

XORTX THERAPEUTICS INC.
Management Discussion and Analysis
For the three months ended March 31, 2018

This management discussion and analysis of financial position and results of operations (“MD&A”) is prepared as at May 30, 2018 and should be read in conjunction with the unaudited interim consolidated financial statements for the three months ended March 31, 2018 of XORTX Therapeutics Inc. (the “Company” or “XORTX”), together with the audited financial statements of the Company for the year ended December 31, 2017, 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”) issued by the International Accounting Standards Board and Interpretations of the International Financial Reporting Interpretations Committee. 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.

Forward Looking Statements

This Management’s Discussion and Analysis (“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 listing statement, 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;
- the ability to secure necessary personnel, equipment and services; and

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.

Except as may be required by applicable law or stock exchange regulation, we undertake 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 we do 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 our Company is available by accessing the SEDAR website at www.sedar.com.

Overall Performance

XORTX is a pharmaceutical company, dedicated to developing and commercialization of therapies regarding progressive kidney disease modulated by aberrant purine and uric acid metabolism in orphan disease indications and larger market type 2 diabetic nephropathy, fatty liver disease.

The primary development program for XORTX is at the clinical stage and is focused on demonstrating first-in-class therapy for autosomal dominant polycystic kidney disease (“ADPKD”), an orphan disease. XORTX has a second,

clinical stage program that is currently evaluating two new chemical entities for the treatment of type 2 diabetic nephropathy ("T2DN").

Principal Products and Patents

Products

The Company's primary development program, XORLO⁽¹⁾ is at the clinical stage and is focused on demonstrating the potential of our first-in-class therapy for Autosomal Dominant Polycystic Kidney Disease ("ADPKD"), an orphan disease. XORLO is the development name given to XORTX's proprietary oral formulation of oxypurinol, and shows substantially increased bioavailability compared to oxypurinol alone.

XORTX also has a second clinical stage program for Type II Diabetic Nephropathy ("T2DN") and is currently evaluating the in licensing of two proprietary, candidate chemical entities for development.

Patents

XORTX has three U.S. granted patents with claims to the use of all uric acid lowering agents to treat high blood pressure, insulin resistance and diabetic nephropathy, and four U.S. patent applications with similar claims for the treatment of metabolic syndrome, diabetes, fatty liver disease as well as a composition of matter patent for formulations of xanthine oxidase inhibitors. Counterparts for these patent applications have also been submitted in Europe, Japan, and other jurisdictions.

Future Plans and Outlook

XORTX intends to grow its business by initiating phase II clinical trials in both ADPKD and T2DN indications, and out-licensing these post-phase II programs. In addition, XORTX plans to grow by expanding our knowledge and technical expertise into new programs to treat orphan progressive kidney disease, fatty liver disease and health issues related to diabetes. The Company is currently seeking additional capital to enable it to undertake these programs.

XORTX's overall strategic goal is to have two phase II trials underway within 14 months, advancing two proprietary products into scientifically rigorous phase II testing. Based upon recently published and successful phase II 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 (Goicoechea et al. (2015) Allopurinol and Progression of CKD and Cardiovascular Events: A long-term Follow-up, Am J Kid Dis; Kim et al. (2014) High-normal serum uric acid predicts the development of chronic kidney disease in patients with type 2 diabetes mellitus and preserved kidney function, J Diabetes Complications) Given the existing, successful clinical data showing the benefit of lowering uric acid levels in progressive kidney disease, we anticipate that the probability of translating our clinical trial testing will be increased, with the further implementation of a dose escalation protocol to optimize the amount of uric acid lowering for each individual patient.

The three year business objectives of XORTX are as follows:

With respect to ADPKD and subject to sufficient funding being available:

1. Submit an Investigational New Drug application ("IND") to advance XORLO into phase II trials within 10 months for the treatment of ADPKD and receive 'orphan designation' for this program.
2. Initiate and complete a phase II trial in ADPKD within the next 30 months.

3. Complete licensing or co-development agreements for the ADPKD program within the next 36 months with Global Pharmaceutical Company partners in Europe, Japan, Korean and/or North American partners resulting in upfront, milestone and royalty payments upon NDA approval.

A number of specialty pharmaceutical companies have expressed an interest in the ADPKD program suggesting a good potential of partnering of the ADPKD program once phase II clinical trial data is complete.

With respect to T2DN and subject to sufficient funding being available:

1. Select a candidate from two proprietary xanthine oxidase inhibitors, including potentially the in-license of one inhibitor from an international pharmaceuticals firm, with rights to at least US and European markets.
2. Submit an IND to advance the in-licensed molecule into phase II trials within 14 months for the treatment of T2-DN.
3. Initiate and complete a phase II proof of concept trial for T2-DN within the next 36 months.
4. Complete licensing or co-development agreement with large market pharmaceutical partner for phase IIIa and IIIb development of T2-DN followed by NDA submission to the FDA (US).

Tertiary programs of interest to XORTX include several orphan disease indications where aberrant purine and uric acid metabolism could be accelerating kidney and liver disease progression. Those orphan diseases include "Follow-On Orphan Market Opportunities": IgA Nephropathy, Lupus Nephritis, Nephropathy associated with Cystic Fibrosis, and type 1 Diabetic Nephropathy, will proceed with pre-clinical evaluation of the contribution of high serum uric acid to disease progression as available funding, staff and time capacity permit.

Summary of Quarterly Results

The table below sets forth unaudited quarterly results prepared by management for the eight previous quarters to March 31, 2018:

(unaudited)	2018 Q1	2017 Q4	2017 Q3	2017 Q2
Accretion	661	3,878	1,498	-
Amortization of Intangible Assets	4,761	4,309	4,198	4,126
Foreign Exchange loss (gain)	(14,280)	758	(6,537)	(1,357)
Consulting	46,575	-	-	-
General and administrative	3,506	4,007	4,977	4,112
Interest	2,431	6,514	3,774	2,587
Investor Relations	5,780	7,800	10,882	-
Listing fees	9,561	-	-	-
Professional Fees	27,837	56,089	9,577	2,284
Research and Development	62,202	66,367	-	-
Share Based Payments	222,555	23,169	23,168	23,168
Travel	14,972	8,397	5,324	3,150
Wages and Benefits	51,914	71,576	30,233	30,000
Charge related to public company listing	2,608,281	-	-	-
Total Comprehensive Loss	3,046,756	252,864	87,094	68,070
Loss per Share	(0.05)	(0.02)	0.00	0.00
(unaudited)	2017 Q1	2016 Q4	2016 Q3	2016 Q2
Amortization of Intangible Assets	4,144	4,119	4,027	3,984
Foreign Exchange loss (gain)	(3,568)	8,139	1,026	361
General and administrative	3,153	5,073	3,221	5,252
Interest	2,588	2,601	2,573	2,545
Investor Relations	1,500	15,157	1,360	1,575
Professional Fees	4,516	7,109	13,135	80
Share Based Payments	23,167	101,937	101,938	-
Travel	673	785	20	848
Wages and Benefits	30,000	32,630	30,907	29,280
Total Comprehensive Loss	66,173	177,550	158,207	43,925
Loss per Share	0.00	(0.01)	(0.01)	0.00

The Company incurred a comprehensive loss of \$3,046,756 (\$0.05 per share) for the three months ended March 31, 2018 compared to \$66,173 (\$0.00 per share) in the three months ended March 31, 2017. This increase in net loss is primarily related to the charge related to public company listing of \$2,608,281 as a result of the reverse takeover transaction completed with APAC. Other significant differences are as follows:

Consulting - \$46,575 (2017 - \$nil) – Consulting fees have increased as the Company hired more consultants during the 2017 year.

Professional fees - \$27,837 (2017 - \$4,516) – Professional fees have increased over the three months ended March 31, 2018 as the Company has incurred increased accounting and legal fees due to the increased corporate activity.

Research and development - \$62,202 (2017 - \$nil) – A limited amount of research and development activity has been initiated in relation to the business objectives outlined above.

Share-based payments \$222,555 (2017 - \$23,167) – The share-based payments increased during the three months ended March 31, 2018 as there were 2,250,000 options granted during the quarter to directors, officers, and consultants. Of the 2,250,000 options granted, 950,000 options vested immediately and 1,300,000 options have the following vesting conditions: 25% vest immediately and the remaining options vest in equal monthly installments over 36 months. No options were granted in the prior year quarter.

Comparison of Cash Flow For the 2017 and 2016 Financial Years

The Company realized a net cash inflow of \$809,724 for the three months ended March 31, 2018 compared to a net cash outflow of \$7,374 for the three months ended March 31, 2017. The increase in cash and cash equivalents for the three months ended March 31, 2018 compared to March 31, 2017 was primarily due to the following:

Operating activities – Cash used in operating activities for the three months ended March 31, 2018 was \$956,563 (2017 –\$6,874). This increase of \$949,689 was mostly due to the deposit paid to Cato of \$631,866, as well as the increase in net loss of the Company of \$2,980,583, offset by the non-cash items such as the charge related to public company listing of \$2,608,281 and the share-based payments of \$222,555.

Investing activities – Cash used in investing activities for the three months ended March 31, 2018 was \$141,958 (2017 - \$500). This was mostly due to the transaction costs of the reverse takeover transaction with APAC net of cash acquired of \$280,955, offset by the deferred transaction costs of \$167,220 recorded as at December 31, 2017 related to the transaction.

Financing activities – Cash provided by financing activities the three months ended March 31, 2018 was \$1,908,245 (2017 - \$nil). This is due to the private placement that took place during the quarter raising gross proceeds of \$1,957,370 through the issuance of 3,914,740 units (the “Units”), at a price of \$0.50 per Unit.

Liquidity and Capital Resources

As at March 31, 2018, the Company had a cash balance of \$871,663 and a working capital position of approximately \$710,869 as compared to a cash balance of \$61,939 and a working capital position of approximately \$(1,045,921) as at December 31, 2017. The Company’s primary source of funding is by way of raising capital through the issuance of equity to third party investors. As part of the reverse-takeover transaction between the Company and APAC Resources Inc. (“APAC”), the Company raised gross proceeds of \$1,957,370 through the issuance of units. It is expected that the gross proceeds through this issuance will enable the Company to satisfy its outstanding payable obligations and fund operations including: general and administrative expenses, wages and salaries, and research and development for a period of 18 months.

Commitments

The Company has entered into long-term arrangements with commitments for the years ending December 31 as follows:

	2018		2017	
Management services – officers	\$	192,000	\$	120,000

Dr. Allen Davidoff, President, CEO and a director of the Company has a long-term employment agreement with the Company. The agreement has a termination clause whereby Dr. Davidoff is entitled to the equivalent of 12 times his then current monthly salary which, as of March 31, 2018 equated to \$192,000.

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 months ended March 31, 2018, the Company was involved with the following transactions with related parties and a shareholder:

- a) Wages and benefits were paid or accrued to a director and an officer of the Company in the amount of \$59,198 (2017 - \$30,000).
- b) Interest of \$nil (2017 2,588) was accrued to a director of the Company during the period.
- c) As at March 31, 2018, \$3,847 (2017 - \$3,755) was payable to directors and officers of the Company. The balance is unsecured, non-interest bearing, and has no fixed terms of repayment.
- d) As at March 31, 2018, \$333,110 was accrued to directors, former directors, and officers of the Company (December 31, 2017 - \$333,110). The balance is unsecured, non-interest bearing and has no fixed terms of repayments.
- e) Management compensation transactions for the three months ended March 31, 2018 and 2017 are summarized as follows:

	Short-term employee benefits	Share-based payments	Total
Three months ended March 31, 2017			
Directors and officers	\$ 30,000	\$ 17,375	\$ 47,375
Three months ended March 31, 2018			
Directors and officers	\$ 59,198	\$ 54,622	\$ 113,820

Significant Transaction

On January 10, 2018, the Company completed the previously announced reverse take-over and acquisition by APAC Resources Inc. ("APAC") of all of the issued and outstanding shares ("XORTX Shares") of the Company (the "Acquisition"). The resulting company was named XORTX Therapeutics Inc. ("XRX") and XORTX Pharma Inc. became a wholly owned subsidiary of XRX.

Also, pursuant to the Acquisition, XRX raised gross proceeds of \$1,957,370 by way of a private placement through the issuance of 3,914,740 units (the "Units"), at a price of \$0.50 per Unit, completed concurrently with the completion of the Acquisition. Each Unit consists of one post-consolidation APAC Share and one APAC Share purchase warrant ("Warrant"), each Warrant entitling the holder to purchase one additional post-consolidation APAC Share at a price of \$0.80 for a period of two years from the date of issuance of the Unit. Finders fees in the aggregate amount of \$45,000 and 90,000 Warrants were paid to registered broker dealers.

Changes in accounting policies – IFRS 9

The Company adopted all of the requirements of IFRS 9 Financial Instruments (“IFRS 9”) as of January 1, 2018. IFRS 9 replaces IAS 39 Financial Instruments: Recognition and Measurement (“IAS 39”). IFRS 9 utilizes a revised model for recognition and measurement of financial instruments and a single, forward-looking “expected loss” impairment model. Most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward in IFRS 9, so the Company’s accounting policy with respect to financial liabilities is unchanged. As a result of the adoption of IFRS 9, management has changed its accounting policy for financial assets retrospectively, for assets that continued to be recognized at the date of initial application. The change did not impact the carrying value of any financial assets or financial liabilities on the transition date.

The following is the Company’s new accounting policy for financial instruments under IFRS 9:

a) Classification

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

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

The Company completed a detailed assessment of its financial assets and liabilities as at January 1, 2018. The following table shows the original classification under IAS 39 and the new classification under IFRS 9:

	Original classification IAS 39	New classification IFRS 9
Cash	FVTPL	FVTPL
Accounts payable and accrued liabilities	amortized cost	amortized cost
Loans payable	amortized cost	amortized cost
Liability component on convertible loans	amortized cost	amortized cost

The Company did not restate prior periods as there was no impact at the date of initial application. The adoption of IFRS 9 resulted in no impact to the opening accumulated deficit nor to the opening balance of accumulated comprehensive income on January 1, 2018.

b) Measurement

Financial assets at FVTOCI

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

Financial assets and liabilities at amortized cost

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

Financial assets and liabilities at FVTPL

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

c) Impairment of financial assets at amortized cost

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

At each reporting date, the Company measures the loss allowance for the financial asset at an amount equal to the lifetime expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition. If at the reporting date, the financial asset has not increased significantly since initial recognition, the Company measures the loss allowance for the financial asset at an amount equal to the 12 month expected credit losses. The Company shall recognize in the consolidated statements of net (loss) income, as an impairment gain or loss, the amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognized.

d) Derecognition

Financial assets

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

Financial liabilities

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

Changes in accounting policies – IFRS 15

The adoption of IFRS 15 Revenue from contracts with customers did not have an impact on the Company's consolidated financial statements.

Accounting standards issued but not yet effective

The following new standard has been issued but not yet applied:

a) IFRS 16 – Leases. IFRS 16 Leases will replace IAS 17 Leases

This standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. The standard will be effective for annual periods beginning on or after January 1, 2019. This standard will affect the way in which the Company accounts for its operating leases and will increase the related disclosures.

Other accounting pronouncements with future effective dates are either not applicable or are not expected to have a material impact on the Company's consolidated financial statements.

Financial and Capital Risk Management

The Company's financial instruments consist of cash, accounts payable and accrued liabilities, loans payable, and the liability component on convertible loans. 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 March 31, 2018, 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, 2017.

Capital Management

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

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

Equity is comprised of:	March 31, 2018	December 31, 2017
Share capital	\$ 5,863,872	\$ 1,391,673
Share-based payments reserve	\$ 528,947	\$ 296,535
Equity component on convertible loans	\$ 5,202	\$ 10,257
Deficit	\$ (5,399,855)	\$ (2,353,099)

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 May 30, 2018 the Company had the following shares outstanding:

- Class	Class A Common Shares
- Authorized	Unlimited, without par value
- Issued and outstanding	62,919,691

Options Outstanding:

The following table summarizes information on stock options outstanding at May 30, 2018:

Exercise Price	Number Outstanding	Expiry Date	Average Remaining Contractual Life
\$0.50	2,250,000	March 19, 2023	4.97 years

Warrants Outstanding:

The following table summarizes information on outstanding warrants as at May 30, 2018:

Exercise Price	Number Outstanding	Expiry date	Average Remaining Contractual Life
\$0.80	4,004,740	January 9, 2020	1.78 years

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.