

XORTX THERAPEUTICS INC.
Management Discussion and Analysis
For the three and nine months ended September 30, 2018

This management discussion and analysis of financial position and results of operations (“MD&A”) is prepared as at November 29, 2018 and should be read in conjunction with the unaudited interim consolidated financial statements for the three and nine months ended September 30, 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”) as issued by the International Accounting Standards Board (“IASB”) and interpretations of the International Financial Reporting Interpretations Committee (“IFRIC”), applicable to the preparation of interim financial statements, including IAS 34, *Interim Financial Reporting*.

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.

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 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; 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.

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.

Business Overview

XORTX is a bio-pharmaceutical company, dedicated to developing and commercialization of therapies to treat progressive kidney disease modulated by aberrant purine and uric acid metabolism in orphan disease indications, larger market type 2 diabetic nephropathy, and fatty liver disease. The Company's current focus is on developing two therapeutic programs to slow and/or reverse the progression of kidney disease in patients at risk of end stage kidney failure.

The primary development program for XORTX is at the clinical stage and is focused on demonstrating the effectiveness and potential of a 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 three new chemical entities for the treatment of type 2 diabetic nephropathy ("T2DN").

Principal Products and Patents

Products

The Company's most advanced development program, XRx-008 (XORLO⁽¹⁾) is at the clinical stage and is focused on demonstrating the potential of our first-in-class therapy for ADPKD. XRx-008 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 T2DN. The Company has two in-house candidate molecules and in addition, 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 or 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 some of 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 a pivotal phase 2/3 clinical trial in ADPKD and a phase 2 clinical trial in T2DN patients, and then out-licensing these programs to specialty and larger pharmaceutical companies. In addition, XORTX plans to grow by expanding our 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 be seeking additional capital to enable it to undertake these programs.

XORTX's overall strategic goal is to have two clinical trials underway within 12 months. XORTX's ADPKD program is poised to advance to a pivotal phase 2/3 clinical trial. The company's secondary program in T2DN will enter phase 2b proof of concept 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 T2DN mellitus and preserved kidney function, J Diabetes

Complications). Given the existing, successful clinical trials and associated data that shows 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.

The three year business objectives of XORTX are as follows:

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

1. Manufacture Oxypurinol and formulation in preparation for pivotal phase 2/3 clinical trials.
2. Complete the Investigational New Drug application (“IND”) process to advance XRx-008 and characterize bioavailability of XRx-008 in man within 10 months.
3. Complete and receive ‘orphan designation’ for this program.
4. Submit the phase 2/3 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 global pharmaceutical company partners in Europe, Japan, Korean and/or North American partners resulting in upfront, milestone and royalty payments upon new drug application (“NDA”) approval.

A number of specialty pharmaceutical companies have expressed an interest in the ADPKD program suggesting an increased probability of partnering of the ADPKD program once phase 2/3 clinical trial, under SPA, is finalized or in the early stages of recruiting the phase 2/3 trial.

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 pharmaceutical company, with rights to at least the US and European markets.
2. Submit an IND application and phase 2 clinical trial to advance the in-licensed molecule into phase 2 trials within 14 months for the treatment of T2DN.
3. Initiate and complete a phase 2 proof of concept trial for T2DN within the next 36 months.
4. Complete licensing or co-development agreement with large market pharmaceutical partner for phase IIIa and IIIb c0-development of T2DN 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 anticipated to accelerate kidney and liver disease progression. Those orphan diseases include “Follow-On Orphan Market Opportunities”: IgA Nephropathy, and Nephropathy associated with Cystic Fibrosis as available funding, staff and time capacity permit. In addition, XORTX anticipates activities to advance a therapy for diabetes associated liver disease.

Recent Developments

On January 9, 2018, the Company completed the previously announced reverse take-over (“RTO”) and acquisition by APAC Resources Inc. (“APAC”) of all of the issued and outstanding shares of XORTX Pharma Inc. (the “Acquisition”). The resulting company was named XORTX Therapeutics Inc. and XORTX Pharma Inc. became a wholly owned subsidiary of XORTX.

Also, pursuant to the Acquisition, the Company raised gross proceeds of \$1,957,370 by way of a private placement through the issuance of 3,914,740 units (the “Units”), completed concurrently with the completion of the Acquisition. Each Unit consisted of one common share and one common share purchase warrant

("Warrant"), each Warrant entitling the holder to purchase one additional common 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.

On February 16, 2018, XORTX announced the appointment of Allan Williams and Paul Van Damme as directors of the Company and the resignation of Dr. Alan Moore as director. Dr. Alan Moore, a co-founder and a long time director of XORTX has remained with the Company as Senior Executive Consultant for Clinical and Regulatory Affairs.

On February 24, 2018, XORTX announced the appointment of Dave Matthews as Chief Financial Officer ("CFO").

On April 19, 2018, XORTX announced that the Polycystic Kidney Disease (PKD) Foundation of America (the "PKD Foundation") has formally recognized XORTX as a leader advancing the development of treatments for progressive kidney disease and specifically rare diseases such as ADPKD.

On May 8, 2018, XORTX announced the appointment of Bruce Rowlands, a director of XORTX as Chairman of the Board of Directors. Bruce Rowlands has extensive experience in the life sciences industry in Canada through his long association with Lorus Therapeutics, a leading Canadian biotechnology company, where he acted as a consultant, banker and senior executive during its early drug development years. Lorus Therapeutics, now Aptose Biosciences Inc., is dual-listed on the TSX and NASDAQ exchanges. Bruce's involvement in the Canadian life sciences industry coupled with his investment banking experience as Vice President and Director of Dominick & Dominick Securities Canada and his corporate governance knowledge gained through a decade of leading a TSX Venture listed company will be valuable in leading the Board of Directors of XORTX.

On June 6, 2018, XORTX announced that the Company's shares have been approved to trade on the OTCQB Venture Market under the symbol XRTXF.

On June 8, 2018, XORTX announced that the Company along with Cato Clinical Research ("Cato") had filed its pre-IND meeting request letter with the FDA. The request for a pre-IND (Investigational New Drug) meeting was accompanied by pre-IND documents and initiates formal communications with the FDA regarding development of XRx-008 for the treatment of ADPKD.

On June 27, 2018, XORTX announced that Bruce Cousins, an experienced biopharma industry executive was elected to the Board of Directors. Bruce Cousins' experience spans small, early stage growth to large, international operation companies in the biopharma industry.

On August 13, 2018, XORTX announced that the Company with its collaborative partner, Cato, has filed its pre-IND meeting documents with the FDA which documents provide a comprehensive overview of the program and facilitate formal communications with the FDA regarding development of XRx-008 for the treatment of ADPKD in advance of the Company's meeting with the FDA scheduled for September 20, 2018.

On September 10, 2018, XORTX announced that the Company with its collaborative partner, Cato, submitted documents to the FDA to receive Orphan Drug Designation (ODD) status for the development of XRx-008 for the treatment of ADPKD.

On October 15, 2018, XORTX announced the addition of two new members to the Company's clinical advisory board, Dr. Petter Bjornstad and Dr. Fred Maese.

On October 23, 2018, XORTX announced that the Company's Polycystic Kidney Disease Clinical Development Plan had been reviewed and accelerated. This major revision to the Company's original clinical development plan was acceptable to the FDA.

Management Change

On November 6, 2018, the Company announced the appointment of James Fairbairn as Chief Financial Officer. Mr. Fairbairn has more than 20 years of experience with publicly-traded companies. He is a Chartered Professional Accountant, having obtained his CPA designation in 1987 and an Institute-certified Director. Mr. Fairbairn holds a B.A. from the University of Western Ontario.

Summary of Quarterly Results

The table below sets forth unaudited quarterly results prepared by management for the eight previous quarters to September 30, 2018:

(unaudited)	2018 Q3	2018 Q2	2018 Q1	2017 Q4
Accretion	397	462	661	3,878
Amortization of Intangible Assets	4,873	4,760	4,761	4,309
Foreign Exchange (gain) loss	9,192	(10,239)	(14,280)	758
Consulting	12,720	43,569	46,575	-
General and administrative	2,491	479	3,506	4,007
Interest	3,262	7,673	2,431	6,514
Investor Relations	10,807	1,139	5,780	7,800
Listing fees	8,372	15,052	9,561	-
Professional Fees	19,593	13,050	27,837	56,089
Research and Development	137,921	121,953	62,202	66,367
Share Based Payments	18,983	24,904	222,555	23,169
Travel	30,214	3,730	14,972	8,397
Wages and Benefits	48,000	48,347	51,914	71,576
Charge related to public company listing	-	-	2,608,281	-
Total Comprehensive Loss	306,825	274,879	3,046,756	252,864
Loss per Share	(0.00)	(0.00)	(0.05)	(0.01)
(unaudited)	2017 Q3	2017 Q2	2017 Q1	2016 Q4
Accretion	1,498	-	-	-
Amortization of Intangible Assets	4,198	4,126	4,144	4,119
Foreign Exchange (gain) loss	(6,537)	(1,357)	(3,568)	8,139
General and administrative	4,977	4,112	3,153	5,073
Interest	3,774	2,587	2,588	2,601
Investor Relations	10,882	-	1,500	15,157
Professional Fees	9,577	2,284	4,516	7,109
Share Based Payments	23,168	23,168	23,167	101,937
Travel	5,324	3,150	673	785
Wages and Benefits	30,233	30,000	30,000	32,630
Total Comprehensive Loss	87,094	68,070	66,173	177,550
Loss per Share	(0.00)	(0.00)	(0.00)	(0.01)

Three months ended September 30, 2018

The Company incurred a comprehensive loss of \$306,825 (\$0.00 per share) for the three months ended September 30, 2018 compared to \$87,094 (\$0.00 per share) in the three months ended September 30, 2017. This increase in net loss is primarily related to the following:

Consulting - \$12,720 (2017 - \$nil) – Consulting fees increased as the Company hired consultants during the 2018 year.

Listing fees - \$8,372 (2017 - \$nil) – Listing fees increased after the Company completed its RTO transaction to become public and listed the Company's shares on the CSE in Q1 2018 and the OTCQB Venture Market in Q2 2018.

Professional fees - \$19,593 (2017 - \$9,577) – Professional fees increased over the three months ended September 30, 2018 as the Company incurred increased accounting and legal fees due to the increased corporate activity.

Research and development - \$137,921 (2017 - \$nil) – Research and development activity has been initiated in relation to the business objectives outlined above.

Travel - \$30,214 (2017 - \$5,324) – Travel increased as the Company increased corporate activity.

Wages and benefits - \$48,000 (2017 - \$30,233) – Wages and benefits increased as salaries increased due to the increase in activity of the Company.

Nine months ended September 30, 2018

The Company incurred a comprehensive loss of \$3,628,460 (\$0.06 per share) for the nine months ended September 30, 2018 compared to \$221,337 (\$0.01 per share) in the nine months ended September 30, 2017. This increase in net loss is primarily related to the following:

Consulting - \$102,864 (2017 - \$nil) – Consulting fees increased as the Company hired consultants during the 2018 year.

Listing fees - \$32,985 (2017 - \$nil) – Listing fees increased after the Company completed its RTO transaction to become public and listed the Company's shares on the CSE in Q1 2018 and the OTCQB Venture Market in Q2 2018.

Professional fees - \$60,480 (2017 - \$16,377) – Professional fees increased over the nine months ended September 30, 2018 as the Company incurred increased accounting and legal fees due to the increased corporate activity.

Research and development - \$322,076 (2017 - \$nil) – Research and development activity has been initiated in relation to the business objectives outlined above.

Share-based payments \$266,442 (2017 - \$69,503) – The share-based payments increased during the nine months ended September 30, 2018 as there were 2,250,000 options granted during the period to directors, officers, and consultants. Of the 2,250,000 options granted, 250,000 have been cancelled, 650,000 options vested immediately and 1,350,000 options vest 25% immediately with the remaining options vesting in equal monthly installments over 36 months. No options were granted in the prior year period.

Travel - \$48,916 (2017 - \$9,147) – Travel increased as the Company increased corporate activity.

Wages and benefits - \$148,261 (2017 - \$90,233) – The wages and benefits have increased as salaries increased due to the increase in activity of the Company.

Comparison of cash flows for the nine months ended September 30, 2018 and 2017

The Company realized a net cash inflow of \$326,390 for the nine months ended September 30, 2018 compared to a net cash inflow of \$81,089 for the nine months ended September 30, 2017. The increase in cash and cash equivalents for the nine months ended September 30, 2018 compared to September 30, 2017 was primarily due to the following:

Operating activities – Cash used in operating activities for the nine months ended September 30, 2018 was \$1,431,009 (2017 –\$46,347). The increase of \$1,384,662 was primarily due to the deposit paid to Cato of \$631,866, as well as the increase in net loss of the Company of \$3,407,123, 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 \$266,442.

Investing activities – Cash used in investing activities for the nine months ended September 30, 2018 was \$150,846 (2017 - \$6,264). This was primarily 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 in the nine months ended September 30, 2018 was \$1,908,245 (2017 - \$133,700). This is due to the private placement that took place during the period 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 September 30, 2018, the Company had a cash balance of \$388,329 and a working capital position of approximately \$173,797 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, the Company raised gross proceeds of \$1,957,370 through the issuance of units. It is expected that the Company’s current cash resources and prepaid expenses with Cato will enable the Company to satisfy its outstanding payable obligations and fund operations.

Although there is no certainty, management is of the opinion that additional funding for future 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 U.S. Food and Drug Administration and equivalent organizations in other countries before their sale can be authorized. If the Company is unsuccessful in obtaining adequate financing in the future, research activities will be postponed until market conditions improve. These circumstances and conditions may cast significant doubt about the Company’s ability to continue as a going concern.

Commitments

The Company has long-term arrangements with commitments as at September 30, 2018 and December 31, 2017 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 September 30, 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 and nine months ended September 30, 2018, the Company incurred the following transactions with related parties and a shareholder:

- a) Wages and benefits were paid or accrued to an officer of the Company in the amount of \$48,000 and \$148,261 (2017 - \$30,233 and \$90,233).
- b) Consulting fees were paid or accrued to an officer of the Company in the amount of \$nil and \$4,000 (2017 - \$nil and \$nil).
- c) Professional fees were paid or accrued to an officer of the Company in the amount of \$2,500 and \$13,750 (2017 - \$nil and \$nil).
- d) Interest of \$nil and \$nil (2017 - \$1,389 and \$6,564) was accrued to a director of the Company during the period.
- e) As at September 30, 2018, \$14,875 (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.
- f) As at September 30, 2018, \$322,110 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.

- g) Management compensation transactions for the three and nine months ended September 30, 2018 and 2017 are summarized as follows:

	Three Months Ended			Nine Months Ended		
	Short-term employee benefits	Share-based payments	Total	Short-term employee benefits	Share-based payments	Total
Directors and officers - 2017	\$ 30,233	\$ 17,375	\$ 47,608	\$ 90,233	\$ 52,125	\$142,358
Directors and officers - 2018	\$ 50,500	\$ 3,651	\$ 54,151	\$166,011	\$163,062	\$329,073

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	New classification
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 September 30, 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:	September 30, 2018	December 31, 2017
Share capital	\$ 5,863,872	\$ 1,391,673
Share-based payments reserve	\$ 572,834	\$ 296,535
Equity component on convertible loans	\$ 5,202	\$ 10,257
Deficit	\$ (5,981,559)	\$ (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 November 29, 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 November 29, 2018:

Exercise Price	Number Outstanding	Expiry Date
\$0.50	2,000,000	March 19, 2023
\$0.50	424,000	October 9, 2023
\$0.50	250,000	November 5, 2023

Warrants Outstanding:

The following table summarizes information on outstanding warrants as at November 29, 2018:

Exercise Price	Number Outstanding	Expiry date
\$0.80	4,004,740	January 9, 2020

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.