

Introduction

The following interim Management's Discussion & Analysis ("Interim MD&A") of Revive Therapeutics Ltd. ("Revive" or the "Company") for the three and nine months ended March 31, 2017 has been prepared to provide material updates to the business operations, liquidity and capital resources of the Company since its last annual management's discussion & analysis, being the Management's Discussion & Analysis ("Annual MD&A") for the fiscal year ended June 30, 2016. This Interim MD&A does not provide a general update to the Annual MD&A, or reflect any non-material events since date of the Annual MD&A.

This Interim MD&A has been prepared in compliance with section 2.2.1 of Form 51-102F1, in accordance with National Instrument 51-102 — Continuous Disclosure Obligations. This discussion should be read in conjunction with the Company's Annual MD&A, audited annual consolidated financial statements for the years ended June 30, 2016, and June 30, 2015, together with the notes thereto, and unaudited condensed interim consolidated financial statements for the three and nine months ended March 31, 2017, together with the notes thereto. Results are reported in Canadian dollars, unless otherwise noted. The Company's financial statements and the financial information contained in this Interim MD&A are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board and interpretations of the IFRS Interpretations Committee. The unaudited condensed interim consolidated financial statements have been prepared in accordance with International Standard 34, Interim Financial Reporting. Accordingly, information contained herein is presented as of May 24, 2017, unless otherwise indicated.

For the purposes of preparing this Interim MD&A, management, in conjunction with the Board of Directors, considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of Revive's common shares; (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board of Directors, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

Further information about the Company and its operations can be obtained from the offices of the Company or on SEDAR at www.sedar.com.

Caution Regarding Forward-looking Statements

This Interim MD&A contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking statements"). These statements relate to future events or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates" or "believes", or variations of, or the negatives of, such words and phrases, or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in such forward-looking statements. The forward-looking statements in this Interim MD&A speak only as of the date of (i) this Interim MD&A; or (ii) as of the date specified in such statement. The following table outlines certain significant forward-looking statements contained in this Interim MD&A and provides the material assumptions used to develop such forward-looking statements and material risk factors that could cause actual results to differ materially from the forward-looking statements.

Interim Management's Discussion & Analysis – Quarterly Highlights For the three and nine months ended March 31, 2017 Dated – May 24, 2017

Forward-looking Statements	Assumptions	Risk Factors
The Company's (i) development of new drug candidates, (ii) demonstration of such drug candidates' safety and/or efficacy in clinical trials, and (iii) obtaining regulatory approval to test and commercialize these drug candidates.	Financing will be available for development of new drug candidates and conducting clinical studies; the actual results of the clinical trials will be favourable; development costs will not exceed Company's expectations; the Company will be able to retain and attract skilled staff; the Company will be able to recruit sufficient suitable patients for clinical trials; all requisite regulatory and governmental approvals to test and commercialize the drug candidates will be received on a timely basis upon terms acceptable to Revive; no adverse changes to regulatory requirements that will materially affect clinical trials of new drug candidates; and applicable pricing, reimbursement, market access and other economic conditions are favourable to the Company.	Availability of financing in the amount and time frame needed for development and clinical trials may not be favourable; increases in costs; the Company's ability to retain and attract skilled staff; the Company's ability to recruit sufficient suitable patients for clinical trials; timely and favourable regulatory and governmental approvals; changes or increases in regulatory requirements; interest rate and exchange rate fluctuations; adverse changes in pricing, reimbursement, market access and other economic conditions.
The Company's ability to obtain the substantial capital it requires to fund research and operations.	Financing will be available for the Company's research and operations and the results thereof will be favourable; debt and equity markets, exchange and interest rates and other applicable economic conditions are favourable to the Company.	Changes in debt and equity markets; timing and availability of external financing on acceptable terms; increases in cost of research and operations; interest rate and exchange rate fluctuations; adverse changes in economic conditions.
Factors affecting clinical trials and regulatory approval process of the Company's drug candidates.	Actual costs of clinical and regulatory processes will be consistent with the Company's current expectations; the Company will be able to retain and attract skilled staff; the Company will be able to recruit sufficient suitable patients for clinical trials; no adverse changes to regulatory requirements that will materially affect the conduct of the clinical trials; the Company will be able to complete clinical studies on a timely basis with favourable results; all applicable regulatory and governmental approvals for drug candidates will be received on a timely basis with terms acceptable to the Company; debt and equity markets, exchange and interest rates and other applicable economic and	The Company's drug candidates may require time-consuming and costly preclinical and clinical testing and regulatory approvals before commercialization; the Company's ability to retain and attract skilled staff; the Company's ability to recruit sufficient suitable patients for clinical trials; adverse changes in regulatory and governmental processes and requirements; interest rate and exchange rate fluctuations; changes in economic and political conditions; the Company will not be adversely affected by market competition.

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Forward-looking Statements	Assumptions	Risk Factors
	political conditions are favourable to the Company; there will be a ready market for the drug candidates.	
The Company's ability to find and enter into agreements with potential partners to bring viable drug candidates to commercialization.	The Company will be able to find suitable partners and enter into agreements to bring drug candidates to market within a reasonable time frame and on favourable terms; the costs of entering into a partnership will be consistent with the Company's expectations; partners will provide necessary financing and expertise to bring drug candidates to market successfully and profitably.	The Company will not be able to find a partner and / or enter into agreements within a reasonable time frame; if the Company enters into agreements, these agreements may not be on favourable terms to the Company; costs of entering into agreements may be excessive; potential partners will not have the necessary financing or expertise to bring drug candidates to market successfully or profitably.
The Company's ability to obtain and protect the Company's intellectual property rights and not infringe on the intellectual property rights of others.	Patents and other intellectual property rights will be obtained for viable drug candidates in target countries; patents and other intellectual property rights obtained will not infringe on others.	The Company will not be able to obtain appropriate patents and other intellectual property rights for viable drug candidates in the target countries; patents and other intellectual property rights obtained will be contested by third parties; no proof that acquiring a patent will make the product more competitive or profitable.
The Company's ability to source markets which have demand for its products and successfully supply those markets in order to generate sales.	The anticipated markets for the Company's potential products and technologies will continue to exist and expand. The Company's products will be commercially viable and it will successfully compete with other research teams who are also examining potential therapeutics (including cannabinoids) with regards to gout, cystinuria, Wilson's disease, Rett Syndrome, rare diseases, cognitive dysfunction, pain, inflammatory skin diseases,	The anticipated market for the Company's potential products and technologies will not continue to exist and expand for a variety of reasons, including competition from other products and the degree of commercial viability of the potential product, including the effects of the pricing, reimbursement and market access environment.

Forward-looking Statements	Assumptions	Risk Factors
	liver diseases, and central nervous system disorders.	
Future actions with respect to and potential impacts of pending claims.	The Company will be able to settle or otherwise obtain disposition of claims against it on favourable terms.	The Company may will not be able to settle pending claims on favourable terms; claims may be adjudicated in a manner that is not favourable to the Company.

Inherent in forward-looking statements are risks, uncertainties and other factors beyond the Company's ability to predict or control. Please also make reference to those risk factors referenced in the "Risk Factors" section below. Readers are cautioned that the above chart does not contain an exhaustive list of the factors or assumptions that may affect the forward-looking statements, and that the assumptions underlying such statements may prove to be incorrect. Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this Interim MD&A.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any of its future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements herein are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law. If the Company does update one or more forward-looking statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements, unless required by law.

Description of Business

The Company is a reporting issuer in the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland. Its common shares are listed for trading on the TSX Venture Exchange under the symbol "RVV" and on the OTCBB under the symbol "RVVTF". The Company's registered and head office is located at 5 Director Court, Suite 105, Vaughan, Ontario, L4L 4S5 and its website is available at www.revivethera.com.

Overview:

The Company is focused on the research and development of novel therapeutics for serious and unmet medical needs by identifying and investigating potential compounds and plant-based therapeutics, such as cannabinoids, that may be repurposed for new indications, be delivered in a different way, combined with existing drugs, or be developed as new chemical entities or prodrugs.

We have expertise in discovery, clinical research, regulatory, and commercial development activities. Our goal is to use these core competencies to advance our product candidates along the regulatory and clinical pathway toward commercial approval. We believe we have the ability to manage and perform the key critical aspects of the drug development process, including conducting clinical trials, developing and executing strategies for the protection of intellectual property, and interacting with regulatory authorities. We are actively seeking development and commercial partnerships that might facilitate these activities. In

the meantime, we are prepared to advance our drug candidates toward commercial approval in the most efficient and expeditious manner.

Our initial focus was on the advancement of repurposing the drug Bucillamine, an arthritis drug approved only in Japan and South Korea, for the treatment of gout (pain from flares). We have completed a Phase 2a clinical program with Bucillamine in gout and we are currently seeking funding, development, and commercialization partners to advance into Phase 2b and into registration studies. We are also investigating Bucillamine as a potential treatment for cystinuria (kidney stones) because we believe that there is an unmet need for new and effective therapeutics to treat this disease. We initiated the U.S. Phase 2 clinical study in February 2017 and began enrolling subjects in May 2017. We expect to complete the study in 2018.

To expand our product pipeline, we employ bioinformatics to perform scientific evaluation, clinical, and market assessment of potential pharmaceutical products for diseases that fall into our target area of expertise. Subsequently, we have also focused on expanding our product pipeline through the advancement of our cannabinoid-based therapeutics strategy in, but not limited to, pain, skin disorders, kidney, and liver diseases. We have initiated a research discovery program of cannabinoid-based therapies targeting liver diseases with PhytoSciences Consulting LLC., a contract research organization. We are also actively engaging in a review of certain complementary assets that we may consider acquiring or licensing, and have optioned an innovative drug delivery technology from Wisconsin Alumni Research Foundation (WARF). We have engaged the University of Wisconsin-Madison to conduct research and development on an innovative drug delivery technology to deliver cannabinoids ("The University of Wisconsin-Madison Research Agreement").

Upon licensing a product candidate, our strategy is to apply our expertise to advance the product toward regulatory approval and commercial sale in major markets, including the U.S. and Canada. These activities include implementing intellectual property protection and registration strategies, formulating or reformulating existing drug products, performing or managing clinical trials in target jurisdictions, undertaking or managing the collection, collation and interpretation of clinical data, and submitting such data to the relevant regulatory authorities in compliance with applicable protocols and standards.

We may also develop next-generation versions of our drug candidates, which will aim to improve upon the original drug or cannabinoid, and may have the potential to treat new diseases that would otherwise remain untreated by the original drug.

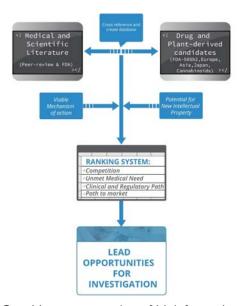
In order to augment our ability to develop product candidates and effectively market any products in respect of which we obtain regulatory approval, we may seek to enter into an agreement or partnership with biopharmaceutical companies that have drug development and/or sales and marketing capabilities. Entering into an agreement or partnership with an organization that has these capabilities may enable us to increase profitability and further accelerate development of our product candidates or enable us to develop the candidate in more than one indication, simultaneously.

In order to optimize the development of our product candidates, we outsource certain aspects of our research and product development activities. Factors that we consider in determining which activities to outsource include cost, relative expertise, capacity, and quality assurance. Product development functions that we have chosen to historically outsource include pre-clinical activities in support of regulatory filings, clinical trials, and manufacturing. We believe that our relationships with external laboratories enable us to complete preclinical testing faster and more efficiently than we can performed these activities in-house. Additionally, we have identified many independent contract research organizations (CROs) that are specifically equipped to manage clinical trial projects, thus alleviating the need for us to commit redundant internal resources. For now, we believe that it is more efficient to outsource drug product manufacturing to contract manufacturing organizations (CMOs) and third-party suppliers.

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Bioinformatics:

We utilize bioinformatics designed to identify repurposed and innovative compounds for treatment of serious and unmet medical needs. We review scientific literature looking for mechanisms of action that could prove useful for diseases and then rank these drug-disease pairs based on a weighting system that incorporates, but not limited to, clinical studies, FDA correspondence, competition, and unmet medical need.



Graphic representation of bioinformatics approach

Principle Products

Bucillamine

Bucillamine is a disease-modifying anti-rheumatic drug, which is prescribed for rheumatoid arthritis in Japan and South Korea. We are repurposing Bucillamine as a potential new treatment for gout and cystinuria.

Material Transfer Agreement

Based on animal study results, we focused on advancing the clinical development of bucillamine for the treatment of acute gout flares. We entered into a material transfer agreement ("MTA") with the developer of bucillamine. Pursuant to the MTA, we would be able to obtain access to proprietary and confidential information (i.e. non-clinical data, clinical data, manufacturing information) and clinical trial supply of the drug bucillamine for the phase 2a and phase 2b human clinical studies of bucillamine for the treatment of acute gout flares and cystinuria. In return, the developer of bucillamine will have exclusive commercialization rights in Japan, Korea and Taiwan, and we will have exclusive commercialization rights in the rest of the world.

Gout

There were 14.3 million diagnosed prevalent cases of chronic gout in the major pharmaceutical markets in 2012, which is forecast to increase to 17.7 million by 2021 (Source: *Decision Resources 2012*). Gout in the U.S. affects approximately 8.3 million (~3.9%) of American adults (Source: *Arthritis Rheum.* 2011 Oct;

63(10):3136-41). It is estimated that the gout disease treatment market value will increase from \$989 million in 2013 to \$2.28 billion by 2018 (Source: GlobalData 2014). Gout is a painful disorder caused by elevated serum uric acid (sUA) in the body due to under excretion of uric acid and/or over production of uric acid. Most patients on the most commonly employed regimens for uric acid lowering fail to achieve a satisfactory serum urate level. Poor control of gout can lead to acute attacks of severe pain, and chronic joint damage and impairment of health resulting in a lower quality of life. Accordingly, there are needs in the market for new therapies to control gouty inflammation and hyperuricemia.

Although gout is a treatable condition, there are limited treatment options, many of which have adverse side effects. Drug treatment for gout includes anti-inflammatory agents (non-steroidal anti-inflammatories (NSAIDs), corticosteroids, Colchicine) and serum urate-lowering therapies, which work by lowering body stores of uric acid. Treatment of gouty inflammation is complicated by the fact that gout patients have a high incidence of cardiovascular and metabolic comorbidities. Common comorbidities include hypertension (70-80%), coronary artery disease (>30-40%), chronic kidney disease (~30-50%), diabetes (~25-40%), gastrointestinal tract diseases, and congestive heart failure (Source: Keenan, RT et. al., Prevalence of contraindications and prescription of pharmacologic therapies for gout. Am. J. Med. 2011, 124: 155-163). Managing patients with these comorbidities is challenging because the majority of them have contraindication for one or more first-line approved medications to treat acute gout. Current drug therapy limitations include: 90% of gout patients having at least one contraindication to NSAIDs and glucocorticoids; 50% to 66% having at least one contraindication to Colchicine. Moreover, corticosteroids can cause hypertension and worsening of blood sugar, and NSAIDs have substantial renal and cardiovascular toxicity.

Rationale of bucillamine for gout

Gout is a common disorder characterized by accumulation of excess body stores of uric acid, and by acute inflammatory attacks of arthritis, and in some patients a chronic destructive arthritis, stimulated by crystalline deposits of the sodium salt of uric acid (monosodium urate) in joint tissues. Bucillamine is a thiol donor derived from the amino acid cysteine, and is similar to N-acetylcysteine and N-2mercaptopropionyl glycine. (Source: Proc. Natl. Acad. Sci. USA 2002, 99: 8915-8920; J. Immunol. 2002, 168: 2560-2567). However, relative to these comparators, bucillamine contains two donatable thiol groups rather than one. It is therefore a considerably more potent inhibitor of certain oxidative stresstriggered cell signaling events that promote acute and chronic inflammation, and are implicated in the painful arthritis of acute gout flares. (Source: J. Immunol. 2000, 165: 2703-2711; J. Cardiovasc. Pharmacol. 2001, 38: 859-867; Cardiovasc. Drug Rev. 2003, 21: 77-90). In addition to its direct action on oxidative stress-induced inflammation signaling, bucillamine acts to stimulate the cellular production of proteins that can regulate the level of uric acid excretion by the kidney, and thereby, their capacity to lower the serum level of uric acid. It does so by increasing the activity of Nuclear factor (erythroid-derived 2)-like 2 (Nrf2), a transcription factor which promotes expression of the urate transporter protein, ATPbinding cassette sub-family G member 2 (ABCG2), which in turn enables uric acid excretion. (Source: Biochem. Pharmacol. 2006, 72: 455-462; Drug Metab. Dispos. 2006, 34: 1756-1763). The physiological importance of ABCG2 in humans is illustrated by the large differences in uric acid levels and the prevalence of gout caused by genetic variation in ABCG2. It is therefore, a potential target for new uricosuric agents in the treatment of gout (Source: Proc. Natl. Acad. Sci. USA. 2009, 106: 10338-10342; Sci. Transl. Med. 2009, 1: 5ra11). A third mechanism by which bucillamine could potentially affect serum uric acid levels in gout involves another uric acid excretion protein, ATP-binding cassette sub-family C member 4 (ABCC4), which is present in the kidney. Expression of ABCC4 also is promoted by Nrf2. (Source: J. Pharmacol. Exp. Ther. 2010, 335: 2-12)

Based on these studies, it was hypothesized that a combination of allopurinol and an Nrf2 activator such as bucillamine may have a synergistic effect in lowering uric acid levels, and that such a combination therapy including primary anti-inflammatory effects with potential secondary uric acid-lowering effects would offer new, more-effective options for gout treatment than other therapies that are currently

available.

Preclinical research of bucillamine for gout

The unpublished animal studies, which served as part of the bucillamine patent for gout, show that:

- 1. Bucillamine had a highly significant (p < 0.001) dose-response effect on monosodium urate crystal-induced release of interleukin-1beta from inflammatory white blood cells *in vitro*. Interleukin-1beta is a principal driving factor for gouty inflammation *in vivo*.
- 2. Bucillamine had a highly significant (p < 0.001) dose-response effect on monosodium urate crystal-induced peritoneal inflammation *in vivo*, which decreased mean neutrophil influx by 5.15% for every increase of 1 μmol/kg of the drug. Neutrophils are a type of inflammatory white blood cell; a reduction in their influx denotes a reduction in inflammation.
- 3. The effects of the administration of Bucillamine and colchicine on monosodium urate-induced peritoneal inflammation was found such that the addition of Bucillamine (10 μmol/kg) produced a highly significant (p < 0.001) decrease in average neutrophil influx. In addition, there was an interactive relationship between Bucillamine and colchicine such that the addition of Bucillamine enhanced the dose-response effect so that there was a decrease of 32.2% for every increase of 1 μmo1/kg of colchicine.</p>
- 4. There was a significant (p = 0.012) interactive effect between Bucillamine and allopurinol on serum and urinary levels of uric acid in a small animal model of elevated uric acid (hyperuricemia). The addition of allopurinol (5mg/kg/day) increased the dose-response effect of Bucillamine so that each increase of 1 mg/kg/day of REV-002 resulted in a decrease of 0.0010 mg/dL in the serum urate concentration.
- 5. There was a highly significant (p < 0.001) interactive effect between allopurinol and Bucillamine on the urinary excretion of uric acid in a small animal model of hyperuricemia. The addition of allopurinol (5mg/kg/day) increased the dose-response effect of Bucillamine such that each increase of 1 mg/kg/day of Bucillamine resulted in an increase of 0.171 mg/dL in the urinary uric acid concentration.

Bucillamine is an established anti-inflammatory agent in rheumatoid arthritis that inhibits the capacity of monosodium urate crystals to provoke inflammation. This suggests the potential for bucillamine to be an effective first line anti-inflammatory drug in the management of acute gouty arthritis flares. Additionally, the synergistic effect of Bucillamine with colchicine on monosodium urate crystal-induced inflammation, demonstrated in small animal studies *in vivo*, suggests potential efficacy as an add-on or second line agent in combination therapy for acute gouty arthritis with colchicine and other agents. The animal study also demonstrated that Bucillamine has a synergistic effect in combination with allopurinol in lowering sUA concentrations in a small animal model of hyperuricemia. The potential uricosuric effect of Bucillamine, particularly when used in conjunction with allopurinol, suggests that bucillamine could provide a means to treat gout more effectively than other therapies that are currently available, via combination of primary anti-inflammatory effects with potential secondary uric acid lowering effects.

Clinical Studies

The execution of the MTA allowed us to submit our Investigational New Drug Application ("IND") to the FDA. In October 2014, we obtained acceptance from the FDA to commence the Phase 2a clinical trial for bucillamine for the treatment of acute gout flares in the U.S.

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The Phase 2a study was an open-label, multicenter, active-controlled, parallel-group clinical trial designed to evaluate the safety and efficacy of two arms of Bucillamine 100mg tablet compared with the active comparator Colchicine (dosed acutely using the FDA-approved regimen) in the treatment of subjects with acute gout flares over a seven-day treatment period. A total of 20 clinical sites in the United States participated in the study and a total of 74 subjects who are confirmed with a qualifying severe gout flare attack was randomized into the study. Subjects were randomized in a 1:1:1 allocation ratio to either Arm A (oral Bucillamine - total of 900mg), Arm B (oral Bucillamine - total of 1,800mg) or Arm C (oral Colchicine - total of 1.8mg) over a seven-day treatment period.

The primary efficacy endpoint is the proportion of patients who responded to treatment. Treatment responders are defined as a \geq 50% reduction in target joint pain score from baseline at 72 hours post-dose without using rescue drug. The target joint pain score is an 11-point Pain Intensity Numeric Rating Scale (PI-NRS) used to assess joint pain intensity while experiencing a gout flare on a scale from 0 (no pain) to 10 (worst possible pain). The PI-NRS is completed using a diary where the subject is required to circle the most appropriate number that best describes their level of pain in the identified target joint during specific time points.

The objective of the Phase 2a study was to evaluate the safety and tolerability, and the efficacy of two regimens of oral Bucillamine over seven days of treatment compared with Colchicine (Colcrys®) in the treatment of subjects with severe gout flare attack. The primary efficacy endpoint is the proportion of patients who responded to treatment defined as a $\geq 50\%$ reduction in target joint pain score from baseline at 72 hours post-dose without using rescue drug.

The final primary endpoint results from the Phase 2a study from a total of 74 subjects that had completed the seven-day treatment period are as follows:

- In Arm A (oral Bucillamine total of 900mg over 7 days), 55% (12/22 subjects) had a ≥ 50% reduction in target joint pain score from baseline at 72 hours post-dose without using rescue drug;
- In Arm B (oral Bucillamine total of 1,800mg over 7 days), 46% (11/24 subjects) had a ≥ 50% reduction in target joint pain score from baseline at 72 hours post-dose without using rescue drug;
- In Arm C, the active comparator arm, (oral Colchicine 1.8mg over 1 hour), 46% (13/28 subjects) had a ≥ 50% reduction in target joint pain score from baseline at 72 hours post-dose without using rescue drug; and
- Bucillamine was well tolerated and there were no serious adverse events reported in subjects taking Bucillamine.

Overall, these exploratory results demonstrate that bucillamine has a signal of efficacy similar to that observed with the comparator drug, Colchicine (Colcrys®), in this clinical study, which has been previously approved for this indication in the U.S.

Future Non-clinical and Clinical Studies

Based on the Phase 2a study results, we designed a potentially pivotal Phase 2b, adequate and well-controlled, multicenter, double blinded, placebo controlled trial and submitted the Phase 2b protocol to the FDA. The FDA has accepted the Phase 2b protocol and we are able to proceed with the study. Once we complete the Phase 2b study, we will submit for an end-of-Phase 2 meeting with the FDA to discuss Phase 3 study plans, additional human clinical studies and any non-clinical studies that the FDA may require us to perform prior to submitting the new drug application for commercial approval in the U.S.

Intellectual Property

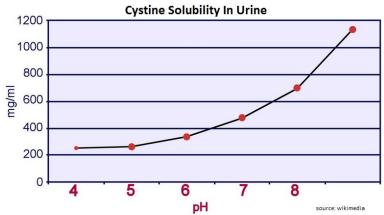
On June 2013, we were assigned the rights to U.S. Patent 9,238,018, titled, 'The Use of Bucillamine in the Treatment of Gout', which expires in November 2033, from Xenexus Pharmaceuticals Pty.

Cystinuria

Cystinuria is a rare autosomal recessive genetic disorder that causes high levels of cystine in the urine thus causing kidney stones to form. The resulting kidney stones are often large and recurrent and lead to significant morbidity and sometimes loss of kidney function. The important clinical manifestation of the disease is a build-up of cystine in the urine, which in turn results in crystallization and stone formation in the kidneys and bladder. In healthy individuals, most cystine dissolves and returns to the bloodstream after entering the kidneys. People with cystinuria have the aforementioned genetic defects that interfere with this process. No curative treatment of cystinuria exists, and typically patients have a lifelong risk of stone formation, repeated surgery, and impaired renal function. There are approximately between 10,000 and 12,000 patients affected with cystinuria in the U.S. The worldwide prevalence is about 1 in 7,000.

Therapy to reduce stone formation focuses on lowering urine cystine concentration and increasing cystine solubility. Cystine is poorly soluble in urine and prone to crystallization and stone formation at concentrations above 300 mg/l. As such, the primary non-pharmacological intervention for preventing cystine stones is to increase fluid intake. Patients with cystinuria are recommended to drink at least three liters of fluid a day (equivalent of ten 10 oz. glasses of water).

The solubility of cystine is also highly dependent on pH. At physiological pH (~7) maximum cystine solubility is between 200 and 400 mg/l. Acidic urine (pH of 5) greatly reduces the solubility to below 250 mg/l; however, at pH greater than 7.5 the solubility increases exponentially. In fact, the solubility of cystine doubles to 500 mg/l at pH 7.5. Unfortunately, excessive alkali therapy is not advisable. When urinary pH increases above 7.0 with alkali therapy, the complication of calcium phosphate nephrolithiasis may ensue because of the enhanced urinary supersaturation of hydroxyapatite in an alkaline environment.



Increase fluid intake and alkali therapy are not always feasible or effective. In fact, work published by researchers from Duke University found that therapeutic success with these more conservative approaches, defined as a urine cystine concentration below 300 mg/l, was achieved by only 15% of patients treated at the University Medical Center over an eight-year period. For patients that cannot reduce stone formation on these conservative programs, pharmaceutical intervention is recommended. The two leading pharmaceutical products for the treatment of cystinuria are Retrophin's Thiola® (tiopronin) and Valeant's Cuprimine® (d-penicillamine).

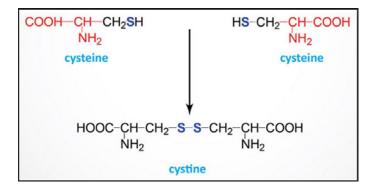
Penicillamine is a first-line chelating agent use for the removal of excess copper in patients with Wilson's disease and to reduce excess cystine in patients with cystinuria. The mechanism of action for cystine reduction is by disulfide interchange between d-penicillamine and cystine, resulting in the formation of penicillamine-cysteine disulfide, a substance that is much more soluble than cystine and readily excreted.

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Cystine is a combination of two cysteine (cys) amino acids whose thiol side chains have been oxidized to form cystine.

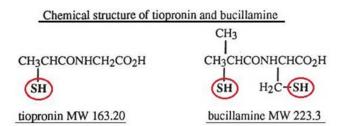


Cystine is far less soluble than cysteine and thus creates problems at urine concentrations above 300 mg/l. Penicillamine competes with excess cysteine to form penicillamine-cysteine disulfide, a far more soluble compound (roughly 50x more so) than cystine. Penicillamine also deprotonates cystine to form penicillamine-cysteine disulfide. The drug is highly effective in the treatment of cystinuria but has poor tolerability and serious safety concerns. The use of penicillamine has been associated with fatalities due to certain diseases such as aplastic anemia, agranulocytosis, thrombocytopenia, Goodpasture's syndrome, and myasthenia gravis. The incidence of adverse events ranges between 30% and 60%.

Tiopronin received FDA approval in 1988 for the prevention of cystine stone formation in patients with severe homozygous cystinuria with urinary cystine greater than 500 mg/day, who are resistant to treatment with conservative measures of high fluid intake, alkali and diet modification, or who have adverse reactions to penicillamine. Tiopronin has similar efficacy and mechanism of action to penicillamine. Tiopronin is an active reducing agent which undergoes thiol-disulfide exchange with cystine to form a mixed disulfide of tiopronin-cysteine. The drug is ideal for patients with allergic reactions or intolerability to penicillamine and considered to be the most tolerable of the two drugs.

Tiopronin has serious side effects including aplastic anemia, agranulocytosis, thrombocytopenia, Goodpasture's syndrome or myasthenia gravis. Patients on the drug should have peripheral blood counts, platelet counts, hemoglobin, serum albumin, and urinary protein levels checked on a regular basis. Patients are also advised to have liver function tests and abdominal roentgenograms on a yearly basis.

Rationale of bucillamine for cystinuria



As noted above, bucillamine has been used in Japan and Korea for decades in the majority of cases for the treatment of rheumatoid arthritis. Researchers out of Osaka University School of Medicine conducted *in vitro* and *in vivo* studies during the early 1990s that provide excellent proof-of-concept of Bucillamine for the treatment of cystinuria.

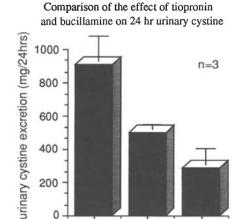
In vitro study. The effects of bucillamine compared to tiopronin was tested in whole urine by adding I-

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cystine at a concentration of 500 µg/mL along with half and equal concentrations of the two study drugs. Results show that the concentration of cystine was markedly reduced by both tiopronin and bucillamine due to the formation of cysteine-tiopronin or cysteine-bucillamine; however, the relative activity of bucillamine was 5% to 12% stronger than that of tiopronin and calculated the relative molecular activity of

bucillamine was 5% to 12% stronger than that of tiopronin and calculated the relative molecular activity of bucillamine was approximately 40% to 50% stronger than that of tiopronin. In other words, the data shows bucillamine dissolved urinary cystine much more effectively than tiopronin at the same molecular weight and a little more effectively than tiopronin at the same drug concentration.

In vivo study: Japanese researchers then tested bucillamine and tiopronin in three patients with confirmed cystinuria in a controlled, two-way, cross-over, wash-out design study of identical doses of each drug. The effectiveness of bucillamine was compared with tiopronin by analyzing the 24-hour urine samples under three different conditions: control, bucillamine, and tiopronin. The data show both bucillamine and tiopronin were effective in reducing urinary cystine concentration at 24 hours but that bucillamine was statistically superior (markedly superior in two patients and slightly superior in the third).



tiopronin bucillamine

Although a small study, the work by Koide T., et al., 1994 does provide proof-of-concept for our Phase 2 study of bucillamine for the treatment of cystinuria. The authors concluded, "Bucillamine can dissolve cystine approximately twice as effective as tiopronin at the same mg amount."

Based on these exploratory results, the information regarding bucillamine, whereby bucillamine has a chemical structure similar to Thiola® but has two active thiol groups versus only one for Thiola®, and the MTA we have in place for bucillamine, we focused on advancing the clinical development of bucillamine for the treatment of cystinuria. We believe that bucillamine may offer patients a safer, more effective treatment option that either of the two monothiol drugs, tiopronin or d-penicillamine. Theoretically, bucillamine should be twice as effective as tiopronin at the same concentration or equally as effective at lower concentrations, potentially making the drug more tolerable for patients.

Clinical status

Koide T, et al., 1994 control

On July 6, 2016, we obtained acceptance of our IND from the FDA to commence the Phase 2 clinical trial for bucillamine for the treatment of cystinuria. The Cystinuria Phase 2 study is a multi-center, dose escalation trial to assess the safety and effectiveness of bucillamine on urinary cystine excretion and cystine capacity in patients with Cystinuria. The primary outcome measures are the incidence of treatment-emergent adverse events along with secondary outcome measuring 24-hr urine cysteine excretion and 24-hr urine cystine capacity, i.e., the capacity of a patient's urine to solubilize or precipitate. The study plans to enroll up to 30 subjects in at least 5 clinical sites in the U.S. We initiated the U.S. Phase 2 clinical study in February 2017 and began enrolling subjects in May 2017. We expect to

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complete the study in 2018.

Future Non-clinical and Clinical Studies

Based on the Phase 2 study results we will submit for an end-of-Phase 2 meeting with the FDA to discuss a Phase 3 study, additional human clinical studies, and non-clinical studies that the FDA may require us to perform prior to submitting the new drug application for commercial approval in the U.S.

Market exclusivity

On October 26, 2015 we announced that the Office of Orphan Products Development of the U.S. Food and Drug Administration (US FDA) has granted orphan designation status for the use of the drug bucillamine for the treatment of cystinuria. Orphan drug designation is granted to therapeutics treating rare diseases affecting less than 200,000 people in the U.S. The orphan drug designation qualifies the Company for various incentives such as a seven-year period of marketing exclusivity in the U.S., the potential for expedited drug development, and opportunities for drug grants and assistance in clinical research study design from the U.S. FDA.

Cannabinoids

There are over 100 known cannabinoid compounds derived from the *Cannabis* plant. The two primary cannabinoids used widely for medical and/or pharmaceutical purposes are Tetrahydrocannabinol (THC) and cannabidiol (CBD). It is widely known that THC is a major psychoactive cannabinoid and is a partial agonist of the cannabinoid receptor type 1 (CB₁) and cannabinoid receptor type 1 (CB₂) receptors and is widely used in pain management. CBD acts on many of the same receptors as THC, but without the psychoactive side effects. Clinical and preclinical data suggest that THC has positive effects on treating pain and CBD has positive effects on treating pain as well as a number of skin disorders, liver diseases and potentially other disorders and diseases.

Due to the mounting data from preclinical and clinical research, the therapeutic effects of cannabis and the safety benefits of cannabinoids has led to significant interest from small-to-medium sized specialty pharmaceutical companies. Currently there are a number of cannabinoid products approved in US or EU: Sativex™ (GW Pharma), Marinol™ (AbbVie), Cesamet™ (Meda), and dronabinol, a synthetic THC (Insys). There are many companies supplying synthetic cannabinoids, *Cannabis* extracts, and herbal *Cannabis* to researchers for preclinical and clinical investigation for a number of diseases and conditions including cancer, diabetes, neuromuscular disorders, treatment of nausea, loss of appetite, and pain, and muscle relaxation for cancer, HIV, multiple sclerosis, and arthritis patients. The cannabinoid-based therapeutics market is expected to grow significantly due to the potential benefits these products may provide over existing therapies.

Drug delivery technology strategy

The Company is focused on developing an innovative drug delivery technology to effectively deliver cannabinoids through the skin and/or directly into the affected area of the skin, otherwise known as transdermal delivery. The potential advantages of transdermal delivery of cannabinoids are that it avoids gastrointestinal tract difficulties, avoids first-pass liver metabolism, enables a steady blood-level profile resulting in improved efficacy over other dosage forms, improves patient compliance as it is user-friendly, convenient, painless, and offers multi-day dosing.

The Company will initially explore the development of a CBD hydrogel, which may have the potential to be delivered in a controlled or sustained release fashion, systemically or locally, through the skin. Transdermal gels are designed to deliver sustained drug amounts at systemically consistent levels.

Proposed transdermal drug delivery technology

The Company's transdermal drug delivery technology, a proposed topical hydrogel, will deliver CBD, which has anti-inflammatory and analgesic properties, in combination with chitosan and tannins, the two major components of the transdermal drug delivery system. The chitosan has blood-clotting and antimicrobial properties, and tannins have antibacterial, antifungal, antioxidant and wound healing properties. The combination of CBD, chitosan and tannins is believed to have synergistic effect and become the next generation drug delivery solution for cannabinoids to treat a wide variety of diseases, disorders and conditions such as pain (i.e. neuropathic pain) and various skin disorders (i.e. acne, psoriasis).

Wisconsin relationship

The transdermal drug delivery technology was founded and based out of the University of Wisconsin. The Company has entered into a Research and Option to License Agreement with the Wisconsin Alumni Research Foundation (WARF) to advance the development of the technology with cannabinoids for treatment of pain. To advance the development of this technology, we have contracted the University of Wisconsin-Madison to conduct research and development on a drug delivery technology to deliver cannabinoids topically ("The University of Wisconsin-Madison Research Agreement") for the potential treatment of various diseases and conditions.

Potential indications

The Company is expanding its product pipeline with cannabinoid-centric treatments for pain, skin disorders, and liver diseases. Cannabinoids are a class of compounds derived from *Cannabis* plants. The two well-known cannabinoids contained in *Cannabis* are CBD and THC. For pain and skin disorders, the Company is focused on developing an innovative topical hydrogel designed to safely and effectively deliver cannabinoids through the skin. Initially, the Company will develop CBD hydrogel and establish proof-of-concept unlocking the potential to treat pain (such as neuropathic or joint pain), and skin disorders (such as inflammatory skin diseases) and expedite wound healing. For liver diseases, the Company has initiated research into cannabinoids employing a cell-based ligand screening approach utilizing several cell-based assays. Based on the results from screening, the cannabinoid candidates will then be tested in animals with a number of liver diseases. These experiments will investigate cannabinoids as potential therapeutics for the following liver indications: liver regeneration, alcoholism, alcoholic steatohepatitis, liver inflammation, liver fibrosis, and NAFLD (non-alcoholic fatty liver disease).

Neuropathic Pain

According to Decision Resources, in 2017 there are expected to be approximately 15.2 million peripheral neuropathic pain patients in the United States, and pain treatment for these patients are expected to represent a total U.S. market size of approximately \$3.3 billion in 2017.

The Company's next generation topical CBD hydrogel is anticipated to provide safe, effective, long-term relief from the pain of peripheral neuropathies. Peripheral neuropathies (also known as neuropathic pain) are medical conditions caused by damage to the nerves in the peripheral nervous system. The peripheral nervous system includes nerves that run from the brain and spinal cord to the rest of the body. These conditions are caused from injured peripheral nerves, following herpes zoster, shingles, diabetes, chemotherapy, HIV and other diseases. Peripheral neuropathies can also be caused by trauma or the effects of surgical procedures. Additional neuropathic pain indications include lower back pain, cancer-related neuropathic pain, complex regional pain syndrome and postoperative neuropathic pain.

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Peripheral neuropathic pain is generally treated with tricyclic antidepressants, anticonvulsants such as duloxetine, depakote, pregabalin, gabapentin and topiramate, and serotonin/norepinephrine reuptake inhibitors ("SNRIs"). Although tricyclic antidepressants, anticonvulsants, and SNRIs often show efficacy in treating neuropathic pain, they also have many drawbacks, including poor tolerability with side effects in most patients.

The Company's topical CBD hydrogel will have the potential to treat a number of neuropathic pain indications more safely and effectively than traditional CBD delivery and other current treatments for these indications. It is anticipated that the Company's topical CBD hydrogel may be used as first- or second-line monotherapy in patients with peripheral neuropathic pain.

The Company's topical CBD hydrogel will also be explored for additional pain disorders in the future.

Inflammatory skin disorders

Inflammatory skin disorders are the results of immune system reactions that involve the skin. Psoriasis is a chronic inflammatory skin disease that affects approximately 7.5 million people in the US. The disease is characterized by an errant immune-system response that drives inflammation and thickening of the skin caused by rapid turnover of skin cells. Psoriasis and other inflammatory skin diseases such as atopic dermatitis can cause tremendous discomfort. The healthcare market has seen an increase in the introduction of systemic therapies, including biologics, to treat patients with moderate-to-severe psoriasis and atopic dermatitis. For the majority of affected patients with less severe disease burden, topical corticosteroids are the predominant therapies prescribed. None of the currently approved therapies are without side effects, and none are well-suited for chronic use. Currently, in the United States, psoriasis is a \$5 B market, of which 90% are from drugs targeting moderate to severe psoriasis patients where the skin manifestation affects more than 3% of the body.

The Company's topical CBD hydrogel will have the potential to treat a number of inflammatory skin disorders more safely and effectively than traditional CBD delivery and other current treatments for these indications. It is anticipated that the Company's topical CBD hydrogel may be used as first- or second-line monotherapy in patients with the various inflammatory skin disorders.

The Company's topical CBD hydrogel will also be explored for additional inflammatory skin disorders and wound healing properties in the future.

Liver diseases

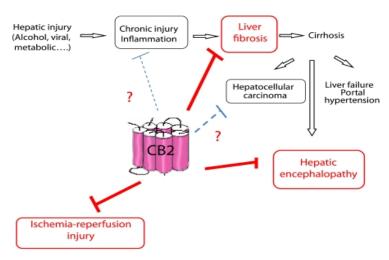
Liver disease is described by irregular functioning of the liver, causing disorders like hepatitis, fatty liver, and cirrhosis. There are over 100 described diseases of the liver affecting at least 30 million people alone in the U.S. Some of which are due to rapidly changing lifestyle patterns and an increase in alcohol consumption and uptake of unhealthy diets,. Liver diseases can also result from injury to the liver caused by hepatitis C virus (HCV), hepatitis B virus (HBV), obesity, chronic excessive alcohol use or autoimmune diseases. Major drug categories used in the treatment of liver diseases includes anti-rejection drugs, vaccines, immunosuppressant, chemotherapy drugs and antiviral drugs. According to an Allied Market Research publication entitled, "World Liver Disease Treatment Market - Opportunities and Forecast, 2014 - 2022", the global market for liver disease treatment is projected to reach \$19,536 million by 2022.

The Company is in the research and development of cannabinoids for the treatment of a variety of liver diseases. The Company contracted a third-party research organization to use a bioinformatics platform to analyze the potential use of cannabinoids in the treatment of diseases. The preliminary results indicate the use of CB1 receptor antagonists for several liver indications (i.e. Fatty liver), which led to further literature investigations, the results of which are summarized below, followed by the proposed experimental approach (pre-clinical).

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Recent data have unraveled a key role of CB2 receptors during chronic and acute liver injury, including fibrogenesis associated with chronic liver diseases, ischemia-reperfusion (I/R)-induced liver injury, and hepatic encephalopathy associated with acute liver failure. It has recently been shown that hepatic CB2 receptors are highly upregulated in several pathological conditions. Overall, the figure below indicates CB2 as a target for the following liver indications: fibrosis, I/R-induced injury, and hepatic encephalopathy.



The Company has compiled a detailed literature review to support the potential use of cannabinoids for the treatment of a variety of liver diseases.

Research suggests that CB2 agonists have demonstrated an ability to protect against liver I/R injury. Early evidence indicates that a single ultralow dose THC can reduce the apoptotic, oxidative and inflammatory injury induced by hepatic I/R injury. THC may serve as a potential target for therapeutic intervention in hepatic I/R injury during liver transplantation, liver resection and trauma. There is a separate report indicating that the cannabinoid, ^{\Delta}8-Tetrahydrocannabivarin, prevents hepatic ischemia/reperfusion injury by decreasing oxidative stress and inflammatory responses through cannabinoid CB2 receptors. ^{A8}-Tetrahydrocannabivarin activated CB2 receptors in vitro, and decreased tissue injury and inflammation in vivo, associated with I/R partly via CB2 receptor activation. Research has also indicated that the non-psychoactive cannabinoid, cannabidiol (CBD), protects against hepatic ischemia/reperfusion injury by attenuating inflammatory signaling and response, oxidative/nitrative stress, and cell death. CBD significantly reduced the extent of liver inflammation, oxidative/nitrative stress, and cell death and also attenuated the bacterial endotoxin-triggered NF-κB activation and TNF-α production in isolated Kupffer cells, likewise the adhesion molecule expression in primary human liver sinusoidal endothelial cells stimulated with TNF-α and attachment of human neutrophils to the activated endothelium. Thus, CBD may represent a new, protective strategy against I/R injury by attenuating key inflammatory pathways and oxidative/nitrative tissue injury, independent of classical CB1/2 receptors. These results emphasize that CBD represents a potential therapeutic option to protect the liver against hypoxiareoxygenation injury. The available data suggest that CB2 agonists may offer new perspectives in prevention of hepatic I/R injury. CB2 receptor mediates protection against hepatic ischemia/reperfusion injury. Therefore, potentially targeting the CB2 receptor may represent a new protective strategy against I/R injury.

Research suggests that CB2 agonists have also demonstrated a potential to protect against alcoholic steatohepatitis. β-caryophyllene (BCP), a CB2 receptor agonist, also known as the "dietary cannabinoid/phytocannabinoid," has been shown to protect against alcoholic steatohepatitis by attenuating inflammation and metabolic dysregulation in mice. Given the safety of BCP in humans, this food additive has a high translational potential in treating or preventing hepatic injury associated with oxidative stress,

inflammation and steatosis. Given the safety profile of BCP in humans, it has tremendous therapeutic potential in a multitude of diseases associated with inflammation and oxidative stress, even those outside of the liver indication. Chronic treatment with BCP attenuated the chronic and binge alcohol-induced liver injury and inflammation by attenuating the pro-inflammatory phenotypic M1 switch of Kupffer cells and by decreasing the expression of vascular adhesion molecules ICAM-1, E-Selectin and P-Selectin, as well as the neutrophil infiltration. The protective effects of BCP against alcohol-induced liver injury were attenuated in CB2 knockout mice, indicating that the beneficial effects of this natural product in liver injury involve CB2 receptor activation. In a separate study, BCP was used to investigate the role of the CB2 receptors in mediating alcohol intake and ethanol-induced conditioned place preference (EtOH-CPP) and sensitivity in mice. The results indicated that BCP dose-dependently reduced alcohol consumption and preference. Overall, the CB2 receptor system appears to be involved in alcohol dependence and sensitivity and may represent a potential pharmacological target for the treatment of alcoholism. These data identify CB2 agonists as potential therapeutic agents for the management of alcoholic liver disease and identify the CB2 receptor as a potential therapeutic target. In summary, BCP has an untapped potential from a therapeutic perspective, has demonstrated safety profiles in humans, and has minimal competition to date in terms of investigation and commercialization. There is an opportunity to formulate this compound, synthesize analogues, and investigate clinical efficacy. This compound is of particular interest as it is a CB2 agonist, not psychoactive, and is referred to in the literature as a "dietary cannabinoid." Its chemical structure is significantly different when compared to the cannabinoid structure of the class as a whole.

Research has also suggested that cannabinoids have shown potential for the treatment of non-alcoholic fatty liver disease (NAFLD). A study in 2015 investigated two non-psychoactive cannabinoids, $^{\Delta}$ 9-Tetrahydrocannabivarin (THCV) and CBD, as potential therapeutics for NAFLD. The result of this study, from *in vitro* and *in vivo* models, demonstrated that both THCV and CBD directly reduced accumulated lipid levels *in vitro* in a hepatosteatosis model and adipocytes.

Based on previous research, CB2 agonists have shown a potential to reduce liver injury and promote liver cell regeneration. A study in the literature that has previously investigated the impact of CB2 receptors on the regenerative process associated with liver injury using JWH133, a CB2 synthetic CB2 receptor agonist. These results suggested that CB2 agonists display potent hepatoprotective properties, in addition to their antifibrogenic effects. CB2 receptors reduce liver injury and promote liver regeneration following acute insult, via distinct paracrine mechanisms involving hepatic myofibroblasts.

Research also suggests that cannabis' anti-inflammatory and protective properties help in the treatment of hepatitis. One study found that cannabinoids' anti-inflammatory properties effectively reduced inflammation of a damaged liver and researchers therefore suggested that cannabis could be developed as a potential drug for hepatitis (Lavon, et al., 2003). Another study found that cannabinoids appear to have immunosuppressive and profibrogenic effects in patients with chronic hepatitis C.

Research Program in Liver Diseases

The Company initiated its research program of cannabinoid-based therapeutics targeting liver diseases. The research studies, including *in vitro* and *in vivo* pharmacology, are being conducted by PhytoSciences Consulting LLC, a contract research organization in Louisville, Kentucky. This investigation will be overseen by academic scientists with over 20 years' experience with expertise in liver disease research. The Company's research program with cannabinoids for liver diseases employs a cell-based ligand screening approach that will involve approximately eighty cannabinoids utilizing a number of validated models for liver diseases. If the results of the compound screen are positive, the Company will further research the selected cannabinoids by employing validated animal models to demonstrate efficacy for specific liver diseases. The overall objective of the research studies is to identify cannabinoids as potential treatments for a number of common, as well as, rare diseases. The Company's strategy is to seek to validate previously done research, build the Company's core competencies in cannabinoids and

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liver disease research, enabling the Company to investigate a number of cannabinoids in preclinical models, and if the opportunity exists, to license research that demonstrated efficacy for specific liver diseases so that the Company may advance to the clinic itself or through pharmaceutical company partners.

The Company will continue to conduct literature review and other due diligence and research activities to explore and identify uses of cannabinoids for the treatment of other liver diseases.

The Company will continue to seek to license and/or acquire intellectual property relating to compounds that have the potential to treat various liver diseases. The Company has signed a term sheet with the University of South Carolina with a view to potentially enter into a definitive written license agreement under which the University of South Carolina licenses certain patent rights and technical information relating to cannabidiol for the treatment of autoimmune hepatitis.

The following chart summarizes the Company's product candidates, including the principle disease(s) or indication(s) being targeted, clinical trial status, expected milestones and marketing rights for each program:

Program	Status	Next Milestone	Spent	Estimated Cost to Complete	Marketing Rights
Cannabinoid drug delivery and liver disease	Signed Research and License Option Agreement with Wisconsin Alumni Research Foundation (WARF) Signed Research Agreement with University of Wisconsin-Madison Initiated cell-based ligand screening of cannabinoids with PhytoSciences	Complete chemistry and material science to evaluate hydrogel formulations Complete in vitro studies to evaluate hydrogel formulations anti-inflammatory response in RAW macrophage model Complete cell-based ligand screening of cannabinoids Initiate research in various animal models of liver diseases	Approximately \$85,000 was spent during the nine months ended March 31, 2017	\$300,000	Worldwide
REV-002: Bucillamine for treatment of acute gout flares	Phase 2a human proof of concept study completed; Phase 2a human proof of concept study close out procedures ongoing; U.S. Food and Drug Administration ("FDA") allowed for Phase 2b study to proceed.	Close out Phase 2a human proof of concept study (expected by December 2017) Budget beyond 2017 will be determined after a partner via outlicensing or acquisition is completed	Approximately \$34,000 was spent during the nine months ended March 31, 2017	Revised budget for remaining part of 2017 - \$66,000	Revive (Rest of world) / MTACo (Japan, Korea, Taiwan)
		Partner via out- licensing or acquisition or continue clinical development (date of completion is undetermined)	N/A	N/A	

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Program	Status	Next Milestone	Spent	Estimated Cost to Complete	Marketing Rights
REV-004: Bucillamine for treatment of cystinuria	Investigational New Drug ("IND") application accepted by the FDA; Initiated Phase 2a human proof of concept study	Complete or decision to end or continue Phase 2a human proof of concept study (expected June 2017)	Spent approximately \$220,000 during the nine months end March 31, 2017	\$980,000	7-year US marketing exclusivity based on orphan drug designation that was awarded by the FDA
		Partner via out- licensing or acquisition or continue clinical development (date of completion is undetermined)			

Operations Highlights

During the nine months ended March 31, 2017, the Company focused primarily on the initiation of the Phase 2 clinical study of REV-004 and on the evaluation and close-out of the Phase 2a study of REV-002.

On July 5, 2016, the Company announced the appointment of Craig Leon, the Company's Chairman of the Board, as Chief Executive Officer ("CEO"). Fabio Chianelli, the Company's former CEO, will continue as President. These changes will permit Mr. Leon to dedicate his efforts to executing the Company's capital markets and business development strategies, while permitting Mr. Chianelli to focus on directing the Company's corporate operations and research and development programs.

On August 18, 2016, the Company completed a non-brokered private placement of units ("Units") for gross proceeds of \$1,500,000 (the "Offering"). Pursuant to the Offering, the Company issued 15,000,000 Units at \$0.10 per Unit. Each Unit consists of one common share and one-half of one common share purchase warrant (a "Warrant"). Each whole Warrant entitles the holder to acquire one common share for \$0.18 until June 18, 2018 (the "Warrant Expiry Date"). In the event that the volume-weighted average trading price of the Common Shares on the Exchange exceeds \$0.25 per Common Share for any period of 20 consecutive trading days, the Company may, at its option, within five business days following such 20-day period, accelerate the Warrant Expiry Date by delivery of notice to the registered holders thereof and issuing a Warrant Acceleration Press Release, and, in such case, the Warrant Expiry Date shall be deemed to be 5:00 p.m. (Toronto time) on the 30th day following the later of (i) the date on which the Warrant Acceleration Notice is sent to Warrant holders, and (ii) the date of issuance of the Warrant Acceleration Press Release. The fair value of the Warrants was estimated to be \$330,000 using a valuation model incorporating Black-Scholes on the following assumptions: dividend yield of 0%; volatility of 110.10%; risk-free interest rate of 0.56%; and expected life of 1.83 years.

In connection with the Offering, the Company paid \$113,765 in cash finder's fees and other transaction costs of which, \$90,692 was allocated to share capital and \$23,073 was allocated to the Warrants. The Company also issued 492,450 finder's warrants ("Finder's Warrants") to qualified arm's length finders. Each Finder's Warrant entitles the holder to acquire one Unit for \$0.10 until June 18, 2018. The fair value of the Finder's Warrants was estimated to be \$71,544 using a valuation model incorporating Black-Scholes on the following assumptions: dividend yield of 0%; volatility of 110.10%; risk free interest rate of 0.56%; and expected life of 1.83 years.

On November 2, 2016, the Company announced that it named Dr. David S. Goldfarb, MD, as Principal Investigator of the Company's upcoming Phase 2 clinical study for Cystinuria.

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On December 6, 2016, the Company announced positive final study results of REV-003 from its research collaboration with Rettsyndrome.org for the potential treatment of Rett syndrome.

On December 21, 2016, the Company announced it has engaged NYU School of Medicine as one of the Company's clinical sites in the U.S. for its Phase 2 clinical study for Cystinuria.

On January 12, 2017, the Company announced it has engaged Massachusetts General Hospital as one of the Company's clinical sites in the U.S. for its Phase 2 clinical study for Cystinuria.

On January 24, 2017, the Company announced Dr. Pritesh Kumar will join the Company as a Scientific Advisor for cannabinoid-based therapeutics for the Company.

On February 7, 2017, the Company announced the initiation of a Phase 2 clinical study in patients with cystinuria in the U.S. The initiation of the Phase 2 clinical study for cystinuria follows the Company's recent announcement that the US FDA has accepted the Company's IND Application to commence a clinical trial for REV-004 (Bucillamine) for the treatment of cystinuria.

On February 16, 2017, the Company announced that it is expanding its product pipeline through the development of cannabinoid-based therapeutics targeting liver diseases.

On February 22, 2017, the Company entered into a term sheet with InMed Pharmaceuticals Inc. for the discovery and development of cannabinoid-based therapies targeting kidney diseases.

On March 1, 2017, the Company announced the initiation of the research discovery program of cannabinoid-based therapeutics targeting liver diseases.

On March 8, 2017, the Company announced that Yanlin Wang, M.D., Ph.D., will join the Company as a scientific advisor for cannabinoid-based therapeutics targeting kidney diseases.

On March 22, 2017, the Company announced that Dr. Scott Friedman, M.D., will join the Company as a scientific advisor for cannabinoid-based therapeutics targeting liver diseases.

On March 29, 2017, the Company provided a corporate update on its Phase 2 clinical study of REV-004 (Bucillamine) in cystinuria and warrant exercise.

On April 12, 2017, the Company announced that its board of directors approved the grant of 965,000 incentive stock options to certain officers, directors, employees and consultants of the Company at an exercise price of \$0.28 per share expiring on April 10, 2027.

Financial Highlights

Financial Performance

The Company's net loss totaled \$452,707 for the three months ended March 31, 2017, with basic and diluted loss per share of \$0.01. This compares with a net loss of \$496,671 with basic and diluted loss per share of \$0.02 for the three months ended March 31, 2016. The Company had no revenue in both periods presented.

Net loss for three months ended March 31, 2017 principally related to research costs of \$225,056 (three months ended March 31, 2016 - \$247,721), professional fees of \$22,750 (three months ended March 31, 2016 - \$62,354), stock-based compensation of \$2,555 (three months ended March 31, 2016 - \$22,574), salaries and benefits of \$156,307 (three months ended March 31, 2016 - \$112,688), consulting fees of \$30,706 (three months ended March 31, 2016 - \$2,940), depreciation and amortization of \$893 (three months ended March 31, 2016 - \$1,556), rent of \$8,905 (three months ended March 31, 2016 - \$7,091) and office expenses of \$5,535 (three months ended March 31, 2016 - \$39,747). The decrease of \$43,964

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related primarily to lower research costs for REV-002, lower stock-based compensation due to the vesting of stock options granted in prior periods, lower office expenses due to decreased reporting issuer costs and lower professional fees due to lower legal fees related to patent applications offset by increases in salaries and benefits due to the hiring of additional employees. As well, the Company wrote-off \$19,579 of historical trade and other payables as any claim in respect of these debts is statue-barred under the *Limitations Act*. The write-off was included in office expenses.

Cash Flow

At March 31, 2017, the Company had working capital of \$1,996,404, compared to working capital of \$531,805 at June 30, 2016. The Company had cash and cash equivalents of \$2,222,994 at March 31, 2017, compared to \$1,333,239 at June 30, 2016. The increase in both working capital and cash and cash equivalents is primarily due to proceeds from the Offering completed on August 18, 2016 and exercise of warrants

Liquidity and Financial Position

Cash and cash equivalents used in operating activities was \$1,639,280 for the nine months ended March 31, 2017. Operating activities were affected by a \$2,679 adjustment for depreciation and amortization, \$14,309 stock-based compensation and the net change in non-cash working capital balances of \$574,844 because of an increase in other receivables of \$83, increase in prepaid expenses of \$33,463 and decrease in accounts payable and accrued liabilities of \$541,298.

Cash and cash equivalents used in investing activities was \$1,515 for the nine months ended March 31, 2017. This pertained to the purchase of intangible assets.

Cash and cash equivalents provided by financing activities was \$2,530,550 for the nine months ended March 31, 2017 which represents proceeds from the Offering and exercise of warrants.

At March 31, 2017, Revive had \$2,222,994 in cash and cash equivalents.

Accounts payable and accrued liabilities were \$277,132 at March 31, 2017. The Company's cash and cash equivalents balance as at March 31, 2017 is sufficient to pay these liabilities.

The Company has no operating revenues and therefore must utilize its income from financing transactions to maintain its capacity to meet ongoing operating activities.

As of March 31, 2017, and to the date of this MD&A, the cash resources of Revive are held with one Canadian chartered bank. The Company has no debt and its credit and interest rate risk is minimal. Accounts payable and accrued liabilities are short-term and non-interest-bearing.

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As of March 31, 2017, based on current projections, Revive's working capital of \$1,996,404 is sufficient to meet its planned development activities for the financial year ending June 30, 2017. The table below outlines the Company's planned uses of working capital:

Use of Capital ⁽¹⁾	Estimated Cost	Spent to date (approx.)	Remaining Funds to Spend or (excess)
REV-002 research development, clinical trials	\$100,000	\$34,000	\$66,000
REV-004 research development, clinical trials	\$980,000	\$219,000	\$761,000
General research and development (4)	\$350,000	\$85,000	\$265,000
Intellectual Property Costs	\$50,000	\$nil	\$50,000
General & Administrative for fiscal 2017 (2)	\$1,092,000	\$723,000	\$369,000
Settlement of lawsuit (3)	undetermined	undetermined	undetermined
Total	\$2,572,000	\$1,061,000	\$1,511,000

Notes:

- (1) The use of proceeds provided in the table above should be considered estimates. Actual expenditures to satisfy these estimated costs may, and most likely will, differ from these estimates.
- (2) General and Administrative expenses estimated for the year ended June 30, 2017 is as follows:
 - Salaries and benefits (\$600,000), consulting fees (\$150,000), office lease (\$30,000), travel (\$30,000), insurance (\$45,000), professional fees (\$150,000), transfer agent and regulatory fees (\$37,000), technology expenses (\$20,000) and marketing (\$30,000).
- (3) Settlement amount for lawsuit is undetermined as of the date of this MD&A. See "Commitments and Contingency" below.
- (4) Estimated general research costs, which also includes cannabinoids and drug delivery programs.

Related Party Transactions

Related parties include the directors, close family members and enterprises that are controlled by these individuals as well as certain persons performing similar functions.

(a) Revive engaged in the following transactions with related parties:

Names	Three Months Ended March 31, 2017 (\$)	Three Months Ended March 31, 2016 (\$)	Nine Months Ended March 31, 2017 (\$)	Nine Months Ended March31, 2016 (\$)
Marrelli Support Services Inc. ("Marrelli Support") (i)	14,110	10,000	35,988	34,360
	,		,	,
DSA Corporate Services ("DSA") (ii)	8,264	4,511	18,469	15,493
RangerCap Inc. ("RangerCap") (iii)	nil	nil	nil	100,000
Total	22,374	14,511	54,457	149,853

(i) Marrelli Support was owed \$2,642 as at March 31, 2017 (June 30, 2016 - \$2,683) for the services of

Carmelo Marrelli to act as Chief Financial Officer ("CFO") of the Company. This amount was included in accounts payable and accrued liabilities. The Company has entered into a consulting agreement (the "Marrelli Consulting Agreement") with Marrelli Support and Mr. Marrelli to provide the services of Mr. Marrelli as CFO of the Company. The term of the Marrelli Consulting Agreement commenced on January 8, 2013, and shall continue until terminated by either Mr. Marrelli or the Company. Pursuant to the Marrelli Consulting Agreement, Mr. Marrelli is entitled to receive monthly compensation of \$1,250 per month, and incentive stock option grants on a reasonable basis, consistent with the grant of options to other grantees. In addition, Marrelli Support provides bookkeeping services to the Company. Mr. Marrelli is the President of Marrelli Support. The amounts charged by Marrelli Support are based on what Marrelli Support usually charges its clients. The Company expects to continue to use Marrelli Support for an indefinite period of time.

- (ii) DSA was owed \$4,148 as at March 31, 2017 (June 30, 2016 \$4,727) for corporate secretarial and filing services. This amount was included in accounts payable and accrued liabilities. DSA is a private company controlled by Carmelo Marrelli, the CFO of the Company. Carmelo Marrelli is also the corporate secretary and sole director of DSA. Services were incurred in the normal course of operations for corporate secretarial, electronic filing and news dissemination services. The Company expects to continue to use DSA's services for an indefinite period of time.
- (iii) RangerCap is owned by Craig Leon, CEO and one of the directors of the Company. The Company has entered into a consulting agreement (the "RangerCap Consulting Agreement") with RangerCap and Mr. Leon to provide the services of Mr. Leon as consultant of the Company. The term of the RangerCap Consulting Agreement commenced on January 1, 2015, and expired on December 31, 2015. Pursuant to the RangerCap Consulting Agreement, Mr. Leon was entitled to receive monthly compensation of \$16,667 per month. In addition, Mr. Leon provided guidance and advice regarding general business, product development and capital markets strategy to the Company.
- (b) Remuneration of directors and key management personnel of the Company, excluding consulting fees, was as follows:

Stock-based Compensation Names	Three Months Ended March 31, 2017 (\$)	Three Months Ended March 31, 2016 (\$)	Nine Months Ended March 31, 2017 (\$)	Nine Months Ended March31, 2016 (\$)
Craig Leon, CEO and Director	nil	3,143	nil	17,247
Bill Jackson, Director	nil	3,143	nil	17,247
Carlo Sansalone, Director	nil	2,095	nil	11,497
Fabio Chianelli, President and Director	nil	2,095	nil	11,497
Carmelo Marrelli, CFO	nil	419	nil	2,300
Dr. Bev Incledon, VP Research & Development	nil	210	nil	1,151
Total	nil	11,105	nil	60,939

Salaries and Benefits Names	Three Months Ended March 31, 2017 (\$)	Three Months Ended March 31, 2016 (\$)	Nine Months Ended March 31, 2017 (\$)	Nine Months Ended March31, 2016 (\$)
Fabio Chianelli, President and Director	62,500	52,084	187,500	186,699
Craig Leon, CEO and Director	62,500	nil	187,500	nil
Total	125,000	52,084	375,000	186,699

(c) Major shareholders:

As at March 31, 2017, no person or corporation beneficially owns or exercises control or direction over common shares of the Company carrying more than 10% of the voting rights attached to all of the common shares of the Company other than Mr. Fabio Chianelli, the President and a Director of the Company, who owns or controls, directly or indirectly, 12.75% of the issued and outstanding shares of the Company. These stockholdings can change at any time at the discretion of the owner.

None of the Company's major shareholders have different voting rights other than holders of the Company's common shares.

The Company is not aware of any arrangements, the operation of which may at a subsequent date result in a change in control of the Company. Other than Mr. Fabio Chianelli, the President and a Director of the Company, who owns or controls, directly or indirectly, 12.75% of the issued and outstanding shares of the Company, the Company is not directly or indirectly owned or controlled by another corporation, by any government or by any natural or legal person severally or jointly.

Commitments and Contingency

Commitments

The Company has entered into an agreement (the "President Agreement") with an officer (Fabio Chianelli) (the "Officer") of the Company to provide services to the Company in the general capacity of President and to undertake the duties and exercise the powers associated with this role. Under the terms of the President Agreement, the President is contracted by the Company for an indefinite term, commencing as of January 1, 2014. The Company shall pay the President a \$250,000 base salary per annum (the "Annual Base Salary") and annual bonus payments (the "Bonus") from time to time, at the Board's entire discretion, of up to 100% of the Annual Base Salary based on the achievement of corporate goals and benchmarks relating to the Company's overall performance. The President Agreement requires an additional contingent lump-sum payment equal to the Officer's then Annual Base Salary and the Bonus paid or declared to the Officer, if any, in the Company's previously completed fiscal year upon the occurrence of a change of control or termination without cause. As a triggering event has not taken place, the contingent payments have not been reflected in the unaudited condensed interim consolidated financial statements for the three and nine months ended March 31, 2017.

The Company has entered into an agreement (the "CEO Agreement") with an officer (Craig Leon) (the "Employee") of the Company to provide services to the Company in the general capacity of CEO and to undertake the duties and exercise the powers associated with this role. Under the terms of the CEO Agreement, the CEO is contracted by the Company for an indefinite term, commencing as of July 5, 2016. The Company shall pay the CEO a \$250,000 base salary per annum (the "Yearly Base Salary") and annual bonus payments (the "Bonus Payment") from time to time, at the Board's entire discretion, of up to

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100% of the Yearly Base Salary based on the achievement of corporate goals and benchmarks relating to the Company's overall performance. The CEO Agreement requires an additional contingent lump-sum payment equal to the Employee's then Yearly Base Salary and the Bonus Payment paid or declared to the Employee, if any, in the Company's previously completed fiscal year upon the occurrence of a change of control or termination without cause. As a triggering event has not taken place, the contingent payments have not been reflected in the unaudited condensed interim consolidated financial statements for the three and nine months ended March 31, 2017.

In March 2015, the Company entered a new lease agreement commencing on September 2015 for a 12-month period. In August 2016, the Company entered a new lease agreement commencing on September 1, 2016 for a 12-month period. The Company is required to pay minimum annual lease payment of \$16,073.

Contingency

The Company is in dispute with a supplier over invoices in the amount of \$827,574. The matter is proceeding by way of arbitration. Management is of the opinion that the charges as invoiced are unfounded and believes that it will be successful in the final arbitration of the amount owed. No provision has been set up in the accounts of the Company. Any settlement and/or payment will be accounted for in the year it occurs. Readers are cautioned that the decision for no provision represents management estimates, the eventual resolution of this liability may differ based on additional information and the occurrence of future events.

Risk Factors

An investment in the securities of the Company is highly speculative and involves numerous and significant risks. Such investment should be undertaken only by investors whose financial resources are sufficient to enable them to assume these risks and who have no need for immediate liquidity in their investment. Prospective investors should carefully consider the risk factors that have affected, and which in the future are reasonably expected to affect, the Company and its financial position. Please refer to the section entitled "Risk Factors" in the Company's Annual MD&A for the fiscal year ended June 30, 2016, available on SEDAR at www.sedar.com.

Disclosure of Internal Controls

Management has established processes to provide them with sufficient knowledge to support representations that they have exercised reasonable diligence to ensure that (i) the unaudited condensed interim consolidated financial statements do not contain any untrue statement of 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 is made, as of the date of and for the periods presented by the unaudited condensed interim consolidated financial statements, and (ii) the unaudited condensed interim consolidated financial statements fairly present in all material respects the financial condition, results of operations and cash flow of the Company, as of the date of and for the periods presented.

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"), the 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

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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 the financial statements for external purposes in accordance with the issuer's GAAP (IFRS).

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 the 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.

Subsequent Event

On April 12, 2017, the Company granted 965,000 stock options to certain officers, directors, employees and consultants of the Company at an exercise price of \$0.28 per share expiring on April 10, 2027.