant liability		_	_	(85,732)	_
Loss on derivative warrant liability	9(g)	(7,936,114)	_	(8,596,114)	_
Foreign exchange (loss) gain		(12,242)	(42,230)	(19,965)	9,967
Interest and other expenses		(1,382)	(839)	(3,929)	(11,851)
Forgiveness of debt			<u> </u>		91,014
Net loss and comprehensive loss for the period		(8,354,613)	(424,910)	(10,746,513)	(831,877)
Basic and diluted loss per common share		(0.89)	(0.06)	(1.19)	(0.13)
Dasic and unded loss per common share		(0.89)	(0.00)	(1.19)	(0.13)
Weighted average number of common shares outstanding					
Basic and diluted		9,401,120	6,914,746	9,007,955	6,579,842

Condensed Interim Consolidated Statements of Changes in Shareholders' (Deficiency) Equity (Unaudited - expressed in Canadian Dollars)

	Note	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)
Shares issued pursuant to									
private placement	9(b)	1,555,314	2,556,320	_	_	(70,000)	_	_	2,486,320
Share issuance costs	. ,	· · · · ·	(70,500)	11,066	_	` ' '	_		(59,434)
Convertible loan debt									
forgiveness		_		5,202	_		(5,202)		_
Share-based payments	9(f)	_		286,695	_				286,695
Net loss for the period								(831,877)	(831,877)
Balance, September 30, 2020		6,914,758	8,349,692	910,766	_	_	_	(7,590,475)	1,669,983
Warrants issued pursuant to									
private placement	9(b)	_	(91,297)	91,297	_	_	_	_	_
Convertible loan debt									
forgiveness		_	_	(5,202)	_	_	_	5,202	_
Obligation to issue shares	7(c)	_	_	_	32,238	_	_	_	32,238
Share-based payments	9(f)	_	_	6,748	_	_	_	_	6,748
Net loss for the period		_	_	_		_	_	(452,725)	(452,725)
Balance, December 31, 2020		6,914,758	8,258,395	1,003,609	32,238	_	_	(8,037,998)	1,256,244
,,		3,7 2 3,7 2 3	0,200,000	-,000,000	,			(0,00,00)	-,=-,=-1
Shares issued pursuant to									
private placement	9(b)	2,085,687	6,121,572	_	_	_	_	_	6,121,572
Warrants issued	9	_	(2,932,000)	_	_	_	_	_	(2,932,000)
Share issuance costs	9(b)	_	(311,216)	195,000	_	_	_	_	(116,216)
Options exercised		51,106	149,172	(65,172)	_	_	_	_	84,000
Warrants exercised		451,583	1,695,584	(32,387)	_	_	_	_	1,663,197
Shares issued for services		25,553	75,000	_	_	_	_	_	75,000
Share-based payments	9(f)	_	_	355,662	_	_	_	_	355,662
Net loss for the period						_	_	(10,746,513)	(10,746,513)
Balance, September 30, 2021		9,528,687	13,056,507	1,456,712	32,238	_	_	(18,784,511)	(4,239,054)

Condensed Interim Consolidated Statements of Cash Flows For the nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

	Nine months en 2021	ded September 30 2020
	\$	\$
Cash provided by (used in):		
Operating activities		
Net loss for the period	(10,746,513)	(831,877
Items not affecting cash:		
Accretion expense	_	846
Loss on derivative warrant liability	8,596,114	_
Amortization	13,143	15,299
Forgiveness of debt	<u> </u>	(91,014
Share-based payments	355.662	286,695
Shares issued for services	75,000	
Unrealized foreign exchange loss	(2,156)	29,426
Changes in non-cash operating assets and liabilities:	()/	., .
Funds held in trust	_	70,000
Deposit	_	(1,606,320
Prepaid expenses and other	(83,783)	(85,988
Accounts payable and accrued liabilities	(316,379)	(86,808
	(2,108,912)	(2,299,741
Investing activities		
Acquisition of intangible assets	(22,783)	(11,510
i ç	(22,783)	(11,510
Financing activities		
Proceeds from issuance of shares	6,121,572	2,486,320
Cash share issuance costs	(116,216)	(59,434
Options exercised	84,000	
Warrants exercised	1,490,083	_
Deferred share issuance costs	(621,408)	14,842
	6,958,031	2,441,728
Increase in cash	4,826,336	130,477
Cash, beginning of period	171,271	58,614
Cash, end of period	4,997,607	189,091
Supplemental Cash Flow and Non-Cash Investing and Financing Activities Disclosure		
Cash paid for interest		_
Cash paid for income taxes	_	_
Application of CATO deposit against payable	_	172,784

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

1. Nature of operations

XORTX Therapeutics Inc. (the "Company" or "XORTX") was incorporated under the laws of Alberta, Canada on August 24, 2012 under the name ReVasCor Inc. and was continued under the Canada Business Corporations Act on February 27, 2013 under the name of XORTX Pharma Corp. Upon completion of the reverse take-over ("RTO") transaction on January 10, 2018 with APAC Resources Inc. ("APAC"), 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.

XORTX is a public company listed on the TSX Venture Exchange (the "TSXV") and the Nasdaq Stock Market ("Nasdaq") under the symbol "XRTX" (Note 14). The Company's operations and mailing address is Suite 4000, 421 - 7th Avenue SW, Calgary, Alberta, T2P 4K9 and its head and registered address is located at Suite 2400, 745 Thurlow Street, Vancouver, British Columbia, V6E 0C5.

XORTX is a bio-pharmaceutical company, dedicated to the development and commercialization of 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, larger market 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 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, which has continued to spread, and any related adverse public health developments, have adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or results of operations at this time but may impact the Company's ability to obtain additional financing to support future research projects.

2. Basis of preparation

Statement of Compliance

These condensed interim consolidated financial statements have been prepared in accordance with International Standard 34, Interim Financial Reporting as issued by the International Accounting Standards Board ("IASB") and interpretations of the IFRS Interpretations Committee ("IFRIC"). Accordingly, certain disclosures included in the annual financial statements prepared in accordance with International Financial Reporting Standards ("IFRS") have been condensed or omitted. These unaudited condensed interim consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2020.

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

2. Basis of preparation (continued)

Basis of Measurement and Presentation

These condensed interim consolidated financial statements have been prepared using the historical cost convention using the accrual basis of accounting except for financial instruments which have been measured at fair value. In the opinion of management, all adjustments (including normal recurring accruals), considered necessary for a fair presentation have been included. The accounting policies have been applied consistently to all periods presented in these consolidated financial statements.

These condensed interim consolidated financial statements incorporate the financial statements of the Company and its 100% owned subsidiaries. The accounts of the Company's subsidiary are prepared for the same reporting period as the parent company, using consistent accounting policies, and all intercompany transactions and balances are eliminated on consolidation.

These condensed interim consolidated financial statements were approved for issue by the Board of Directors on November 24, 2021.

3. Accounting policies

These condensed interim consolidated financial statements have been prepared on a basis consistent with the significant accounting policies disclosed in the annual financial statements for the year ended December 31, 2020. Accordingly, they should be read in conjunction with the annual consolidated financial statements for the year ended December 31, 2020, other than as noted below:

Derivative warrant liabilities

During the nine-month period ended September 30, 2021, the Company issued common share units with warrants for the Company's common shares. The warrants are classified as a derivative financial liability as they contained a ratchet provision that provided for an adjustment in the exercise price if shares or securities convertible to shares were 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 warrants are initially recognized at fair value using the relative fair value method and subsequently measured at fair value with changes recognized through profit or loss.

The derivative liabilities will ultimately be converted into the Company's equity (Share Capital) 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 pricing model to estimate fair value at each period end date. The key assumptions used in the model are described in Note 9(g).

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.

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

4. Critical accounting judgments and estimates (continued)

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. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. 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. Warrant liabilities are accounted for as derivative liabilities as exercise is not fixed. The assumptions and models used for estimating fair value for share-based payment transactions and warrant liabilities are disclosed in Note 9.

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.

Going concern assumption

The preparation of these condensed interim consolidated financial statements requires management to make judgments regarding the ability of the Company to continue as a going concern as discussed in Note 1.

5. Contract payments

During 2018, the Company entered into an agreement with Cato Research Canada Inc. ("Cato") to manage a planned clinical study. As part of this agreement, the Company made a payment of USD \$505,331 and has committed to utilize Cato for this clinical study, subject to certain conditions. During the year ended December 31, 2020, Cato agreed to apply \$436,240 of the payments against the accounts payable balance owing to Cato and forgive interest on these balances of \$36,234.

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 \$1,606,320 through the issuance of units in the private placement (USD \$1,200,000 at the exchange rate on the date of the transaction) 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, which is equal to the \$1.64 per unit in the concurrent private placement.

The change in the deposits for the nine months ended September 30, 2021 and year ended December 31, 2020 are shown below:

	September 30	December 31
	2021	2020
	\$	\$
Balance, beginning of period	1,826,404	656,324
Additions	_	1,606,320
Application of deposit against accounts payable	_	(436,240)
Balance, end of period	1,826,404	1,826,404

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

6. Prepaid expenses and other

	September 30 2021	December 31 2020
	\$	\$
GST receivable	21,599	14,351
Deferred share issue costs	621,408	_
Prepaid expenses	121,814	44,115
	764,821	58,466

Prepaid expenses primarily include amounts in connection with investor relations conferences and investor relations. Deferred share issuance costs are costs in relation to the public offering that occurred subsequent to period end (Note 14).

7. Intangible assets

Cost	Total
	\$
Balance, December 31, 2019	378,814
Additions	46,588
Impairment	(100,220)
Balance, December 31, 2020	325,182
Additions	22,783
Balance, September 30, 2021	347,965
•	
Accumulated amortization	Total
	\$
Balance, December 31, 2019	106,426
Amortization	20,098
Impairment	(35,658)
Balance, December 31, 2020	90,866
Amortization	13,143
Balance, September 30, 2021	104,009
Carrying values	Total
	\$
At December 31, 2020	234,316
At September 30, 2021	243,956

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 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.

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

7. Intangible assets (continued)

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 judgement and estimates of the recoverable amount, it is classified within level 3 of the fair value hierarchy.

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 consideration:
 - i) an annual license fee of US\$1,000 (2021 fees-paid);
 - 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 September 30, 2021. 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 other 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 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.

8. Accounts payable and accrued liabilities

	September 30 2021	December 31 2020
	\$	\$
Trade payables	641,128	389,982
Accrued liabilities	75,714	644,231
Total	716,842	1,034,213

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

9. Share capital and reserves

a) Authorized and issued

Unlimited common shares - 9,528,687 issued at September 30, 2021 (December 31, 2020 - 6,914,758)

b) Issuances

Nine months ended September 30, 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 are also subject to typical anti-dilution provisions and a ratchet provision that provides 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 shall be amended to match such lower price.

In connection with the private placement, the Company paid \$116,216 in cash commissions and issued 58,288 finders' warrants. 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 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 the share-based payments to share capital as a result.

The Company issued 451,583 common shares for the exercise of warrants in the amount of \$1,490,083. A value of \$32,387 was transferred from reserves to share capital and a value of \$173,114 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.

Year ended December 31, 2020:

On February 28, 2020, the Company closed a private placement, through the issuance of 1,555,314 units for gross proceeds of \$2,556,320, of which \$900,000 was received in cash, \$50,000 represented the conversion of certain outstanding payables into units and \$1,606,320 (US\$1,200,000 at the then current exchange ratio) was issued to Prevail Partners LLC, who have agreed to provide certain services to the Company in exchange for units. The 977,318 units issued to Prevail Partners LLC were measured by reference to their fair value on the issuance date, which is equal to the \$1.64 per unit in the concurrent private placement.

Each unit comprised one common share and one common share purchase warrant exercisable at \$2.94 for a period of one year from the issuance of the units. However, if at any time following the expiry of the statutory four-month hold period, the closing price of the common shares is greater than \$4.11 for 10 or more consecutive trading days, the Company may notify the holder, by way of a news release, that the warrants will expire on the 20th business day following the date of such notice, unless exercised by the holder before such date. The warrants were assigned a value of \$91,297 using the residual method.

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

9. Share capital and reserves (continued)

b) Issuances (continued)

The Company paid \$59,434 in cash share issuance costs and issued 11,896 finders' warrant units valued at \$11,066, with each finders' warrant unit being exercisable at \$1.64 for a period of 12 months from the closing of the private placement. Each finders' warrant unit comprised one common share and one common share purchase warrant exercisable at \$2.94 for a period of one year from the closing date of the private placement. The warrants are subject to the same acceleration provision as the warrants issued in the private placement.

As at December 31, 2019, \$70,000 of the cash proceeds were received and held in trust by the Company's lawyer and recorded as share subscriptions received in advance. The amount was reclassified to share capital during the year ended December 31, 2020, upon closing of the private placement.

c) Escrow Shares

Following the closing of the RTO, the Company had an aggregate of 441,946 common shares held in escrow pursuant to an escrow agreement dated January 9, 2018. The shares were subject to a 10% release on January 25, 2018, with the remaining escrowed securities being released in 15% tranches every 6 months thereafter. As at September 30, 2021, there were nil shares (December 31, 2020 - 66,292) remaining in escrow.

d) Common Share Purchase Warrants

A summary of the changes in warrants for the period ended September 30, 2021 and year ended December 31, 2020 is presented below:

	Number of Warrants	Exercise price
Balance, December 31, 2019	341,119	\$ 9.39
Granted – February 28, 2020	1,555,317	\$ 2.94
Expired – January 10, 2020	(341,119)	\$ 9.39
Balance, December 31, 2020	1,555,317	\$ 2.94
Granted – February 9, 2021	2,085,687	\$ 4.70
Exercised	(440,012)	\$ 3.34
Expired	(1,215,816)	\$ 2.94
Balance, September 30, 2021	1,985,176	\$ 4.70

The weighted average contractual remaining life of the unexercised warrants was 4.36 years (2020 – 0.16 years)

The following table summarizes information on warrants outstanding at September 30, 2021:

Exercise Price	Number Outstanding	Expiry date	Average Remaining Contractual Life
\$4.70	1,985,176	February 9, 2026	4.36 years

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

9. Share capital and reserves (continued)

e) Finders' Warrants

A summary of the changes in finders' warrants for the period ended September 30, 2021 and year ended December 31, 2020 is presented below:

	Number of Warrants	Exercise price
Balance, December 31, 2019	_	_
Granted – February 28, 2020 – finders' warrants	11,896	\$ 1.64
Balance, December 31, 2020	11,896	\$ 1.64
Granted – February 9, 2021 – finders' warrants	58,288	\$ 4.70
Exercised	(11,571)	\$ 1.87
Expired	(1,193)	\$ 1.64
Balance, September 30, 2021	57,420	\$ 4.70

The weighted average contractual remaining life of the unexercised finders' warrant was 4.36 years (2020 – 0.16 years)

The following table summarizes information on finders' warrants outstanding at September 30, 2021:

Exercise Price	Number Outstanding	Expiry date	Average Remaining Contractual Life
\$4.70	57,420	February 9, 2026	4.36 years

The fair value of finders' warrant was estimated at \$195,000 on the date of grant using Black-Scholes. The exercise price of the unit of \$4.70; expected life of 5.0 years; expected volatility of 160%; risk free rate of 0.58%; and expected dividend yield of 0%.

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 model with the following data and assumptions.

	2021	2020
Dividend yield	Nil	Nil
Annualized volatility	145.24%-149.46%	151.64% - 152.24%
Risk-free interest rate	0.36%-0.82%	0.33%
Expected life	5 years	5 years

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

9. Share capital and reserves (continued)

f) Stock Options (continued)

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. The Company has not declared dividends in the past.

The 59,624 options granted January 11, 2021 vested immediately.

Of the 268,307 options granted June 23, 2020, 127,768 of the options vested immediately and 140,545 options vest in equal monthly installments over 36 months.

The 12,776 options granted August 25, 2020 vested immediately.

Of the 42,588 options granted May 12, 2021, 21,294 of these options vested immediately, and 21,294 options vest in equal monthly installments over 36 months.

The 21,294 options granted June 16, 2021 vested immediately.

63,882 options were granted July 14, 2021 to vest in equal monthly installments over 36 months.

The share-based payment expense recognized was \$62,221 and \$355,662 during the three and nine months ended September 30, 2021 (2020 - \$90,443 and \$286,695).

A summary of the changes in stock options for the nine months ended September 30, 2021 and year ended December 31, 2020 is presented below:

	Number of Options	Exercise price
Balance, December 31, 2019	183,124 \$	5.87
Granted – June 23, 2020	268,307 \$	1.64
Granted – August 25, 2020	12,776 \$	2.82
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
Exercised	(51,106) \$	1.64
Expired	(80,917) \$	3.40
Balance, September 30, 2021	519,572 \$	3.19
Vested and exercisable, September 30, 2021	371,937 \$	3.66

The weighted average contractual remaining life of the unexercised options was 3.42 years (December 31, 2020 – 3.64 years).

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

9. Share capital and reserves (continued)

f) Stock Options (continued)

The following table summarizes information on stock options outstanding at September 30, 2021:

Exercise Price	Number Outstanding	Number Exercisable	Average Remaining Contractual Life
\$5.87	127,760	127,760	1.47 years
\$5.87	21,294	20,112	2.10 years
\$1.64	170,354	100,795	3.73 years
\$2.82	12,776	12,776	3.91 years
\$3.29	59,624	59,624	4.28 years
\$1.88	42,588	24,252	4.62 years
\$1.76	21,294	21,294	4.71 years
\$2.41	63,882	5,324	4.79 years
	519,572	371,937	

g) Derivative warrant liability

Private Placement Warrants:

During the nine-month period ended September 30, 2021, the Company issued warrants for the Company's common shares pursuant to a financing in February 2021 as described above.

The warrants issued as part of the unit contain 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 \$2,932,000 on the date of grant using the Black-Scholes model with the following assumptions: exercise price of the warrant of \$4.70; expected life of 5.0 years; expected volatility of 160%; risk free rate of 0.58%; and expected dividend yield of 0%.

During the nine-month period ended September 30, 2021, 440,012 warrants were exercised and a value of \$173,114 was transferred from the derivative warrant liability to share capital as a result.

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

	September 30
	2021
Balance at January 1, 2021	\$ _
Warrants issued February 9, 2021	2,932,000
Warrants exercised	(173,114)
Fair value adjustment	8,596,114
Balance at September 30, 2021	\$ 11,355,000

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

9. Share capital and reserves (continued)

g) Derivative warrant liability

Significant assumptions used in determining the fair value of the derivative warrant liabilities at September 30, 2021 are as follows:

	September 30	0, 2021
Share price	\$	6.16
Risk-free interest rate		0.88%
Dividend yield		0%
Expected volatility		165%
Remaining term (in years)		4.4

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

h) Share Consolidation

On September 23, 2021, the Company completed a share consolidation of the common shares on a basis of 1 post-consolidation common share for 11.74 pre-consolidation common shares (the "Consolidation"). As required by IAS 33, *Earnings per Share*, all information with respect to the number of common shares and issuance prices for time periods prior to the Consolidation have been restated to reflect the Consolidation.

10. 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 three and nine months ended September 30, 2021, the Company incurred the following transactions with related parties:

- a) Wages and benefits were paid or accrued to an officer of the Company in the amount of \$48,000 and \$148,412 (2020 \$48,000 and \$148,097).
- b) Professional fees were paid or accrued to a former officer of the Company in the amount of \$nil and \$34,500 (2020 \$7,500 and \$22,500).
- c) Professional fees were paid or accrued to an officer of the Company in the amount of \$38,000 and \$38,000 (2020 \$nil and \$nil).
- d) Consulting fees were accrued to directors of the Company in the amount of \$28,500 and \$66,500 (2020 \$9,000 and \$27,000).

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

10. Related party transactions (continued)

- e) As at September 30, 2021, \$15,750 (December 31, 2020 \$52,450) was payable to the Chief Financial Officer ("CFO") of the Company for CFO services, and \$22,500 (December 31, 2020 \$20,340) was payable to directors of the Company and \$nil (December 31, 2020 \$518,084) was accrued to the Chief Executive Officer ("CEO") of the Company, for CEO services. The balances are unsecured, non-interest bearing, and have no fixed terms of repayment.
- f) Management compensation transactions for the three and nine months ended September 30, 2021 and 2020 are summarized as follows:

	Short-term employee benefits	Share-based payments	Total
	S S	\$	\$
Three months ended September 30, 2020		· ·	•
Directors and officers	64,500	65,105	129,605
Three months ended September 30, 2021			
Directors and officers	48,000	31,027	79,027
	Short-term	Share-based	
	employee benefits	payments	Total
	\$	\$	\$
Nine months ended September 30, 2020			
Directors and officers	197,597	219,586	417,183
Nine months ended September 30, 2021			
Directors and officers	148,412	214,621	363,033

11. Financial instruments and risk management

The Company's financial instruments consist of cash, accounts payable and accrued liabilities, and warrant liability. These financial instruments are classified as financial assets at FVTPL and financial liabilities at amortized cost. The fair values of these financial instruments approximate their carrying values at September 30, 2021, due to their short-term nature.

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.

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

12. 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 nine months ended September 30, 2021. The Company is not exposed to external requirements by regulatory agencies regarding its capital.

13. Commitments

The Company has long-term arrangements with commitments that are not recognized as liabilities as at September 30, 2021 and December 31, 2020 as follows:

a) Employment Agreement

	September 30 2021	December 31 2020
	\$	\$
Management services – officers	192,000	192,000

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 September 30, 2021, equated to \$192,000.

b) Payments

In the normal course of business, the Company has committed to payments totaling \$700,812 (2020 - \$nil) 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.

14. Subsequent events

On October 15, 2021, the Company listed its common shares on Nasdaq under the symbol "XRTX" and closed an underwritten public offering of 2,906,000 units, 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 aggregate gross proceeds of \$14,851,850 (US\$12,001,780), prior to deducting underwriting discounts and other offering expenses (the "US IPO Offering"). The share-issue costs included \$1,709,355 in cash costs and \$483,879 in non-cash costs. 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 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. The warrants issued as part of a unit in the US IPO Offering will be recorded as a financial liability as the exercise price of these units is denominated in a currency other than the functional currency of the Company. 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 approximately US\$1.47 million which increased the US IPO Offering to 3,261,000 common shares and 3,341,900 warrants. The completion of the US IPO Offering removed the ratchet provision associated with the private placement that closed February 9, 2021 (see Note 9(b)).

Notes to the Condensed Interim Consolidated Financial Statements For the three and nine months ended September 30, 2021 and 2020 (Unaudited - expressed in Canadian Dollars)

14. Subsequent events (continued)

As at September 30, 2021, there were \$621,408 in deferred share issuance costs included in prepaid expenses.

On November 2, 2021, the Company announced that it had received final approval to list its common shares on the TSXV under the symbol "XRTX". The Company's shares were de-listed from trading on the Canadian Securities Exchange (the "CSE") effective November 4, 2021 and began trading on the TSXV commenced on November 5, 2021.

Management Discussion and Analysis
For the nine months ended September 30, 2021

This management discussion and analysis of financial position and results of operations ("MD&A") is prepared as at November 26, 2021 and should be read in conjunction with the unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2021 of XORTX Therapeutics Inc. (the "Company" or "XORTX"), together with the audited financial statements of the Company for the year ended December 31, 2020, as well as the accompanying MD&A for the period then ended (the "Annual MD&A").

The referenced unaudited condensed interim consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), including International Standard 34, Interim Financial Reporting, as issued by the International Accounting Standards Board ("IAS") and Interpretations of the IFRS Interpretations Committee ("IFRIC"). All dollar amounts included therein and in the following MD&A are expressed in Canadian dollars except where noted.

The Company's critical accounting estimates, significant accounting policies and risk factors as disclosed in the Annual MD&A have remained substantially unchanged and are still applicable to the Company unless otherwise indicated.

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. ("APAC"), 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 principal executive offices are located at Suite 4000, 421 – 7th Avenue SW, Calgary, Alberta, Canada T2P 4K9. The Company's shares trade on the TSX Venture Exchange ("TSXV") and the Nasdaq Stock Exchange ("Nasdaq") under the symbol "XRTX".

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, 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 and any other product candidates we may develop, and the labeling under any approval we may obtain;
- regulatory developments in the United States and other countries;
- the performance of third-party manufacturers;
- our plans to develop and commercialize our product candidates;
- 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 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:

- incorrect assessments of the value of acquisitions, licenses and development programs;
- technical, manufacturing and processing problems;
- actions by governmental authorities, including increases in taxes;
- the availability of capital on acceptable terms;
- 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.sedar.com.



BUSINESS OVERVIEW

XORTX Therapeutics Inc. is a clinical-stage biotechnology company, focused on identifying, developing and commercializing therapies to treat progressive kidney disease modulated by aberrant purine and uric acid metabolism and uric acid metabolism in orphan (rare) disease indications such as autosomal dominant polycystic kidney disease ("ADPKD") and larger, more prevalent type 2 diabetic nephropathy ("T2DN") as well as acute kidney injury ("AKI") due to coronavirus infection.

Our focus is on developing three therapeutic products to:

1/ slow or reverse the progression of chronic kidney disease in patients at risk of end stage kidney failure; 2/ address the immediate need of individuals facing coronavirus induced AKI; and

3/ the identification of other opportunities where our existing and new intellectual property can be leveraged to address health issues.

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

Our three lead product candidates are XRx-008, a program for the treatment of ADPKD; XRx-101, a program to treat AKI associated with Coronavirus/ COVID-19 infection, AKI and associated health consequences; and XRx-225, a program for the treatment of T2DN. At XORTX, we aim to redefine the treatment of kidney diseases by developing medications to improve the quality-of-life of patients with life-threatening diseases by modulating abberant purine and uric acid metabolism, including lowering elevated uric acid as a therapy.

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 designed to provide unique solutions for acute and chronic disease. Our therapeutic platforms can be used alone, or in combination, with synergistic activity to develop a multifunctional tailored approach to a variety of disease entities that can address disease in multiple body systems through management of chronic or acute hyperuricemia, immune modulation, and metabolic disease. We continue to leverage these therapeutic platforms to expand our pipeline of novel and next generation drug-based therapies that we believe could represent significant improvements to the standard of care in multiple acute and chronic cardiovascular diseases and specifically kidney disease.

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

Highly Modular and Customizable

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-101 program for acute kidney injury is designed to produce rapid suppression of hyperuricemia then maintain purine metabolism at a low level during viral infection and target management of acute organ injury. Our XRx-008 program is designed for longer term stable chronic oral dosing of xanthine oxidase inhibitors. The capabilities of our formulation technology allow us to manage the unique challenges of cardiovascular and renal disease by modulating, purine metabolism, inflammatory and oxidative state.



Fit-for-purpose

Our platforms can also be utilized to engineer new chemical entities and formulations of those agents that have enhanced properties For example, our XRx-225 product candidate program, some of the intellectual property for which we license from third parties, represents a potential new class of xanthine oxidase inhibitor with a targeted design to enhance anti-inflammatory activity. The capability of tailoring the therapeutic benefit of this class of new agents permits us to identify targets and disease that we wish to exploit and then through formulation design optimize those small molecules and proprietary formulations to maximize clinically meaningful therapeutic effect.

Readily scalable and transferable

Our in-house small molecule and formulations design expertise is positioned to create a steady succession of product candidates that are scalable, efficient to manufacture (by us or a partner or contract manufacturing organization), and produce high production and high purity active pharmaceutical drug product. We believe this will provide a competitive advantage, new intellectual property and opportunity to provide first-in-class products that target unmet medical needs and clinically meaningful 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 ADPKD, AKI due to COVID-19 infection, and T2DN. There is no guarantee that the FDA will approve our proposed uric acid lowering agent products for the treatment of kidney disease or the health consequences of diabetes.

Product Candidate Pipeline

Our lead product candidates are XRx-008, XRx-101, and XRx-225. XRx-008 is in preparations for a Phase 3 registration clinical trial, the last stage of clinical development before FDA approval. Our XRx-101 program is advancing toward preparing for a "bridging" pharmacokinetic study for the Company's Phase 3 clinical trial to slow or reverse acute kidney disease in hospitalized individuals with COVID-19. XRx-225 is at the non-clinical stage and advancing toward the clinical development stage.

Products

The Company's most advanced development program, XRx-008, is a late clinical stage program focused on demonstrating the potential of our novel therapy for ADPKD. XRx-008 is the development name given to XORTX's proprietary oral formulation of oxypurinol, and shows increased oral bioavailability compared to oxypurinol alone. XORTX is also developing a second oral formulation of oxypurinol, XRx-101, for use in treating patients infected with the coronavirus COVID-19 with associated AKI.

XORTX is currently evaluating xanthine oxidase inhibitor candidates for the XRx-225 program to treat T2DN as well as developing new chemical entities to address the large unmet medical need.

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 or diabetic nephropathy, and two U.S. patent applications with similar claims for the treatment of metabolic syndrome, diabetes, and fatty liver disease. Counterparts for some of these patent applications have also been submitted in Europe. In both the US and Europe, XORTX owns composition of matter patent applications for unique proprietary formulations of xanthine oxidase inhibitors, and the European patent application has 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 coronavirus COVID-19 infection. Additional patent applications to expand and extend coverage of uric acid lowering agents are currently contemplated and/or are in preparation.



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 indications, with an initial focus on renal and 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 have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future;
- 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 delay, scale back, or cease our product development programs or operations;
- 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 safety warnings 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 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;
- COVID-19 pandemic may materially and adversely affect our business and financial results;
- 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 this 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 September 30, 2021, combined with our recently completed US IPO Offering (see "Fund Raising Activities and Warrant Exercises" below) and the net proceeds of future financings, will enable us to advance the clinical development of XRx-008 and XRx-101 product candidates. XORTX may also be eligible to receive certain research, development and commercial milestone payments in the future. However, because successful development of our product candidates and the achievement of milestones by our strategic partners is uncertain, we are unable to estimate the actual funds we will require to complete the research, development and commercialization of product candidates.

RECENT DEVELOPMENTS

Consolidation and Exchange Uplistings

On September 20, 2021, the Company announced that further to receipt of shareholder approval at the special meeting of shareholders held September 2, 2021 (announced on August 13, 2021), the Company would complete a share consolidation of the issued and outstanding common shares of the Company on the basis of 11.74 pre-consolidation common shares for each one (1) post-consolidation common share. On September 24, 2021 the share consolidation was effected resulting in consolidated shares outstanding on that date of 9.528,687.

On October 13, 2021, the Company announced that it had received approval to list its common shares on the Nasdaq under the symbol "XRTX".

On November 2, 2021, the Company announced that it had received final approval to list its common shares on the TSXV under the symbol "XRTX". The Company's shares were de-listed from trading on the Canadian Securities Exchange (the "CSE") effective November 4, 2021 and trading on the TSXV commenced on November 5, 2021.

Fund Raising Activities and Warrant Exercises

On October 15, 2021, the Company closed an underwritten public offering in the U.S. of 2,906,000 units, with each unit consisting of one common share and one warrant to purchase one common share at US\$4.13 per unit, for aggregate gross proceeds of approximately US\$12 million, prior to deducting underwriting discounts and other offering expenses (the "US IPO Offering"). The USD IPO Offering was undertaken by A.G.P. / Alliance Global Partners ("A.G.P.") who acted as sole book-running manager. The warrants are exercisable at US\$4.77 per share and have a term of five years. In addition, the Company granted A.G.P. a 45-day option to purchase up to an additional 435,900 common shares at US\$4.13 less underwriting discounts. On closing, A.G.P. exercised its option to purchase additional warrants to purchase up to an additional 435,900 common shares. On November 8, 2021, A.G.P. partially exercised its 45-day over-allotment option to purchase 355,000 common shares at US\$4.13 per share, resulting in additional gross proceeds to the Company of approximately US\$1.47 million which increased the US IPO Offering to 3,261,000 common shares and 3,341,900 warrants. As of the date of this MD&A, A.G.P. has the right to exercise a further 80,900 common shares under the 45-day option.



In January and February 2021, 350,204 warrants that were issued in connection with the February 2020 private placement were exercised. Of the warrants exercised, 339,801 were exercised at \$2.94 per common share and 10,703 were exercised at \$1.64 per common share in respect to certain finder's warrants that were issued in relation to that private placement.

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 (the "Private Placement"). 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 (adjusted to reflect the share consolidation of \$11.74:1 effected on September 24, 2021) 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 also subject to a ratchet provision that provided for an adjustment in the exercise price in the event the Company issued or sold 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. With the US IPO Offering being undertaken at a higher price than the Private Placement, the ratchet provision terminated on October 15, 2021.

In connection with the Private Placement, the Company paid \$116,216 in cash commissions and issued 58,288 finders' warrants. 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.

In September and October 2021, 301,379 warrants that were issued in connection with the Private Placement were exercised at \$4.70 per common share.

December 2020 Notification from European Patent Office for XRx-225

On December 29, 2020, the Company announced the receipt of notification that the patent "Formulations of Xanthine Oxidase Inhibitors" will be granted by the European Patent Office. The patent covers compositions and methods of using XORTX's proprietary formulations of xanthine oxidase for, renal and other diseases where aberrant purine metabolism has been implicated in disease progression. On September 1, 2021, the Company announced the grant of the patent titled "EPO National Stage of PCT International Application for Compositions and Methods for Treatment and Prevention of Hyperuricemia Related Health Consequences".

COVID-19 Developments

In March 2020, the outbreak of the novel strain of coronavirus, specifically identified as "SARS-CoV-2" which causes COVID-19 infections, resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and physical distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility. The duration and impact of the COVID-19 Pandemic outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

On March 16, 2020, XORTX announced the filing of a provisional patent application covering the potential use of any uric acid lowering agent, and more specifically a xanthine oxidase inhibitor XRx-101 (we believe a novel formulation of oxypurinol), to treat respiratory, kidney disease and multi-organ injury related to patients infected with SARS-COV-2 or other respiratory viruses COVID-19.



Partnership with Icahn School of Medicine

On November 16, 2020, the Company announced the topline results from the Company's partnership with the Icahn School of Medicine at Mount Sinai, New York ("Icahn School of Medicine"). The aim of this study was to characterize the incidence of AKI and hyperuricemia in patients hospitalized with COVID-19. The results of the data analysis show that in some individuals with COVID-19 infection, hyperuricemia increases early in and is associated with AKI. The data also strongly suggest that for those individuals with very high serum uric acid levels, this can contribute to worsening kidney outcomes. These topline results indicate that further clinical studies to lower uric acid in these individuals is warranted, and may improve AKI, dialysis, recovery and mortality outcomes. On October 14, 2021, the Company announced that the results of the study provide support for the Company's provisional patent and applications for XRx-101 with the conclusion of the study indicating, "In patients admitted to the hospital for COVID-19, higher uric acid levels were independently associated with major adverse kidney events and mortality in a dose-dependent manner. In addition, hyperuricemia was associated with higher procalcitonin and troponin levels."

Appointment of LONZA Group as Manufacturer

On April 30, 2020, the Company announced the appointment of LONZA Group as the manufacturer of GMP oxypurinol for the XRx-008 and XRx-101 clinical trial programs. The launch of oxypurinol manufacturing for both XRx-008 and XRx-101 is the first step to advance these programs toward clinical testing. Lonza is a leading global supplier to the pharmaceutical, biotech and specialty ingredients markets.

Changes in officers, directors and advisory board members

On May 12, 2021, William Farley was appointed to the Board of Directors of the Company.

On June 16, 2021, Jacqueline Le Saux was appointed to the Board of Directors to replace Allan Williams who resigned effective that date.

On July 1, 2021, Stephen Haworth was appointed as the Chief Medical Officer of the Company.

On July 14, 2021, Amar Keshri was appointed as Chief Financial Officer to replace James Fairbairn.

On August 31, 2021, the Company announced the appointment of Dr. Charles Edelstein to the Company's clinical advisor board.

FUTURE PLANS AND OUTLOOK

XORTX intends to grow its business by developing three programs focused on kidney disease.

First, the Company is in planning stages for the XRx-008 program to treat progressive kidney disease in individuals with ADPKD. XORTX's primary goal is initiation of a pivotal phase 3 clinical trial in ADPKD, to demonstrate the benefit of xanthine oxidase inhibition and lowering elevated uric acid as a therapy to slow kidney disease progression, and then commercialize by out-licensing this "first-in-class" program to a pharmaceutical company partner.

Second, XORTX is developing XRx-101 for treatment of acute kidney injury associated with Coronavirus/ COVID-19 infection as a therapy to treat and protect kidneys from acute injury and other organ injury associated with viral infection. This program is under early, rapid development with a target to initiate a clinical trial within the year and characterize the anti-viral, and kidney protective effects of this novel therapy.

Lastly, the Company continues to evaluate new xanthine oxidase inhibitors as in-licensing candidate compounds and develop new proprietary xanthine oxidase inhibitors for the treatment of progressive kidney disease due to type 2 diabetic nephropathy (see "Products" above).



In addition, XORTX plans to grow by expanding its knowledge and technical expertise into new therapeutic programs to treat a variety of other orphan diseases, fatty liver disease and health issues related to diabetes.

The Company will require additional capital to enable it to undertake these programs.

XORTX's overall strategic goal is to initiate a pivotal clinical trial in the ADPKD program once sufficient funding is raised by the Company. Based upon recently published and successful phase 2 clinical pilot trials, progression of kidney disease in ADPKD and chronic kidney disease (~50% T2DN) can be slowed or perhaps stopped by decreasing uric acid levels into the mid-normal range of serum concentration. Recent, successful clinical trials and associated data shows the benefit of lowering uric acid levels in progressive kidney disease and accumulating positive clinical trial results published recently in patients with chronic kidney disease and more specifically type 2 diabetic nephropathy suggest an increased probability of future clinical trial success, licensing potential and program advancement to marketing approval.

With respect to ADPKD and the XRx-008 program, during the next three years, subject to sufficient funding being available, the steps towards advancing this program are:

- 1. Manufacture Oxypurinol and develop unique formulation for pivotal phase 3 'registration' clinical trials.
- 2. Complete the Investigational New Drug application ("IND") process to advance XRx-008 and characterize bioequivalence/bioavailability of XRx-008 in man.
- 3. Complete and receive 'orphan drug designation' for this program.
- 4. Submit the phase 3 pivotal trial protocol to demonstrate the effectiveness of uric acid lowering by XRx-008 in ADPKD patients and initiate the clinical trial under a special protocol assessment (SPA).
- 5. Complete licensing or co-development agreements for the ADPKD program within the next 24 months with pharmaceutical company partners in key markets. These agreements may include income to XORTX from upfront, milestone and royalty payments upon new drug application ("NDA") approval.

A number of pharmaceutical companies have expressed an interest in the ADPKD program, once a phase 3 clinical trial, under SPA, is finalized or in the early stages of recruiting.

Regarding the XRx-101 program to decrease the AKI in hospitalized patients, over the next 12 months, subject to sufficient funding, the Company will advance this program by taking the following steps:

- 1. Manufacture Oxypurinol and develop a unique formulation for a bioequivalence study then pivotal phase 3 'registration' clinical trial.
- 2. Submit a completed IND filing and conduct a bioequivalence/bioavailability study of XRx-101 in man.
- 3. Develop global partnerships with academic clinical trial centers with the goal of initiating an investigator led pilot phase 3 registration trial in the near future.
- 4. Submit the phase 3 pivotal trial protocol to demonstrate the effectiveness of modulating aberrant purine metabolism and uric acid lowering by XRx-101 in patients with COVID-19 infection and at risk of acute kidney injury and initiate this trial.



SUMMARY OF QUARTERLY RESULTS

The table below sets forth unaudited quarterly results prepared by management for the eight previous quarters to September 30, 2021:

(unaudited)	2021 Q3	2021 Q2	2021 Q1	2020 Q4
Amortization of Intangible Assets	4,526	4,373	4,244	5,140
Foreign Exchange loss (gain)	12,242	7,336	387	7,006
Consulting	109,269	94,480	151,861	39,172
Directors' fees	39,500	_	_	_
General and administrative	6,263	13,012	10,812	1,933
Interest	1,382	665	1,882	815
Investor Relations	118,947	60,251	204,874	109,973
Listing fees	36,858	36,903	14,553	15,510
Professional Fees	(402,676)	491,552	112,821	75,000
Research and Development	381,967	26,423	13,786	142,548
Share Based Payments ²	62,221	90,451	202,990	6,748
Travel	_	_	2,100	_
Wages and Benefits	48,000	48,000	52,412	79,808
Transaction costs on derivative warrant	_	_	85,732	_
(Gain) loss on derivative warrant liability	7,936,114	(655,000)	1,315,000	_
Impairment of intangible assets	_	_	_	64,562
Recovery of provision for patent acquisition ¹	_	_	_	(95,490)
Total Comprehensive Loss	8,354,613	218,446	2,173,454	452,725
Loss per Share	(0.89)	(0.02)	(0.26)	(0.07)

(unaudited)	2020 Q3	2020 Q2	2020 Q1	2019 Q4
Accretion		425	421	420
Amortization of Intangible Assets	5,154	5,095	5,050	5,009
Foreign Exchange loss (gain)	42,230	90,907	(143,104)	10,126
Consulting	15,000	33,708	15,000	25,436
General and administrative	1,742	3,445	2,396	2,229
Interest	839	2,525	8,487	14,039
Investor Relations	52,848	40,081	38,275	14,707
Listing fees	10,802	14,063	11,763	8,776
Professional Fees	37,819	22,785	26,976	38,744
Research and Development	120,033	12,452	2,422	1,532
Share Based Payments	90,443	189,524	6,728	8,555
Travel	_	_	8,460	11,894
Wages and Benefits	48,000	49,740	50,357	48,000
Forgiveness of debt	_	(91,014)	_	_
Total Comprehensive Loss	424,910	373,736	33,231	189,467
Loss per Share	(0.06)	(0.05)	(0.01)	(0.04)

Note 1: The provision for patent acquisition relates to a patent rights acquisition of US\$75,000 paid in 2012. During the year ended December 31, 2020, the Company determined that the purchase was no longer feasible; therefore, the provision was reversed. Note 2: Share based payments relate to the vesting of options over the period.



Three months ended September 30, 2021

The Company incurred a comprehensive loss of \$8,354,613 (\$0.89 per share) for the three months ended September 30, 2021, compared to \$424,910 (\$0.06 per share) in the three months ended September 30, 2020.

Variances within the loss items are as follows:

Consulting - \$109,269 (2020 - \$15,000) - Consulting expenses increased during the three months ended September 30, 2021, as more consultants were engaged during the interim period due to an increase in Company activity with respect to corporate development.

Directors' fees - \$39,500 (2020 - \$nil) – Directors' fees expenses increased during the three months ended September 30, 2021, as the Company began paying annual and meeting fees to its independent directors on July 1, 2021.

Investor relations - \$118,947 (2020 - \$52,848) – Investor relations expenses increased in the three months ended September 30, 2021, as the result of hiring investor relations consultants and public relations firms for general investor relations services.

Professional fees - (\$402,676) (2020 - \$37,819). Professional fees decreased for the three months ended September 30, 2021, as the legal fees incurred prior to July 1, 2021 related to the US IPO Offering and uplisting to Nasdaq were reclassified from legal expenses to deferred share issue costs.

Research and development - \$381,967 (2020 - \$120,033) - Research and development expenses increased in the three months ended September 30, 2021, as the result of commencement of various feasibility studies.

Share-based payments - \$62,221 (2020 - \$90,443) – The share-based payment expense decreased in the three months ended September 30, 2021, as fewer options were granted in the interim period and therefore less compensation charges related to these options were recorded.

Loss on derivative warrant liability - \$7,936,114 (2020 – nil). This expense relates to the warrants issued as part of the units issued under the Private Placement. The warrants were classified as a derivative financial liability as they contained a ratchet provision that provided for an adjustment in the exercise price of the warrants if shares or securities convertible to shares were sold at a price lower than the exercise price. The warrants are initially recognized at fair value and subsequently measured at fair value with changes recognized through profit or loss. This is a non-cash item.

Nine months ended September 30, 2021

The Company incurred a comprehensive loss of \$10,746,513 (\$1.19 per share) for the nine months ended September 30, 2021, compared to \$831,877 (\$0.13 per share) in the nine months ended September 30, 2020.

Variances within the loss items are as follows:

Consulting - \$355,610 (2020 - \$63,708) – Consulting expenses increased during the nine months ended September 30, 2021, as more consultants were engaged during 2021 due to an increase in Company activity with respect to corporate development.

Directors' fees - \$39,500 (2020 - \$nil) – Directors' fees expenses increased during the nine months ended September 30, 2021, as the Company began paying annual and meeting fees to its independent directors on July 1, 2021.



Investor relations - \$384,072 (2020 - \$131,204) – Investor relations expenses increased in the nine months ended September 30, 2021, as the result of hiring investor relations consultants and public relations firms for general investor relations services.

Professional fees - \$201,697 (2020 - \$87,580). Professional fees for the nine months ended September 30, 2021, due to increased legal fees related to work related to advancing the Company's products.

Research and development - \$422,176 (2020 - \$134,907) - Research and development expenses increased in the nine months ended September 30, 2021, as the result of commencement of various feasibility studies.

Share-based payments - \$355,662 (2020 - \$286,695) — The share-based payment expense increased in the nine months ended September 30, 2021, as more options were granted in both the nine month period and in 2020 that vested over the period.

Transaction costs on derivative warrant liability and loss on derivative warrant liability - \$85,752 and \$8,596,114 respectively (2020 – nil and nil). This expense relates to the warrants issued as part of the units issued under the Private Placement. The warrants were classified as a derivative financial liability as they contained a ratchet provision that provided for an adjustment in the exercise price of the warrants if shares or securities convertible to shares were sold at a price lower than the exercise price. The warrants are initially recognized at fair value and subsequently measured at fair value with changes recognized through profit or loss. This is a non-cash item.

Comparison of cash flows for the nine months ended September 30, 2021

The Company realized a net cash inflow of \$4,826,336 for the nine months ended September 30, 2021, compared to \$130,477 for the nine months ended September 30, 2020. The variances in the cash flow for the nine months ended September 30, 2021, compared to September 30, 2020. were as follows:

Operating activities – Cash used in operating activities for the nine months ended September 30, 2021, was \$2,108,912 (2020 - \$2,299,741). The cash used in operating activities was primarily due to the net loss during the period offset by the non-cash items.

Investing activities — Cash used in investing activities for the nine months ended September 30, 2021, was \$22,783 (2020 - \$11,510). The cash used related to the acquisition of intangible assets during the period.

Financing activities – Cash provided by financing activities in the nine months ended September 30, 2021, was \$6,958,031 (2020 - \$2,441,728). The cash provided was related to the Private Placement that took place during the period raising gross proceeds of \$6,121,572 through the issuance of 2,085,687 units at a subscription price of \$2.935 per unit (adjusted to reflect the share consolidation of 11.74:1 effected on September 24, 2021) and upon exercise of the warrants.

LIQUIDITY AND CAPITAL RESOURCES

As at September 30, 2021, the Company had a cash balance of \$4,997,607 and working capital deficit of \$4,483,010 (on a cash basis the working capital was \$6,871,990 after adding back the non-cash derivative warrant liability in the amount of \$11,355,000, which will only be settled by issuing equity of the Company) as compared to a cash balance of \$171,271 and working capital of \$1,021,928 as at December 31, 2020. During the year ended December 31, 2020, the Company closed a \$2,556,320 private placement and during the nine months ended September 30, 2021, the Company closed the Private Placement with the issuance of 2,085,687 units at a subscription price of \$2.935 per unit (adjusted to reflect the share consolidation of 11.74:1 effected on September 24, 2021) for gross proceeds of \$6,121,572. The Company issued 451,583 common shares for the exercise of warrants in the amount of \$1,490,083. The Company's primary source of funding is by way of raising capital through the issuance of equity to third party investors.



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.

COMMITMENTS

The Company has long-term arrangements with commitments as at September 30, 2021, and December 31, 2020 as follows:

	September 30	December 31
	2021	2020
	\$	\$
Management services – officers	192,000	192,000

The President and CEO of the Company has a long-term employment agreement. The agreement has a termination clause whereby he is entitled to the equivalent of 12 times his then current monthly salary which, as of September 30, 2021, equated to \$192,000. On November 1, 2021, the Company's Board of Directors approved an increase in annual compensation for the President and CEO to US\$300,000.

OFF BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements.

TRANSACTIONS WITH RELATED PARTIES

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 three and nine months ended September 30, 2021, the Company incurred the following transactions with related parties:

- a) Wages and benefits were paid or accrued to an officer of the Company in the amount of \$48,000 and \$148,412 (2020 \$48,000 and \$148,097).
- b) Professional fees were paid or accrued to a former officer of the Company in the amount of \$nil and \$34,500 (2020 \$7,500 and \$22,500).
- c) Professional fees were paid or accrued to an officer of the Company in the amount of \$38,000 and \$38,000 (2020 \$nil and \$nil).
- d) Consulting fees were accrued to directors of the Company in the amount of \$28,500 and \$66,500 (2020 \$9,000 and \$27,000).
- e) As at September 30, 2021, \$15,750 (December 31, 2020 \$52,450) was payable to the Chief Financial Officer ("CFO") of the Company for CFO services, and \$22,500 (December 31, 2020 \$20,340) was payable directors of the Company and \$nil (December 31, 2020 \$518,084) was accrued to the Chief Executive Officer ("CEO") of the Company, for CEO services. The balances are unsecured, non-interest bearing, and have no fixed terms of repayment.



f) Management compensation transactions for the three and nine months ended September 30, 2021 and 2020 are summarized as follows:

	Short-term employee benefits	Share-based payments	Total
	\$	\$	\$
Three months ended September 30, 2020 Directors and officers	64,500	65,105	129,605
Three months ended September 30, 2021 Directors and officers	48,000	31,027	79,027
	Short-term employee benefits	Share-based payments	Total
	\$	\$	\$
Nine months ended September 30, 2020			
Directors and officers	197,597	219,586	417,183
Nine months ended September 30, 2021			
Directors and officers	148,412	214,621	363,033

FINANCIAL AND CAPITAL RISK MANAGEMENT

The Company's financial instruments consist of cash, accounts payable and accrued liabilities, and warrant liability (non cash). Cash is classified as a financial asset at FVTPL, accounts payable and accrued liabilities are classified as financial liabilities at amortized cost and warrant liability is classified as a financial liability at FVTPL.

The fair values of cash and accounts payable and accrued liabilities approximate their fair values at September 30, 2021, due to their short term nature.

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, 2020.

Capital Management

The Company defines capital that it manages as 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:

	September 30	December 31
Equity is comprised of:	2021	2020
	\$	\$
Share capital	13,056,507	8,258,395
Share-based payments and warrants reserve	1,456,712	1,003,609
Obligation to issue shares	32,238	32,238
Deficit	(18,784,511)	(8,037,998)

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

OUTSTANDING SHARE DATA

As at November 26, 2021, the Company had the following shares outstanding:

- Class Common Shares

- Authorized Unlimited, without par value

- Issued and outstanding 12,989,687

Options Outstanding:

The following table summarizes information on the 519,572 stock options outstanding as at November 26, 2021:

Exercise Price	Number Outstanding	Expiry Date
\$5.87	127,760	March 19, 2023
\$5.87	21,294	November 5, 2023
\$1.64	170,354	June 23, 2025
\$2.82	12,776	August 27, 2025
\$3.29	59,624	January 11, 2026
\$1.88	42,588	May 12, 2026
\$1.76	21,294	June 16, 2026
\$2.41	63,882	July 14, 2026

Warrants Outstanding:

The following table summarizes information on the 5,329,796 outstanding warrants as at November 26, 2021:

Exercise Price	Number Outstanding	Expiry date
\$4.70	1,842,596	February 9, 2026
US\$4.77	3,487,200	October 15, 2026

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.



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 conduct clinical trials, which may not conduct such trials with good laboratory practices; 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 subsidiaries, 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 subsidiaries, 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.

Going-Concern Risk

The Company's future operations are dependent upon the identification and successful completion of equity or debt financing and the achievement of profitable operations at an indeterminate time in the future. There can be no assurances that the Company will be successful in completing an equity or debt financing or in achieving profitability.



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 and has financial risk exposure towards digital currencies. The level of the financial risk exposure related to a 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 Chief Executive Officer and Director, 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 bio-pharmaceuticals, initially focused on the treatment of 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 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.



FORM 52-109FV2 CERTIFICATION OF INTERIM FILINGS VENTURE ISSUER BASIC CERTIFICATE

I, Allen Davidoff, Chief Executive Officer of XORTX Therapeutics Inc., certify the following:

- 1. **Review:** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of XORTX Therapeutics Inc. (the "issuer") for the interim period ended September 30, 2021.
- 2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.
- 3. *Fair presentation:* Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

Date: November 26, 2021.

<u>"Allen Davidoff"</u> Allen Davidoff Chief Executive Officer

NOTE TO READER

In contrast to the certificate required for non-venture issuers under National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings (NI 52-109), this Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as defined in NI 52-109. In particular, the certifying officers filing this certificate are not making any representations relating to the establishment and maintenance of

- i) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
- ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

The issuer's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in this certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

FORM 52-109FV2 CERTIFICATION OF INTERIM FILINGS VENTURE ISSUER BASIC CERTIFICATE

I, Amar Keshri, Chief Financial Officer of XORTX Therapeutics Inc., certify the following:

- 1. **Review:** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of XORTX Therapeutics Inc. (the "issuer") for the interim period ended September 30, 2021.
- 2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.
- 3. *Fair presentation:* Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

Date: November 26, 2021.

<u>"Amar Keshri"</u> Amar Keshri Chief Financial Officer

NOTE TO READER

In contrast to the certificate required for non-venture issuers under National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings* (NI 52-109), this Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as defined in NI 52-109. In particular, the certifying officers filing this certificate are not making any representations relating to the establishment and maintenance of

- i) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
- ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

The issuer's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in this certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.