

## MANAGEMENT'S DISCUSSION & ANALYSIS – Q3 2019 (January 31, 2019)

This Management's Discussion and Analysis ("MD&A") of Resverlogix Corp.'s operations and financial position should be read in conjunction with the unaudited condensed interim consolidated financial statements and the notes thereto for the three and nine months ended January 31, 2019 and 2018 and the audited consolidated financial statements and the notes thereto and the Management's Discussion and Analysis for the years ended April 30, 2018 and 2017. Our financial statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") and comprise Resverlogix Corp. (the "Company") and its wholly-owned subsidiary Resverlogix Inc. (together referred to as the "Group"). An advisory with respect to the use of non-IFRS measures is set out in this MD&A under "Non-IFRS Measures". All amounts in the following MD&A are stated in US dollars unless otherwise stated. References to "we", "us" or "our" mean Resverlogix Corp. and its subsidiary unless the context otherwise requires.

### Cautionary Statement Regarding Forward-Looking Information

This MD&A contains forward-looking information within the meaning of applicable Canadian securities legislation. Forward-looking information is often, but not always, identified by the use of words such as "believes", "anticipates", "plans", "intends", "will", "should", "expects", "continue", "estimate", "forecasts" and other similar expressions. In particular, this MD&A includes forward-looking information related to: our belief that apabetalone, formerly/also referred to as RVX-208, is a first-in-class, small molecule selective Bromodomain and ExtraTerminal Domain ("BET") inhibitor with potentially important benefits for patients with high-risk cardiovascular disease, diabetes mellitus, chronic kidney disease, end-stage renal disease treated with hemodialysis, neurodegenerative disease, Fabry disease, peripheral artery disease and other orphan diseases; our plans to establish apabetalone for treatment of clinical conditions; our belief that our human clinical trials will provide an understanding of the drug properties in humans; our belief that our patent and patent applications will protect our ideas and inventions related to composition of matter, methods and treatments in our core areas of science and business; and our expectation that we will be able to raise additional capital through external financing or partnering to provide additional funds for our programs.

Readers are cautioned that our expectations, beliefs, projections and assumptions used in preparation of such information, although considered reasonable at the time of preparation, may prove to be wrong, and as such, undue reliance should not be placed on forward-looking statements. With respect to forward-looking statements contained in this MD&A, we have made key assumptions including:

- BET proteins play a critical role in the epigenetic regulation of transcription of particular genes.
- BET proteins all contain highly conserved bromodomains that play a key role in their epigenetic control of gene expression.
- Our small molecules, including apabetalone, function via inhibition of BET bromodomains and, therefore, specifically modulate transcription of particular targets.
- Our patents and patent applications will protect our ideas and inventions related to composition of matter, methods and treatments in our core areas of science and business.
- We anticipate that we will be able to raise additional capital through external financing or partnering to provide additional funds for our programs; and
- The anticipated expenditures required to complete clinical trials.

Our actual results, events or developments could be materially different from those expressed or implied by these forward-looking statements. We can give no assurance that any of the events or expectations will occur or be realized. By their nature, forward-looking statements are subject to numerous known and unknown risks and uncertainties including but not limited to those associated with the success of research and development programs, clinical trial programs, the regulatory approval process, competition, securing and maintaining corporate alliances, market acceptance of our products, the availability of government and insurance reimbursements for our products, the strength of our intellectual property, our financing capability, the potential dilutive effects of any financing, reliance on subcontractors and key personnel and additional risk factors discussed in our Annual Information Form and other documents we

file from time to time with securities authorities, which are available through SEDAR at [www.sedar.com](http://www.sedar.com). Additionally, risks and uncertainties are discussed on page 22 of this MD&A.

The forward-looking statements contained in this MD&A are expressly qualified by this cautionary statement. We disclaim any intention and have no obligation or responsibility, except as required by law, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

## Non-IFRS Measures

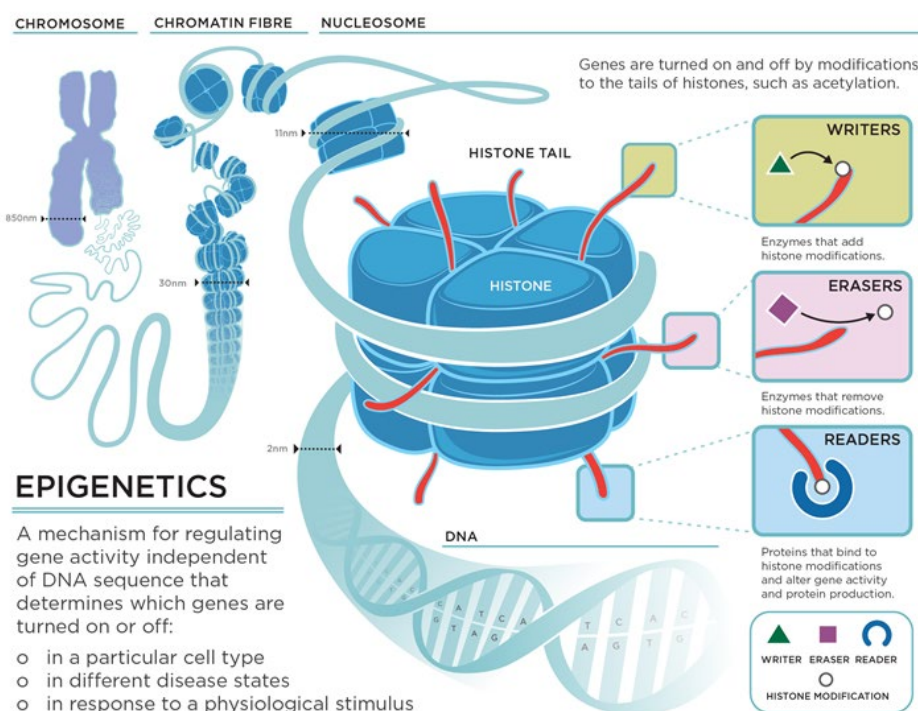
To supplement our consolidated financial statements presented in accordance with IFRS, we use the non-IFRS measure average monthly Cash Burn Rate. This measure is provided to enhance readers' overall understanding of our current use of cash resources and is included to provide investors and management with an alternative measure for assessing our operating results in a manner that is focused on the use of cash for operations and to provide a more consistent basis for comparison between quarters. This measure is based on the cash flow used in operations prior to changes in non-cash working capital from the Consolidated Statements of Cash Flows, as presented on page 14 herein. The average monthly amount is determined using the applicable period total divided by the number of months in the period. This measure is not in accordance with and does not have a standardized meaning under IFRS and is unlikely to be comparable to a similar measure used by other entities.

## Overview

### What is Epigenetics?

The human body is made up of nearly two hundred different cell types that have cell-specific functions resulting from the selective production of the proteins encoded by human DNA and, more specifically, human genes. Aberrant levels of proteins can contribute to disease progression and disease states. Epigenetics describes the mechanisms by which gene activity is regulated, thereby affecting levels of transcription into messenger RNA ("mRNA") which is then translated into protein. Epigenetics is the study of modifications to chromatin (DNA associated with proteins) that, without affecting the DNA sequence, result in regulation of gene transcription, the first step in producing the proteins that each gene encodes. Such modifications determine whether a gene is "on" or "off" or whether its activity is high or low in a particular cell type, in different disease states or in response to a physiological stimulus. Chromatin modifications are added by enzymes called "writers" and removed by enzymes called "erasers". Other proteins, called "readers", recognize a specific pattern of modifications. In contrast to "writers" and "erasers" that add or remove post translational modifications, "readers" detect the presence or absence of these modifications and serve as a scaffold for the transcriptional machinery directly responsible for gene expression.

Our compounds target one group of "reader" proteins called the Bromodomain and Extra Terminal ("BET") proteins. BET inhibition represents an important new area of drug development, since epigenetic modification is a known hallmark of several complex pathologies, including cardiovascular disease ("CVD"), metabolic disorders, and neurological diseases. Substantial evidence has shown that alterations in the pattern of chromatin modifications underlie these multiple disease states. Epigenetic regulators are promising targets for therapeutic intervention, and hold significant



COPYRIGHT © 2012 - RICHARD E. BALLERMANN

### Epigenetic Mechanism of Action

potential for treatment advances in important diseases of high unmet medical need.

### Resverlogix Corp.

Since our inception, we have focused on developing therapeutics for disease states with high unmet medical need.

In the fall of 2015, Resverlogix initiated a Phase 3 clinical trial "BETonMACE" with apabetalone ("RVX-208") in high-risk CVD patients with type 2 diabetes mellitus ("DM") and low levels of high-density lipoprotein ("HDL"). The primary endpoint is the time to first occurrence of MACE. Regulatory approval has been granted in the following countries, Argentina, Belgium, Bulgaria, Croatia, Germany, Hungary, Israel, Mexico, Poland, Serbia, Slovakia, Russia and Taiwan. With communication from the U.S. Food and Drug Administration ("FDA"), we have the opportunity to include U.S. patients in BETonMACE. We have enrolled approximately 2,400 patients as outlined in the study's protocol. The BETonMACE trial is currently expected to be completed within the first half of calendar 2019, with third party adjudication of all MACE events anticipated to be available within two to three months past trial completion. The topline results of the study will be made available shortly thereafter.

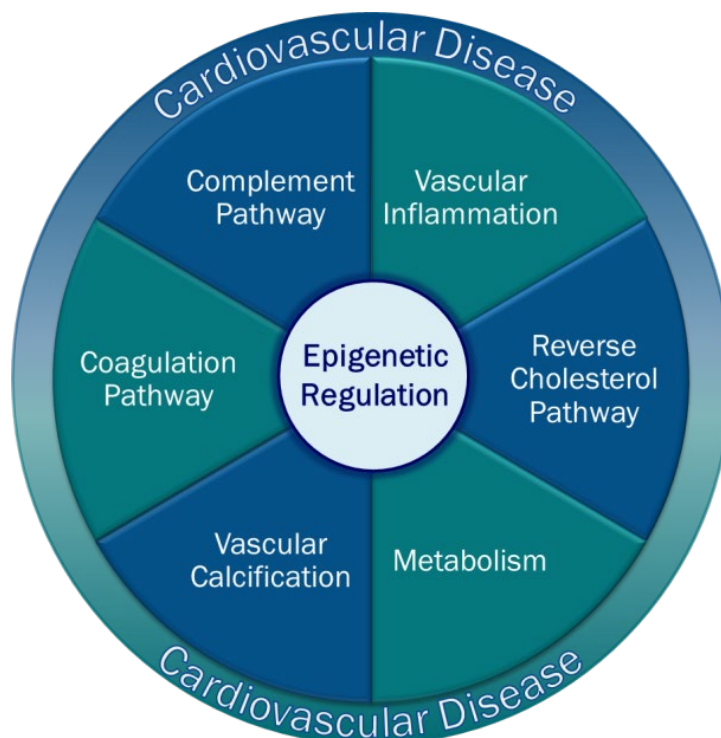
### Apabetalone (RVX-208)

Apabetalone is the first BET inhibitor in clinical trials for high risk vascular disease. A hallmark of many diseases such as cancer, inflammation and more recently cardiovascular disease, is aberrant gene transcription. Bromodomains ("BRDs") are a family of evolutionary conserved protein-interaction modules that play key functions in chromatin organisation and regulation of gene transcription. One recognised family of bromodomain containing proteins is the BET family. Apabetalone is the first oral agent in the BET inhibitor class that preferentially targets bromodomain 2 ("BD2") of BET proteins. In binding to this bromodomain, apabetalone affects the expression of multiple genes with roles in a variety of cellular processes. Our lead drug, apabetalone ("RVX-208"), targets BET proteins to impact several important biological processes that are contributors to the pathophysiology of chronic vascular diseases such as cardiovascular disease ("CVD"), diabetes mellitus ("DM"), and chronic kidney disease ("CKD"), namely: (i) vascular inflammation, (ii) vascular calcification, (iii) complement and coagulation, (iv) reverse cholesterol transport ("RCT"), and (v) metabolism. Apabetalone is a first-in-class small molecule in development for the secondary prevention of a major adverse cardiac event ("MACE") in high risk CVD patients with a DM co-morbidity. Based on the above-mentioned effects of apabetalone, we are currently exploring the potential for apabetalone to modulate disease-related pathology in other indications including CKD, end-stage renal disease (late stage CKD), neurodegenerative disease (such as vascular cognitive dementia) and orphan diseases such as Fabry disease and pulmonary arterial hypertension ("PAH").

Analysis of our phase 2 (ASSERT, SUSTAIN and ASSURE) clinical trials has demonstrated that based on the modulation of risk factors, apabetalone significantly reduces MACE in patients with CVD, particularly those who have a low level of HDL and elevated c-reactive protein ("CRP"), a well-known marker of inflammation, and in those with diabetes mellitus co-morbidity (Nicholls, Ray et al. 2018). Insight into the clinical benefits of apabetalone have been provided by experimental investigations detailing the multiple physiological activities affected by apabetalone.

The name, apabetalone, has received formal approval as an International Nonproprietary Name and a United States Adopted Name. As such, the nonproprietary name, apabetalone, can be used globally for internal and external communications rather than the nonproprietary name RVX-208. As part of ongoing commercial development for RVX-208, we have launched an official process to obtain the official global brand name for apabetalone.

**Epigenetic gene regulation governed by BET proteins is at the core of many CVD pathological processes – dysregulation of multiple pathways contributes to increased risk and worse cardiovascular outcomes**



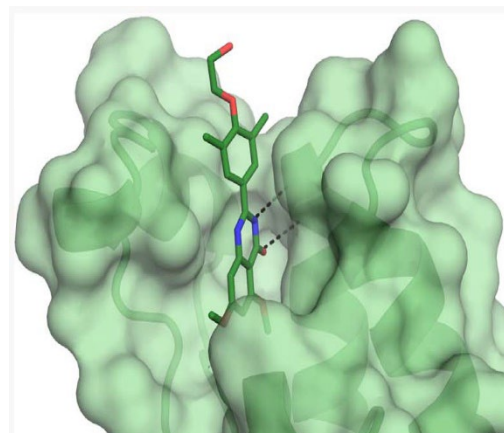


## Epigenetic Mechanism of Action: Single Therapeutic Target with Multiple Biological Effects

BET inhibition results in the simultaneous modulation of multiple biological pathways via a single molecular target. Studies highlighting the molecular and mechanistic functions of BET inhibitor molecules and the ongoing development of new BET inhibitors as potential therapeutics in multiple indications are initiating a shift from the current drug development paradigm. From a single molecular target for a single downstream effect, to a multimodal approach whereby multiple biological processes contributing to a disease state are concurrently modulated via a single molecular target, epigenetic modulation is a novel approach to targeting disease pathology.

We believe that this approach is therapeutically and commercially attractive for the following reasons:

- BET proteins all contain highly-conserved bromodomains that play a key role in epigenetic control of gene expression (in many cell types);
- Apabetalone functions via inhibition of BET bromodomain binding to chromatin thereby modulating transcription of particular targets;
- Apabetalone preferentially binds to the second bromodomain of BET family members (BRD2, BRD3 and BRD4), with a 20-fold or higher selectivity for the second bromodomain versus the first bromodomain;
- Apabetalone is highly differentiated from other therapies that focus only on single biological targets such as increasing HDL or decreasing low-density lipoprotein (“LDL”) in plasma, and has effects on multiple pathways and biomarkers that function in concert to reduce CVD events; and
- Apabetalone is the only selective BET inhibitor in the field of CVD with no known competitor, providing Resverlogix with an estimated lead of at least 7-8 years over competitors and significant scarcity value.



Apabetalone (RVX-208) Bound in the BET Binding Pocket

Apabetalone has illustrated the potential to become an important and differentiated therapeutic for high-risk patients with CVD, DM, CKD, neurodegenerative disease and orphan diseases.

## Clinical Sample Repository of BET Inhibitor Treated Patients

Our Phase 2 clinical program in CVD patients with varying degrees of disease severity consisted of three trials: ASSERT, SUSTAIN and ASSURE. These studies provided us with a repository of samples that enable the interrogation of multiple biomarkers that are affected by apabetalone treatment. The data generated from the analysis of these samples is the first and largest integrated dataset of the response of multiple vascular risk markers to an epigenetic drug treatment. Our BET database, which is comprised of hundreds of thousands of data points, provides insight into how epigenetics and select BET inhibition affect target risk markers for vascular disease. We continue to add to these important data with ongoing sample analyses to further elucidate the role of epigenetics in this biology and its role in vascular disease.

## Highlights

### Clinical Trial Developments

#### Phase 3 BETonMACE Trial – Fully Enrolled

The pooled MACE analysis from our phase 2 studies focused on the potential benefit of apabetalone and BET inhibition to reduce MACE over a short treatment time period of up to six months. The data from 798 patients demonstrated that treatment with apabetalone led to a significant reduction in MACE. Results from patients within these studies whom also had diabetes mellitus, a high-risk patient population, illustrated similar significance. Based on these findings, our intention with the BETonMACE trial is to reconfirm in a larger prospective setting, in patients with modifiable vascular disease (i.e. low HDL and diabetes), the reduction of MACE coupled with favourable effects on markers of vascular risk and renal function.

The BETonMACE study, “Effect of RVX-208 on Time to Major Adverse Cardiovascular Events in High-Risk Type 2 Diabetes Mellitus Subjects with Coronary Artery Disease”, commenced in October 2015. The study is a large international multi-center, double-blind, randomized, parallel group, placebo-controlled clinical trial to determine whether treatment with apabetalone in combination with rosuvastatin or atorvastatin increases the time to MACE compared to treatment with rosuvastatin or atorvastatin alone. The primary endpoint of the BETonMACE trial is designed to show a relative risk reduction (“RRR”) of MACE, narrowly defined as a single composite endpoint of CV death, non-fatal myocardial infarction (“MI”) and stroke. The study is an event-based trial and will continue until at least

250 MACE events have occurred. MACE will be adjudicated by an independent committee and the study will be monitored by a data safety monitoring board. Secondary endpoints include: time to first occurrence of the composite broad MACE which includes the addition of hospitalization for CVD events (unstable angina and revascularization procedures), changes in lipoprotein concentrations (HDL and apolipoprotein A-I (“ApoA-I”)), changes in diabetes mellitus variables (glucose and glycated hemoglobin), change in alkaline phosphatase (“ALP”), changes in kidney function as well as additional safety and tolerability of apabetalone (RVX-208). In order to be eligible to participate in the study, patients must have documented history of type 2 Diabetes Mellitus, experienced a recent (defined as 7-90 days prior to randomization) Coronary Artery Disease (“CAD”) event including unstable angina, revascularization procedure or MI and have low levels of HDL (<40 mg/dL for males and <45 mg/dL for females). Standard of care high potency statin therapy shall consist of daily dose of either atorvastatin 40-80 mg or rosuvastatin 20-40 mg. After an initial screening period of 1 to 2 weeks during which subjects will be treated with standard of care statin therapy, subjects will be randomized to either apabetalone (RVX-208) 100 mg b.i.d. (twice daily) or matching placebo with continued statin treatment. This combination treatment period will continue for the duration of the study. A full detailed protocol for the BETonMACE study can be viewed on [www.clinicaltrials.gov](http://www.clinicaltrials.gov) with the following NCT ID, NCT02586155.



**BETonMACE Approved in 14 Countries**

On November 11, 2015, we announced that the first patient in the Phase 3 BETonMACE clinical trial was randomized and dosing had commenced.

On July 25, 2017, we announced the receipt of a positive Type C written response from the Division of Metabolism and Endocrinology Products of the FDA. In light of updated information submitted to the FDA regarding apabetalone, including: human exposure, clinical dosing and established acceptable safety margins. We agreed to make adjustments to the existing BETonMACE study protocol and to update the Investigator's Brochure and the Informed Consent Documents.

On March 19, 2018, we announced that recruitment in the BETonMACE study has successfully surpassed the planned enrollment target of 2,400 patients. When 75% of the planned 250 MACE events, being 188 events in total, have occurred, a sample size re-estimation analysis (“SSRA”) was planned. Subsequently, it was determined that a SSRA will no longer be performed given the current expectation for BETonMACE trial completion and that conducting such an analysis at this stage would offer no practical value and would also cause a statistical penalty in regards to final powering of the trial.

On June 14, 2018, we announced that we received confirmation from the FDA that BETonMACE, if successful, is likely to support the filing and approval of a New Drug Application (“NDA”). The statistical analysis plan and proposed endpoints were reviewed and accepted by the Division of Cardiovascular and Renal Products (“DcaRP”) of the FDA. The exact indication for approval will be reviewed by the FDA, and will be driven by the study's results.

The independent Data and Safety Monitoring Board (“DSMB”) for the BETonMACE trial completed planned safety reviews of the trial in August 2016, December 2016, March 2017, June 2017, November 2017, February 2018, August 2018 and December 2018 and recommended that the study should continue as planned without any modifications and noted that no safety concerns were identified. The DSMB may conduct additional periodic reviews. We, the clinical steering committee, and all investigators remain blinded to the study data.

---

### **Phase 2a Pharmacokinetic (Part A) and Efficacy/Safety (Part B) Trial in Patients with End-Stage Renal Disease Treated with Hemodialysis - Planned**

On February 23, 2017, we announced the receipt of the final minutes of an in-person Type B meeting with the Cardiovascular and Renal Products Division of the FDA. The purpose of the meeting was to request written comments, recommendations and feedback on the proposed protocol for a Phase 2a kidney dialysis trial. The primary objective of the study will be to evaluate if treatment with apabetalone in combination with standard of care ("SoC") decreases alkaline phosphatase in comparison to placebo and SoC. In light of guidance received from the FDA, the Phase 2a study design will be separated in two parts. Part A will involve a single-dose pharmacokinetic ("PK") study in eight patients receiving hemodialysis. The PK results from Part A will influence the dose selection for Part B. Part B will be a double-blind, randomized, placebo-controlled, sequential cross-over study with apabetalone, and is designed to evaluate biomarker changes and safety parameters with apabetalone in up to 30 patients with end-stage renal disease (the final stage of chronic kidney disease) treated with hemodialysis.

On May 15, 2017, we announced the acceptance, by the Cardiovascular and Renal Products Division of the FDA, of the Company's Investigational New Drug ("IND") application to commence a Phase 2a kidney dialysis trial. The details of the study are described above. We intend to proceed with the planned Phase 2a clinical trial in 2019.

### **Phase 2a Fabry Disease Trial - Planned**

On May 30, 2017, we announced that Health Canada, Therapeutic Products Directorate ("TPD"), approved our request to proceed with a clinical trial with our lead compound apabetalone in patients with Fabry disease. This study is an open-label, exploratory clinical study to assess the patient safety and effect on key biomarkers of apabetalone in subjects with Fabry disease for up to 16 weeks. The primary objective of the study is to evaluate the safety and tolerability of apabetalone in patients with Fabry disease. Secondary objectives include evaluating the effect of apabetalone in subjects with Fabry disease as determined by change in key biomarkers including alkaline phosphatase ("ALP"), high-sensitivity C-reactive protein (hs-CRP), and other well-known markers for chronic kidney disease. The study population will consist of two cohorts: Cohort 1: Patients with Fabry disease receiving enzyme replacement therapy ("ERT") and Cohort 2: Patients with Fabry disease not receiving ERT. We intend to proceed with the planned Phase 2a clinical trial in 2019. Patients with Fabry disease experience various heart, kidney, and dermatological complications with stroke, heart disease and kidney complications being the top causes of mortality. Current medications approved for Fabry disease are not sufficient and there remains a large unmet need.

### **Phase 1 PK Trial in Patients with Severe Renal Impairment - Completed**

On June 1, 2015, we presented the analysis of data pooled from the ASSERT, SUSTAIN and ASSURE clinical trials relating to specific biomarkers relevant to CKD. A poster entitled, "Effects of RVX-208, a First-in-Class Epigenetic BET-Inhibitor, on Key Renal Parameters in Subjects with a History of CVD, and Chronic Kidney Disease (CKD); a Post-hoc Analysis of Patients from the ASSERT, SUSTAIN and ASSURE Clinical Trials", was presented at the European Renal Association-European Dialysis and Transplant Association ("ERA-EDTA") Congress. It highlighted the statistically significant reductions in ALP observed in the apabetalone (RVX-208) treatment group compared to placebo and the early signal of improved estimated glomerular filtration rate ("eGFR") in patients with eGFR <60 mL/min/1.7m<sup>2</sup> at baseline and following 6 months of treatment. Dr. Kamyar Kalantar-Zadeh, MD, MPH, PhD, Professor and Chief, Division of Nephrology and Hypertension at University of California in Irvine, examined these findings. These findings generated the hypothesis that apabetalone may be beneficial in the treatment of CKD and that additional clinical trials for target responder CKD and/or dialysis populations who have a high burden of cardiovascular disease and risk may be warranted.

On May 24, 2016, we announced the formation of an International Renal Clinical Advisory Board ("RCAB") for the future development of apabetalone into expanded renal indications. The RCAB is comprised of: Chairman Dr. Kamyar Kalantar-Zadeh, MD, MPH, PhD, Dr. Carmine Zoccali, MD, FASN, FNKF, FERA, Dr. Marcello Tonelli, MD, SM, FRCPC, Dr. Vincent Brandenburg, MD, Dr. Srinivasan Beddhu, MD, and Dr. Mathias Haarhaus, MD, PhD.

On July 21, 2016, we announced that dosing had commenced in a Phase 1 PK study with apabetalone in patients with severe renal impairment. This trial was initiated and designed in accordance with our strategy to expand into new indications such as renal and orphan diseases. The primary objective of the Phase 1 study, based in New Zealand, was to determine if apabetalone treated patients with severe renal impairment have the same favourable PK traits as has been illustrated in previous apabetalone trials. As expected, results showed no significant difference in PK between renal failure patients and age and sex matched controls.

On November 17, 2016, we announced the collection of data from the New Zealand based Phase 1 PK study with apabetalone in patients with severe renal impairment. The primary objective of the Phase 1 study was met by demonstrating that apabetalone treated patients with severe renal impairment have the same favourable PK traits and safety profile as has been observed in previous apabetalone trials. These results allowed us to proceed with more advanced renal impairment and dialysis trials. The study also explored acute changes in biomarkers relevant to BET inhibition in subjects with severe renal impairment.

On January 23, 2017, we announced preliminary results from the Phase 1 PK study in late stage CKD patients. The data showed remarkable results in reducing inflammatory protein biomarkers in patients with late stage CKD versus healthy control patients. Protein data was collected following a single oral administration of 100mg of apabetalone before and after multiple time points in both cohorts. Protein levels of 288 proteins were significantly different at baseline between the two groups ( $p < 0.05$ ), revealing a highly differential protein signature between CKD patients and controls. Following a single dose administration of apabetalone in the late stage CKD patients, the levels of multiple plasma proteins were significantly changed within 12 hours after dosing, demonstrating a fast onset of drug action. Analysis of the changes in protein levels at the 12-hour time point revealed that, in the late stage CKD patients, 33 percent of proteins had statistically significant changes ( $p < 0.05$ ) compared to only 10 percent in the controls. Of these significant proteins, several established renal biomarkers such as interleukin 6 (IL6) and osteopontin, were positively regulated with respect to disease severity and progression. These and additional data were published in the peer reviewed journal *Kidney International Reports* in May of 2018. The article was titled: “Benefit of Apabetalone on Plasma Proteins in Renal Disease”, authored by Wasiak et al. The quick onset of action and improvement of reported CKD risk factors are encouraging for us in our planned expansion beyond our current cardiovascular and diabetes program.

### Phase 2 ASSERT, SUSTAIN and ASSURE Analysis

Our phase 2 clinical program in CVD patients with varying degrees of disease severity is comprised of three trials: ASSERT, SUSTAIN and ASSURE. These studies provided us with a repository of samples that enable the interrogation of multiple biomarkers that are affected by treatment with apabetalone. The data generated from the analysis of these samples is the first and largest integrated dataset of the response of multiple vascular risk markers to an epigenetic drug treatment. To date, our BET database of hundreds of thousands of data points provides insight into how epigenetics and select BET inhibition affect target risk markers for vascular disease. We continue to add to these important data with ongoing sample analyses to further elucidate the role of epigenetics in this biology and its role in vascular disease.

Combined data from ASSERT, SUSTAIN and ASSURE trials ( $n=798$ ) demonstrated that treatment with apabetalone led to a significant reduction in MACE. Patients treated with apabetalone ( $n=556$ ) had a lower cumulative MACE rate of 5.9% vs. 10.4% ( $p=0.02$ ) in the placebo treated group ( $n=242$ ). In exploratory subgroups the benefit of apabetalone treatment appeared more striking with MACE occurring less frequently in association with apabetalone than with placebo among patients with diabetes (5.4% vs. 12.7%;  $p=0.02$ ). Similarly, MACE occurred less frequently in association with apabetalone than with placebo in patients with baseline HDL-C  $< 39$  mg/dL (5.5 vs. 12.8%;  $p=0.01$ ) or with baseline hsCRP levels  $> 2$  mg/L (5.4 vs. 14.2%;  $p = 0.02$ ). This data was published in the *American Journal of Cardiovascular Drugs* by Nicholls et al (October 2017).

Additional combined data was published in *Kidney and Blood Pressure*, by Kulikowski et al in March of 2018. These data showed that apabetalone treatment of SUSTAIN and ASSURE patients with CKD was associated with favourable kidney function and ALP profile. Patients who received apabetalone over 6 months showed significantly ( $p=0.02$ ) lowered serum ALP -14.0% ( $p < 0.0001$  versus baseline) versus -6.3% ( $p=0.9$  versus baseline) compared to placebo treated patients. The eGFR in the apabetalone treated group increased by 3.4% (1.7 mL/min/1.73 m<sup>2</sup>) ( $p=0.04$  versus baseline), and decreased by 5.8% (2.9 mL/min/1.73 m<sup>2</sup>) ( $p=0.6$  versus baseline) in the placebo group.

Follow-up analyses of the impact of apabetalone on attenuated coronary atherosclerotic plaque (“AP”) in ASSURE patients were published by Shishikura et al in the *American Journal of Cardiovascular Drugs* (August 28, 2018). The study employed serial intravascular ultrasound (“IVUS”) measures of coronary atheroma in patients treated with apabetalone or placebo. Apabetalone treated patients demonstrated significant reductions in AP length and AP index compared to baseline (pre-treatment) measures. The change in AP index correlated with on-treatment concentration of high-density lipoprotein (HDL) particles as well as with very low-density lipoprotein (“LDL”) particles. These correlations were independent of each other. This study indicates that apabetalone favourably modulated ultrasonic measures of plaque vulnerability.

Analysis of the phase 2 program data continues to not only broaden our understanding but also provides a more targeted pathway for our future clinical trials with apabetalone. We plan to perform further detailed analysis on potential new biomarkers and biological pathways that apabetalone may affect through its select BET inhibition mechanism. New findings in these analyses will guide selection of potential additional indications that can broaden the scope of diseases that BET inhibition can benefit. Appropriate intellectual property will be developed in concert with any novel findings.

### Recent Scientific Developments

Based on our observed MACE reduction data from the pooled post-hoc analysis of the ASSERT, SUSTAIN and ASSURE clinical trials, a number of hypotheses were generated to help investigate the driving factors responsible for the MACE reductions observed. Based on our research and in-depth analysis of the activity of apabetalone in multiple cell types, a combination of BET responsive activities were identified as probable underlying contributors to the MACE reductions observed in the clinic, including, reverse cholesterol transport, directional changes towards normalization of perturbed vascular inflammation, vascular calcification, complement and coagulation.



We performed microarray-based gene expression analysis using primary human hepatocytes treated with apabetalone. Cells from multiple donors were assessed in independent experiments. Results demonstrated that apabetalone downregulates pathways that contribute to cardiovascular risk or MACE such as atherosclerosis, thrombosis and inflammation. Specifically, apabetalone downregulated the complement, fibrin clotting, acute phase response, NF- $\kappa$ B signaling<sup>1</sup>, cholesterol and fatty acid synthesis pathways, illustrating repression of most of the pathway components. Overactivation of the complement pathway and acute phase response participate in plaque development and destabilization. Fibrin clotting is fundamental in the formation of thrombi and emboli. NF- $\kappa$ B plays a pivotal role in inflammatory responses, regulating multiple aspects of innate and adaptive immunity, and inducing the expression of various pro-inflammatory genes. Downregulation of these pathways by apabetalone may avoid catastrophic vascular events leading to occlusion and death. Results for several components of the complement, coagulation and acute phase response pathways were verified by real-time PCR, a more sensitive and robust method of measuring mRNA expression, as well as using enzyme-linked immunosorbent assay ("ELISAs") to measure protein levels. Results were also recapitulated in human hepatocarcinoma cell lines and with BET inhibitors with different chemical scaffolds. In addition, in patients' plasma from the ASSERT, SUSTAIN and ASSURE clinical trials, apabetalone reduced levels of specific complement, coagulation and acute phase response proteins. Further proteomic analysis of protein levels in patients' plasma from our previous clinical trials is in progress.

Multiple cell types present in blood, including monocytes, lymphocytes and neutrophils, contribute to CVD. To assess the effect of apabetalone in these cells, we treated human whole blood from healthy volunteers ex vivo and analyzed gene expression using microarrays. The analysis identified multiple pro-inflammatory and pro-atherosclerotic genes that are downregulated by apabetalone. Effects on many apabetalone targets predict reduction in atherosclerosis, CVD and risk of MACE in patients. Other groups have shown that these proteins are also upregulated in blood from sites of occlusion during acute myocardial infarction. These genes either play a direct role in the acute event or they constitute a tissue response to the occlusion. These data provide further evidence that apabetalone is affecting pathways underlying CVD and/or acute events. We are also pursuing investigation of apabetalone's specific effects on individual cell types in blood from patients with other diseases.

We have validated the above effects in a number of cell types, including vascular smooth muscle cells, model hepatocyte cell lines, endothelial cells, and immune cells. These analyses show consistent regulation of markers and pathways known to contribute to CVD, and are highlighted in the publications below.

Apabetalone mediated BET inhibition affects multiple processes important for CVD and renal risk. Based on mechanistic data, we believe that apabetalone treatment, or select BET inhibition, attenuates the inflammatory process that contributes to disease initiation and progression. We are currently performing further detailed analysis on potential new biomarkers and biological pathways that apabetalone may affect through its select BET inhibition mechanism. New findings in these analyses will seek out potential additional indications that can be applied to broadening the scope of diseases that BET inhibition can benefit.

On May 23, 2017, we highlighted two additional works involving our lead drug, apabetalone, one recently published by third party academics and one in the form of a patent application by Pfizer Inc. ("Pfizer"). The publication, titled "Alkaline phosphatase: a novel treatment target for cardiovascular disease in CKD," is published in the prominent journal *Nature Reviews Nephrology*. This article describes the mechanisms that link ALP to vascular calcification, inflammation, and cardiovascular disease. The authors discuss, "new drugs that target ALP, which have the potential to improve cardiovascular outcomes without inhibiting skeletal mineralization." The article dedicates a paragraph to apabetalone and cites four different publications involving apabetalone. The Pfizer patent application was filed for the purpose of protecting their invention of using BET-family bromodomain inhibitors as a method of increasing frataxin in the treatment of patients with Friedreich's ataxia. Apabetalone was listed as a potentially effective agent against this disease which is present in about 1 in 50,000 people. Friedreich's ataxia occurs from the degeneration of nerve tissue in the spinal cord. Symptoms usually begin between 5 to 15 years of age, leading to wheelchair requirements and can eventually lead to early death often related to cardiovascular disease.

On May 31, 2017, we announced that a recently submitted scientific paper titled, "Downregulation of the Complement Cascade In Vitro, in Mice and in Patients with Cardiovascular Disease by the BET Protein Inhibitor Apabetalone (RVX-208)" was published in the *Journal of Cardiovascular Translational Research*. This publication discusses how through transcriptional regulation, apabetalone modulates pathways that underlie CVD including complement, a pathway which includes many CVD risk factors that are dysregulated.

On June 5, 2017, at the European Renal Association - European Dialysis and Transplant Association (ERA-EDTA) Congress in Madrid, Spain, we presented new data from the recently completed phase 1 PK study in patients with severe renal impairment in an oral presentation titled, "Apabetalone (RVX-208) Impacts Key Biomarkers and Pathways Associated with Chronic Kidney Disease in Patients with Severe Renal Impairment." This presentation highlighted an upregulation of pathways known to be activated in CKD such as the inflammatory response, immune response, thrombosis, calcification and oxidative stress, in the renal impaired patients (stage 4 CKD) compared to controls. These pathways were robustly and highly significantly downregulated in the stage 4 CKD patients 12 hours after

---

<sup>1</sup> NF- $\kappa$ B is 'nuclear factor kappa-light-chain-enhancer of activated B cells'



a single oral administration of apabetalone. Apabetalone treatment also downregulated the abundance of circulating CKD biomarkers involved in vascular inflammation, endothelial dysfunction, acute phase response, coagulation and vascular calcification. These findings expand our knowledge of CKD associated plasma proteins, and demonstrates apabetalone's impact on pathways linked to both renal disease and cardiovascular complications. Concurrently, we presented new data in two poster presentations at the ERA-EDTA Congress titled: Effects of Apabetalone (RVX-208) on Serum Albumin in Subjects with CVD, Diabetes and Chronic Kidney Disease; A Post-hoc Analysis of the ASSURE and SUSTAIN Clinical Trials and "Apabetalone, a Bromodomain and Extraterminal Protein Inhibitor, Decreases Key Factors in Vascular Calcification in vitro and in Clinical Trials". The data presented provides the rationale for our CKD program, with apabetalone, which is aimed at assessing the cardiovascular risk reducing potential, in addition to any improved kidney function, observed in prior Phase 2 trials.

On August 26, 2017, we hosted a symposium entitled: "Managing Diabetes & CVD: Is epigenetics a new way forward?" at the ESC Congress in Barcelona, Spain. Speakers included: Lina Badimon, MD - Barcelona, Spain; Kausik Ray, MD - Imperial College London, United Kingdom; Erik Stroes, MD - Academic Medical Centre, Amsterdam, Netherlands; and Stephen Nicholls, MD - Adelaide, Australia. These renowned experts in the field of CVD presented on topics including, "Managing high risk diabetes patients with cardiovascular disease: What works, and what else can we do?", "Promise of epigenetic modulation as a target in atherosclerotic patients", and "Insights from the first trials in epigenetics in human: What is the way forward?" The presentations highlighted the opportunity and need for a novel approach to the treatment of high risk cardiovascular disease and diabetes. Moreover, data presented demonstrated the potentially important role for epigenetics in the underlying pathology of these diseases.

On August 27 and 29, 2017, we presented two poster presentations titled: "Lowering the neutrophil to lymphocyte ratio by the BET inhibitor, apabetalone: potential implications for cardiovascular events in high risk patients" and "Apabetalone (RVX-208) impacts key biomarkers and pathways associated with cardiovascular disease in patients with severe renal impairment" at the ESC Congress 2017. The first poster contained data demonstrating that neutrophil/lymphocyte ("NLR") ratio levels, a well-known marker of inflammation in cardiovascular patients, were higher in patients with established CVD that experienced a MACE compared to those who did not experience a MACE in the ASSURE and SUSTAIN studies. In addition, it was shown that apabetalone treatment reduced the NLR ratio after 6-months of treatment, highlighting the impact of apabetalone on inflammatory pathways implicated in CVD. The second poster highlighted data from the Phase 1 PK trial in patients with severe renal impairment. Data presented illustrated that a single oral dose of apabetalone rapidly reduces circulating markers and predicted pathway activation linked to the progression of renal disease and accompanying CVD complications. Together these posters highlight the potential of apabetalone in modulating the multiple pathways underlying CVD, including inflammation.

During September 2017, we presented an oral presentation titled, "Downregulation of the complement cascade in vitro, in mice and in patients with cardiovascular disease by the BET inhibitor apabetalone (RVX-208)" at the European Meeting on Complement in Human Disease ("EMCHD") in Copenhagen, Denmark and an oral presentation titled, "Apabetalone (RVX-208) acts via an epigenetic mechanism to lower major adverse cardiovascular events (MACE) in patients with atherosclerosis and diabetes mellitus" at the Bridging Discovery Research with Therapies Conference in Banff, Alberta.

On September 29, 2017, our paper titled, "RVX-297, a BET bromodomain inhibitor, has therapeutic effects in preclinical models of acute inflammation and autoimmune disease" was published in Molecular Pharmacology. This publication illustrates that for the first time a BD2 selective BET inhibitor with anti-inflammatory properties is effective in a number of preclinical models of acute inflammation and autoimmunity.

On October 12, 2017, "Selective BET Protein Inhibition with Apabetalone and Cardiovascular Events: A Pooled Analysis of Trials in Patients with Coronary Artery Disease" was published in the American Journal of Cardiovascular Drugs. This publication highlights the results of a pooled analysis of the ASSERT, SUSTAIN and ASSURE phase 2 clinical trials. The manuscript was authored by the members of the BETonMACE CSC. These findings, in conjunction with prior preclinical data, provide a strong rationale for the ongoing BETonMACE trial.

On November 13, 2017, we presented a poster titled: "Apabetalone Downregulates Factors That Promote Vascular Calcification and Contribute to Cardiovascular Events" at the AHA Scientific Sessions 2017. Data presented in this poster illustrates that apabetalone mediates the downregulation of factors and biological pathways associated with vascular calcification. Simultaneous effects on multiple contributing cell types suggest apabetalone may oppose pathologic vascular calcification to decrease MACE in patients with high CVD risk. The data from these three posters illustrates findings from ongoing studies in our CKD program.

On December 8, 2017, our paper titled, "Benefit of Apabetalone on Plasma Proteins in Renal Disease" was published in Kidney International Reports. The findings in the article demonstrate plasma proteome dysregulation in patients with impaired kidney function and the beneficial impact of apabetalone on proteins and pathways linked to chronic kidney disease and its cardiovascular complications which were first presented at the ERA-EDTA Congress in June 2017.

On December 12, 2017, we announced that a publication titled "BET inhibitors RVX-208 and PFI-1 reactivate HIV-1 from latency" was published in Nature Scientific Reports. The publication by Lu et al. demonstrates that both BET inhibitors, RVX-208 (apabetalone) and

PFI-1 owned by us and Pfizer, respectively, can reactivate HIV-1 from latency. Persistent latent reservoirs of HIV-1 in resting CD4+T cells are the major obstacle in curing HIV-1 infection. Their conclusion suggests that BET inhibitors, such as apabetalone (RVX-208), are a group of leading compounds for potentially unmasking HIV-1 latency to allow for viral eradication.

On March 28, 2018, our paper titled, "Apabetalone Mediated Epigenetic Modulation is Associated with Favorable Kidney Function and Alkaline Phosphatase Profile in Patients with Chronic Kidney Disease" was published by Kidney & Blood Pressure Research. The publication reports, for the first time, the effects of pharmacologic epigenetic modulation on levels of ALP and kidney function via apabetalone in CKD patients. The data presented provides the rationale for our CKD program, with apabetalone, which is aimed at assessing the cardiovascular risk reducing potential, in addition to any improved kidney function.

On May 24, 2018, we hosted a symposium entitled: "Epigenetics in CKD & CVD: A potential breakthrough therapy", at the European Renal Association – European Dialysis and Transplant Association (ERA-EDTA) Congress in Copenhagen, Denmark. Speakers included: Vincent M Brandenburg, MD – Aachen, Germany; Eric Stroes, MD – Academic Medical Centre, Amsterdam, The Netherlands; Louise Nordfors, PhD – Karolinska Institute, Stockholm, Sweden and; Kamyar Kalantar-Zadeh, MD – UC Irvine School of Medicine, Irvine, USA. These renowned experts in the field of CKD presented on topics including, "Cardiovascular disease in diabetes and CKD & residual risk - The promise of epigenetics", "Epigenetics in CKD: Rationale for BET inhibition, an emerging therapeutic mechanism in renal disease and CVD", and "A clinical view on BET inhibition in CKD & CVD: Understanding recent data and future perspectives" The presentations highlight the opportunity and need for a novel approach to reduce risk in kidney and cardiovascular disease, and demonstrate the important role for epigenetics in the underlying pathology of these diseases.

On June 7, 2018, we announced that a publication titled, "The BET bromodomain inhibitor apabetalone induces apoptosis of latent HIV-1 reservoir cells following viral reactivation," was published in Nature's Acta Pharmacologica Sinica. The publication by Zhang et al. demonstrated apabetalone's abilities to expose and reactivate latent HIV-1 reservoirs, induce HIV-1 latent cell death, and reduce the side effects of standard of care (cART combination antiretroviral therapy). These conclusions suggest that BET inhibitors, such as apabetalone, are a group of leading compounds for potentially unmasking HIV-1 latency to allow for viral eradication.

On August 22, 2018, we supported a symposium entitled: "LDL-C: Done Deal, Next Epigenetics" at the ESC Congress in Munich, Germany. Speakers included: Ulrich Laufs, MD – Leipzig, Germany; Erik Stroes, MD - Academic Medical Centre, Amsterdam, Netherlands; Jorge Plutzky, MD – Boston, USA; and Kausik Ray, MD - Imperial College London, United Kingdom. These renowned experts in the field of CVD and epigenetics presented on topics including: "The real residual risk in patients with CVD & diabetes: The promise of epigenetics", "Understanding epigenetics: The potential rationale for BET inhibition in management of CVD", and "A clinical view on BET inhibition in targeting residual risk in CVD and diabetes". The presentations highlighted the epidemiology and pathophysiology of patients at high cardiovascular risk with diabetes, how BET inhibition affects gene expression via epigenetic mechanisms as a novel strategy to improve outcomes in CVD and reviewed current clinical research programmes evaluating the role of epigenetic regulation of gene expression in CVD management.

In addition to the satellite symposium, Dr. Ewelina Kulikowski, Senior Vice President of Research & Development of the Company presented during the Basic and Translational Science Hot Line - Vascular Biology session, titled: Apabetalone (RVX-208) Reduces Monocyte-Endothelial Cell Adhesion and Expression of Key Vascular Inflammation Markers in Monocytes, Endothelial Cells and in Inflamed Mouse Aorta.

On July 23, 2018 and September 1, 2018, we presented the design of a cognition substudy of the BETonMACE Phase 3 trial in a poster at the Alzheimer's Association International Conference ("AAIC") and an oral presentation at Clinical Trials in Alzheimer's Disease Asia ("CTAD – Asia"). Additionally, at the CTAD – Asia conference, we presented a poster titled, "Effect of the BET Protein Inhibitor Apabetalone on Serum Markers of Potential Importance for Cognitive Decline in Cardiovascular Disease Patients," illustrating new data from the proteomic analysis from the Company's phase 2 ASSURE clinical trial.

On October 22, 2018, we announced poster presentations at three premier conferences:

- The American Society of Nephrology ("ASN") Kidney Week 2018: "Apabetalone Downregulated Factors and Pathways Associated with Vascular Calcification"),
- Clinical Trials on Alzheimer's Disease ("CTAD") 2018: "Apabetalone, a BET Bromodomain Inhibitor, Suppresses Inflammatory Mediators in Microglia and Vascular Endothelial Cells that Contribute to Neurodegenerative Diseases"),
- The American Heart Association ("AHA") Scientific Sessions 2018: 1. "Cardiovascular Evaluation of the Selective BET Inhibitor, Apabetalone, in ACS Patients With Diabetes: Baseline Characteristics of the BETonMACE CV Outcomes Study," 2. "Apabetalone [RVX-208] Suppresses Expression of Key Vascular Inflammation Markers in Monocytes, Endothelial Cells and LPS-Challenged Mouse Liver and Monocyte Adhesiveness to Activated Endothelial Cells").

Through participation at major conferences and events, we continue to highlight apabetalone's ability to regulate multiple biological pathways that underlie and contribute to CVD, diabetes, and neurodegenerative diseases.

In January 2019, data from analyses of apabetalone's effects on vascular calcification was published online in *Atherosclerosis* (authored by Gilham et al). This study showed that apabetalone inhibited extracellular calcium deposition and opposed induction of transdifferentiation markers in human coronary artery vascular smooth muscle cells under osteogenic culture conditions. Apabetalone suppressed osteogenic induction of tissue-nonspecific alkaline phosphatase mRNA, protein and enzyme activity. Levels of BRD4, a transcriptional regulator and target of apabetalone which has been linked to calcification, was reduced on many calcification-associated enhancers, and correlated with decreased expression of the associated gene.

### Potential Orphan Disease Indications

Based on the literature and knowledge of epigenetics and BET inhibition, our analysis of apabetalone treated human plasma and our recent proteomics assessment, new pathways, genes and biomarkers known to play a role in orphan diseases have been investigated. New data generated in our research laboratory has demonstrated that BET inhibition by apabetalone has effects on multiple biological pathways that underlie disease pathology. Based on these recent advancements and scientific knowledge gained, we intend to continue to expand our research and development to explore orphan diseases such as Fabry disease and PAH. We will perform detailed commercial and scientific analysis in all of these opportunities to build the best possible rationale for advancing any of these opportunities forward. In addition to apabetalone, preclinical testing with other BET inhibitors from within our compound library has demonstrated similar effects on important markers known to play a role in orphan diseases. These compounds are under consideration as follow-on compounds.

#### Orphan Disease Fact Sheet

- Defined as rare diseases and disorders.
- Affect fewer than 200,000 people in the US.
- An estimated 7,000 rare diseases have been identified affecting over 30 million patients in the US.
- 400 drugs and biologics have been FDA approved.
- Due to the difficulty in recovering the therapeutic development costs associated with small patient segments, the Orphan Drug Act (ODA) was introduced in 1983 to foster research into rare diseases.
- The ODA provides for granting special status to a drug or biological product to treat a rare disease. This status is referred to as orphan designation.
- Orphan designation allows the drug sponsor to benefit from incentives for the development of these products.
- Incentives include tax credits on clinical research, technical assistance during new drug application (NDA) filing and exclusivity of 7 years after the marketing approval is granted.

Source: NIH Rare Diseases Clinical Research Network Fact Sheet

### Apabetalone (RVX-208) Clinical Trial History

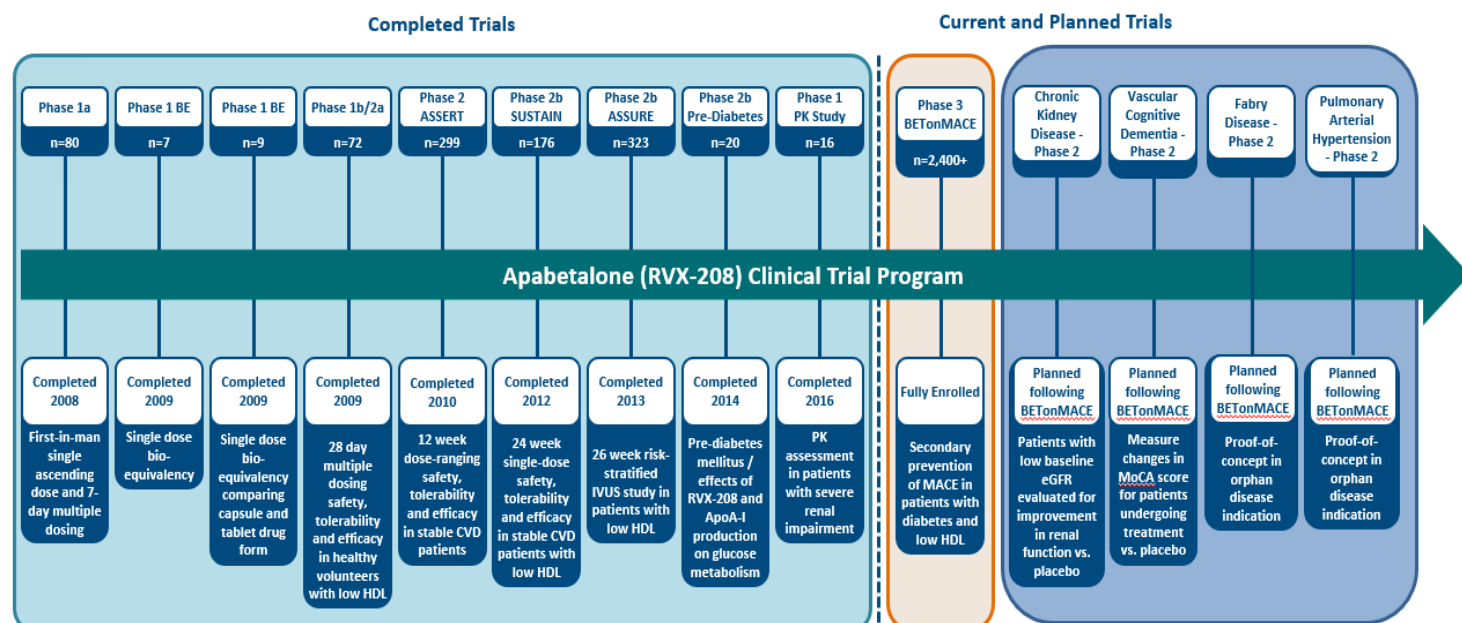
A total of 1,001 subjects have participated in our completed clinical trials, of which 722 received treatment with apabetalone and 279 received placebo. Three Phase 2 studies in patients with cardiovascular disease and one Phase 2 study in patients with pre-diabetes have been completed.

- 1) The Phase 2 ASSERT study enrolled 299 patients. Findings demonstrated by ASSERT included:
  - 200 mg/day of apabetalone was the optimal dose, based on safety and efficacy;
  - Patients with a low level of HDL-C at baseline had a better response for HDL-C and ApoA-I increases when treated with apabetalone; and
  - Best responses were observed in those patients given apabetalone in combination with second generation statins such as Rosvastatin (Crestor®) or Atorvastatin (Lipitor®).
- 2) The Phase 2b SUSTAIN study enrolled 176 patients. Findings demonstrated by SUSTAIN included:
  - Low baseline HDL and low baseline ApoA-I were the best responders; and
  - There was one MACE event in subjects treated with apabetalone compared to six in subjects treated with placebo.
- 3) The Phase 2b ASSURE study enrolled 323 patients. Findings demonstrated by from ASSURE included:
  - Low baseline HDL were the best responders;
  - Elevated baseline hsCRP were strong responders; and
  - There were fewer MACE events in subjects treated with apabetalone (7.4%) vs. subjects treated with placebo (13.8%).
- 4) The Phase 2b Pre-diabetes study enrolled 20 patients. Findings demonstrated by this study included:
  - Short duration of apabetalone treatment had beneficial effects on glucose metabolism; and
  - Both the reduction in glucose absorption and production are expected to be of benefit in patients with prediabetes mellitus.

These key findings contributed to determining a therapeutic window and targeted patient group for apabetalone.

Based on our clinical trials, we have developed a broader and more integrated view of the effects of treatment with apabetalone across the vascular and coronary artery disease spectrums with safety and efficacy results for up to six months of treatment.

## Completed, Current and Planned Apabetalone (RVX-208) Clinical Trials



## Corporate Developments

### Private Placements and Prospectus Offering

On June 20, 2017, we issued a total of \$7.5 million (CAD\$10 million) of equity units pursuant to a private placement and prospectus offering. Eastern and Hepalink purchased 1,617,980 and 1,333,333 equity units, respectively at a price of CAD\$1.80 per unit pursuant to a private placement for gross proceeds of \$4.0 million (CAD\$5.3 million). Other subscribers purchased an additional 2,552,489 equity units at a price of CAD\$1.80 per unit pursuant to a prospectus offering for gross proceeds of an additional \$3.5 million (CAD\$4.6 million). Each equity unit consists of one common share and one common share purchase warrant. Each warrant is exercisable at a price of CAD\$2.05 per underlying common share for a period of four years from the closing of the private placement and prospectus offering.

On September 8, 2017, we issued a total of 3,418,744 equity units, pursuant to a private placement for gross proceeds of \$4.2 million (CAD\$5.1 million), or CAD\$1.50 per unit, whereby each unit was comprised of one common share and one-half common share purchase warrant. Each warrant is exercisable at a price of \$1.50 per share for a period of 4 years from the closing of the offering. The units are subject to a four-month hold period.

On December 1, 2017, we closed the previously announced private placement of 60,416,667 equity units to Hepalink at a price of CAD\$1.44 per unit for gross proceeds of \$68.5 million (CAD\$87.0 million). Each unit was comprised of one common share and 0.082759 of a common share purchase warrant. Each full warrant is exercisable at a price of CAD\$1.64 per share for a period of four years from the closing of the offering.

During the three months ended April 30, 2018, we issued 1,776,322 shares at a weighted average price of CAD\$1.78 per share pursuant to additional private placements for gross proceeds of \$2.5 million (CAD\$3.2 million).

In addition, on April 12, 2018, we issued 364,914 equity units at CAD\$1.75 per unit pursuant to a private placement for gross proceeds of \$0.5 million (CAD\$0.6 million). Each unit was comprised of one common share and one-half of a common share purchase warrant. Each warrant is exercisable at a price of CAD\$2.00 per underlying common share for a period of two years from the closing of the private placement.

In August 2018, we issued 10,403,216 equity units at CAD\$2.50 per unit pursuant to a private placement for gross proceeds of \$20.0 million (CAD\$26.0 million). Each unit consisted of one common share and one-half of a common share purchase warrant. Each warrant



is exercisable at a price of CAD\$3.00 per underlying common share for a period of three years from the closing of the private placement.

In November 2018, we issued 4,500,000 equity units at CAD\$3.00 per unit pursuant to a private placement for gross proceeds of \$10.3 million (CAD\$13.5 million). Each unit consisted of one common share and one-half of a common share purchase warrant. Each warrant is exercisable at a price of CAD\$3.10 per underlying common share for a period of three years from the closing of the private placement.

In January 2019, we issued 2,213,398 equity units to Hepalink at CAD\$3.00 per unit pursuant to a private placement for gross proceeds of \$5.1 million (CAD\$6.6 million). Each unit consisted of one common share and one-half of a common share purchase warrant. Each warrant is exercisable at a price of CAD\$3.21 per underlying common share for a period of three years from the closing of the private placement.

### **Repayment of Loan**

On December 6, 2017, we repaid our loan (CAD\$68.8 million, or USD\$54.2 million) and all related interest and fees (CAD\$6.1 million, or USD\$4.8 million).

### **Third Eye Loan**

On May 7, 2018, we announced we had closed a US\$30 million senior secured loan (the "Third Eye Loan") with Third Eye Capital ("Third Eye"). The loan bears interest at 10% per annum and will mature on May 4, 2019. It also includes covenants that we must comply with including a minimum cash balance of \$5.0 million, a current ratio of 1:1 (excluding warrant liability, unearned licensing rights fee and debt from current liabilities), and a minimum market capitalization of CAD\$150 million. The Third Eye Loan is subject to mandatory prepayment provisions requiring at least 50% of the net cash proceeds of asset dispositions, licensing, distribution or partnership agreements, royalties, debt or equity issuances, grants and tax refunds to be applied to repayment of the Third Eye Loan. During the nine months ended January 31, 2019, we repaid approximately \$15.5 million of the Third Eye Loan, corresponding to 50% of the net cash proceeds from the private placements and warrant exercises in the period.

### **Licensing**

On July 8, 2015, we entered in to a licensing agreement with Shenzhen Hepalink Pharmaceutical Co., Ltd. ("Hepalink"), Under the terms of the agreement, Hepalink has the exclusive rights to distribute and market apabetalone in China, Hong Kong, Taiwan and Macau (the "Territories"), for all indications.

The license between us and Hepalink provides for certain milestone payments based on net sales of RVX-208 in the licensed territories. The annual sales milestones range from 500 million renminbi ("RMB") to 10 billion RMB (US\$72 million to US\$1.4 billion, incorporating the period end spot exchange rate), with Resverlogix being eligible to receive sales-based milestone payments from Hepalink ranging from US\$5 million to US\$90 million. In addition, Hepalink shall pay a royalty of 6% of annual net sales of RVX-208 in the licensed territories. Hepalink will be responsible for all clinical and development costs in the Territories, including a patient population that is expected to be included in the Company's Phase 3 BETonMACE trial. We are contractually obligated to pay a fee to the financial advisor involved with the transaction equal to 3.5% on the first \$10.0 million of payments, if any, received from Hepalink pursuant to the license, and 2.5% on amounts above \$10.0 million, up to a maximum of \$1.0 million of fees. As at January 31, 2019, these potential payments do not satisfy the criteria for recognition as a liability.

On October 23, 2017, we entered into a Right of First Refusal Agreement with Hepalink USA Inc. (Hepalink USA), a subsidiary of Hepalink. Under the Agreement, Hepalink USA was granted a right of first refusal in connection with the licensing of the right to develop, manufacture, and commercialize pharmaceutical products containing RVX-208 (apabetalone) in the United States until April 15, 2019. Hepalink USA paid CAD\$8.0 million to us in consideration for the right of first refusal granted (the "Fee"). If Resverlogix and Hepalink USA enter into a license agreement with respect to the US Licensing Rights, the Fee shall be credited against any payment obligations of Hepalink USA thereunder. Otherwise, the Fee is refundable, in whole or in part, upon termination of the Agreement. The Agreement may be terminated by either party. The amount received is being recorded as Unearned Licensing Rights Fee until credited against payments due from Hepalink USA under a license agreement, or until the Fee is no longer refundable.

On January 8, 2018, we entered into a licensing agreement with Medison Pharma Ltd. Under the terms of the agreement, Medison has the exclusive rights to distribute and market apabetalone in Israel. Resverlogix is eligible to receive from Medison, ascending double digit royalties based on future net sales of the product in the licensed territory. If certain sales milestones are reached total royalty payments are estimated to potentially reach in excess of US\$100 million over the entire patent life in the licensed territory. Medison will be responsible for all regulatory, sales and marketing costs for apabetalone in the licensed territory.

## Royalty Preferred Shares

On July 2, 2015, the Company's articles were amended to make certain changes to the dividend entitlement of holders of royalty preferred shares. The amendments to the Royalty Preferred Shares limit the dividends payable to holders of royalty preferred shares in a particular period to amounts received by us during that period. We determined that this amendment was necessary in the course of negotiating the terms of the license agreement with Hepalink.

On December 20, 2016, the Company's articles were further amended to make certain additional changes to the dividend entitlement of holders of royalty preferred shares. The amendments provided that the holder of royalty preferred shares is entitled to a dividend, calculated based on a percentage of net revenue earned from the sale of licensing of any pharmaceutical product in which Resverlogix holds an intellectual property right, and removed the requirement that the pharmaceutical product elevate plasma levels of certain lipoprotein associated with a decreased risk of atherosclerosis and coronary heart disease. We determined that the amendments were necessary and appropriate based on detailed analysis of the results of our phase 2 clinical program.

## Results of Operations for the Three and Nine Months Ended January 31, 2019 and 2018

(in thousands of US dollars unless otherwise noted)	Three months ended January 31,		Nine months ended January 31,	
	2019	2018	2019	2018
Expenses	\$ 9,363	\$ 12,894	\$ 27,931	\$ 31,384
Financing costs	4,038	10,966	74,160	18,685
Loss before income taxes	13,401	23,860	102,091	50,069
Income taxes	5	12	9	34
Net and total comprehensive loss	\$ 13,406	\$ 23,872	\$102,100	\$ 50,103
<b>Net loss per share</b>				
Basic and diluted	\$ 0.07	\$ 0.15	\$ 0.55	\$ 0.40

## Cash Burn Rate

The average monthly Cash Burn Rate, a non-IFRS measure as described on page 2 herein, for the three and nine months ended January 31, 2019 was \$2.6 million and \$2.8 million, respectively (2018 - \$4.7 million and \$3.6 million, respectively), reflecting the continued clinical development costs of the BETonMACE trial.

(in thousands of US dollars unless otherwise noted)	Three months ended January 31,		Nine months ended January 31,	
	2019	2018	2019	2018
Cash flow used in operations	\$ (8,846)	\$ (9,475)	\$(39,684)	\$ (21,507)
Changes in non-cash working capital	1,097	(4,726)	14,753	(10,816)
	(7,749)	(14,201)	(24,931)	(32,323)
Number of months	3	3	9	9
Average Monthly Cash Burn Rate	(2,583)	(4,734)	(2,770)	(3,591)

Our historical Cash Burn Rate is not necessarily indicative of our future Cash Burn Rate. Our burn rate has decreased, reflecting a decrease in BETonMACE clinical development costs as the trial advances towards completion. Based on our planned business operations for the next year, we expect our Cash Burn Rate to continue to fluctuate each quarter based on the specific activities (most notably clinical and chemistry) occurring in each quarter.

## Research and Development

In addition to the costs associated directly and indirectly with clinical programs, research and development includes other product development costs such as drug development and manufacturing, pharmacology, toxicology and other studies, and costs associated with discovery research. R&D expenses also include salaries and benefits for R&D staff, consulting fees, supplies and general laboratory operating expenses.

During the three months ended January 31, 2019, gross R&D expenditures totaled \$7.8 million (2018 - \$12.0 million). Clinical costs totaled approximately \$5.1 million (2018 - \$8.3 million), including \$5.0 million on the BETonMACE clinical trial net of cost recoveries, reflecting the continued progression of the trial which is now nearing completion (2018 - \$8.1 million on the BETonMACE clinical trial net of cost recoveries), \$0.1 million on regulatory costs (primarily related to the BETonMACE clinical trial) (2018 - \$0.1 million) and \$Nil (2018 - \$0.1 million) of other clinical costs including sample analysis, consultants and insurance. BETonMACE costs included clinical management, data management, pharmacovigilance, clinical supplies/drug product, central laboratory, and investigator fees.

During the nine months ended January 31, 2019, gross R&D expenditures totaled \$23.4 million (2018 - \$28.5 million). Clinical costs totaled approximately \$12.6 million (2018 - \$17.2 million), including \$12.0 million on the BETonMACE clinical trial, net of cost recoveries, reflecting the progression of the trial (2018 - \$16.3 million on the BETonMACE clinical trial and \$0.2 million on the Renal Dialysis clinical trial), \$0.3 million on regulatory costs (primarily related to the BETonMACE clinical trial) (2018 - \$0.3 million) and \$0.3 million (2018 - \$0.4 million) of other clinical costs including sample analysis, consultants and insurance.

During the three and nine months ended January 31, 2019, chemistry costs (comprised of CMC, or chemistry, manufacturing and controls) totaled approximately \$1.3 million and \$6.3 million, respectively (2018 - \$2.4 million and \$6.9 million, respectively). The fluctuations were due primarily to timing of shipments of clinical supplies (drug product) to sites/patients for the BETonMACE clinical trial, reflecting continual progression of the BETonMACE trial towards completion.

During the three and nine months ended January 31, 2019, preclinical costs were approximately \$0.1 million and \$1.5 million, respectively (2018 - \$0.4 million and \$1.5 million, respectively). Preclinical costs include research, pharmacology, toxicology and DMPK (drug metabolism, and pharmacokinetics) costs including those related to the potential broadening of indications. The costs in both periods are attributable to various small studies related in part to the potential broadening of additional indications.

Research and development compensation and related costs (related primarily to our research, preclinical and clinical teams), for the three and nine months ended January 31, 2019 were relatively unchanged at \$0.5 million and \$1.6 million, respectively (2018 - \$0.6 million and \$1.7 million, respectively).

## General and Administrative

General and administrative expenses includes compensation and related costs, operating costs not directly involved in research and development, as well as professional fees for legal, audit, communications, medical affairs and business development services.

During the three and nine months ended January 31, 2019, general and administrative expenditures totaled \$1.6 million and \$4.6 million, respectively (2018 - \$1.0 million and \$3.0 million, respectively). The increase was due to higher share-based payment transaction costs in the current period.

## Share-based Payments

Share-based payments and depreciation and amortization are included in research and development and general and administrative rather than being presented separately in the statements of comprehensive loss (income).

During the three and nine months ended January 31, 2019, we recognized share-based payments of \$1.3 million and \$2.6 million, respectively (2018 - \$0.1 million and \$0.2 million, respectively). The large increase in the current period relates to the large amount of restricted stock units granted in the current period (whereas in the prior period there were no units granted). The expense recognized in a given period reflects the fair value of past and newly-granted stock options outstanding during the period, and is impacted by factors such as vesting and fluctuations in share price. Share-based payments are a non-cash expense which does not impact operating cash flows.

During the nine months ended January 31, 2019, we did not grant any stock options (2018 - Nil), and we granted 1,883,600 restricted stock units (2018 - Nil).

## Change in Fair Value of Warrant Liability

We have issued warrants in connection with various securities offerings. Warrants issued as part of an equity unit, or in connection with a debt financing, with an exercise price denominated in a foreign currency are reported as a liability until they are exercised or expire. These warrants are adjusted to fair value at each reporting period and any change in fair value between reporting periods is recorded in the statement of comprehensive loss.

During the three and nine months ended January 31, 2019, we recognized a \$4.1 million gain and a \$26.8 million loss, respectively, on the change in the fair value of our warrant liability (2018 - \$6.1 million loss and \$2.6 million loss, respectively). The changes in fair value were based on several factors including changes in the market price of our shares to CAD\$3.19 on January 31, 2019 from CAD\$1.29 on April 30, 2018, and to CAD \$1.92 on January 31, 2018 from CAD\$1.99 on April 30, 2017, the revaluation of 12.1 million new liability classified warrants issued in the current period, as well as decreases in the remaining terms of the various series of warrants, and changes in estimated future volatility of our common shares. Gains and losses resulting from the revaluation of warrant liability are non-cash and do not impact our cash flows.

### Change in Fair Value of Royalty Preferred Shares

During the nine months ended January 31, 2019, we recognized a \$42.7 million loss on the change in the fair value of our royalty preferred shares (2018 - \$6.4 million loss). For fair value measurement purposes, the royalty preferred shares liability has been categorized within level 3 of the fair value measurement hierarchy. The fair value of the royalty preferred shares is based on management's judgments, estimates and assumptions which include significant unobservable inputs including the timing and amounts of the Company's discounted risk adjusted future net cash flows, which incorporate: a cumulative probability rate of generating forecasted future cash flows of 42% as at January 31, 2019 and 35% as at April 30, 2018 (January 31, 2018 and April 30, 2017 - 35%) reflecting in each case, among other factors, our clinical results and communication with regulatory bodies; a discount rate of 20.1% as at January 31, 2019 and 21.7% as at April 30, 2018 (23.6% as at January 31, 2018 and 23.4% as at April 30, 2017); commencement of revenue between late 2021 and 2022, based on clinical development paths across various jurisdictions, as at January 31, 2019 and between late 2021 and 2023 as at April 30, 2018 (January 31, 2018 and April 30, 2017 - between 2021 and 2023); projected apabetalone market shares percentages; and projected product pricing. The passage of time during the nine months ended January 31, 2019 to future cash flows based on the estimated timing and commencement of revenue, the change in the discount rate due to a decrease in the estimated size premium rate (a component of our estimated weighted average cost of capital), and the increased cumulative probability rate of generating forecasted future cash flows affected the fair value of our royalty preferred shares.

The fair value of the royalty preferred shares is subject to significant volatility. Small changes in the aforementioned assumptions may have a significant impact on the fair value of the royalty preferred shares. For instance, holding all other assumptions constant, a 1% increase in the discount rate would result in a \$7.9 million decrease in the fair value of the royalty preferred shares. Furthermore, assuming commencement of revenue one year later would result in a \$21.6 million decrease in the fair value of the royalty preferred shares.

### Interest and Accretion

On December 6, 2017, we repaid our CAD\$68.8 million loan and all related interest and fees. During the nine months ended January 31, 2018, interest and fees on the CAD\$68.8 million loan totaled \$3.3 million and accretion of the discount on the debt and debt issuance costs totaled \$1.8 million.

On May 4, 2018, we closed the US\$30.0 million Third Eye Loan. The loan bears interest at 10% per annum and will mature on May 4, 2019. During the nine months ended January 31, 2019, we repaid approximately \$15.5 million of the Third Eye Loan. During the nine months ended January 31, 2019, interest on the Third Eye Loan totaled \$1.7 million and accretion of the debt issuance costs totaled \$2.5 million.

## Liquidity and Capital Resources

### Debt

#### Repayment of Loan

On December 6, 2017, we repaid our CAD\$68.8 million loan and all related interest and fees. Prior to repayment, in August 2017, the maturity date of our loan was extended from August 28, 2017 to December 26, 2017. In connection with the loan extension, the loan was assigned from Citibank to a lender affiliated, directly or indirectly with Eastern Capital Limited ("the Lender"). The loan was secured by an irrevocable CAD\$68.8 million Standby Letter of Credit (the "Letter of Credit") in favour of the Lender arranged by Eastern Capital Limited ("Eastern"), which was maintained until maturity of the loan. In connection with the extension of the loan, we granted to the Lender a security interest in all of our assets as security for the loan.

#### Third Eye Loan

On May 7, 2018, we announced we had closed the US\$30 million Third Eye Loan with Third Eye. The loan bears interest at 10% per annum and will mature on May 4, 2019. It also includes covenants that we must comply with including a minimum cash balance of \$5.0 million, a current ratio of 1:1 (excluding warrant liability, unearned licensing rights fee and debt from current liabilities), and a minimum market capitalization of CAD\$150 million. The Third Eye Loan is subject to mandatory prepayment provisions requiring at



least 50% of the net cash proceeds of asset dispositions, licensing, distribution or partnership agreements, royalties, debt or equity issuances, grants and tax refunds to be applied to repayment of the Third Eye Loan. During the nine months ended January 31, 2019, we repaid approximately \$15.5 million of the Third Eye Loan, corresponding to 50% of the net cash proceeds from the private placements and warrant exercises in the period.

## Cash

As at January 31, 2019, we had \$6.5 million of cash and \$7.3 million of trade and other payables. Our cash and liquidity is described further under “Liquidity”.

## Liquidity

We are a development stage company; our primary capital requirements relate to funding research and development activities, including preclinical and clinical trials, and for general working capital purposes. Our operations have been financed in recent years primarily through the sale of common shares or units (consisting of common shares and warrants) and the Citibank and Third Eye loans.

Our primary objective when managing capital is to ensure we have sufficient funds available to carry out our research, development and commercialization programs based, in part, on continuous monitoring.

On October 24, 2017 we announced that we have entered into a Right of First Refusal Agreement with Hepalink. Under the Agreement, Hepalink was granted a right of first refusal in connection with the licensing of the right to develop, manufacture, and commercialize pharmaceutical products containing RVX-208 (apabetalone) in the United States until April 15, 2019. Hepalink paid CAD\$8.0 million to us in consideration for the right of first refusal granted. If we and Hepalink enter into a license agreement with respect to the US Licensing Rights, the Fee shall be credited against any payment obligations of Hepalink USA thereunder. Otherwise, the Fee is refundable, in whole or in part, upon termination of the Agreement.

On December 1, 2017, we closed a private placement of 60,416,667 equity units to Hepalink at a price of CAD\$1.44 per unit for gross proceeds of \$68.5 million (CAD\$87.0 million). On December 6, 2017 we repaid our CAD\$68.8 million (US\$54.2 million) loan and all related interest and fees.

As at January 31, 2019, we had \$6.5 million of cash, \$7.3 million of trade and other payables, and were committed to pay \$8.3 million for research and development and \$0.7 million of lease obligations over the following twelve months. In addition, aggregate expenditures over the next twelve months under cancellable agreements with contract research organizations and central laboratories conducting the BETonMACE and other trials are estimated to total approximately \$15 – 20 million. Our average monthly Cash Burn Rate, a non-IFRS measure, as described on page 2 herein, for the nine months ended January 31, 2019 was \$2.8 million. Our historical Cash Burn Rate is not indicative of our future Cash Burn Rate. Our cash burn rate has decreased slightly in the current quarter, reflecting the BETonMACE trial maturing. Based on our planned business operations for the next year which reflects the BETonMACE trial, we expect our Cash Burn Rate to fluctuate based on the specific activities (most notably clinical and chemistry) occurring in each quarter.

Our cash as at January 31, 2019 will not be sufficient to fund our contractual commitments or our planned business operations over the next year, or to repay our loan.

We will have to raise additional capital. If we are not able to raise capital, we will have to reduce our cash requirements by eliminating or deferring spending on research, development and corporate activities, or may be forced to cease operations.

As noted above, in December 2017, further to a letter of intent regarding a significant equity investment in Resverlogix and/or a significant potential regional licensing arrangement announced in August 2017, we closed a CAD\$87.0 million equity private placement with Hepalink. We continue discussions for regional licensing opportunities with potential pharma partners including Hepalink. We will continue to pursue and examine both non-dilutive and dilutive arrangements, with a preference for non-dilutive alternatives, in the following priority: co-development, licensing, rights (on indications or potential follow-on compounds, for instance) or other partnering arrangements, private placements and/or public offerings (equity and/or debt). However, there is no assurance that these arrangements will be completed.

These conditions result in a material uncertainty which may cast significant doubt on our ability to continue as a going concern.

We will also require additional capital to fund research, development and corporate activities beyond the next year. We will continue to explore alternatives to generate additional cash including raising additional equity and product licensing; however, there is no assurance that these initiatives will be successful. We intend to raise capital from equity and/or debt offering and/or partnering in the future.

We intend to perform additional human clinical trials, including a severe renal impairment trial, and such trials and regulatory approvals likely require several years to complete. We may not generate operating cash inflows in the foreseeable future, and we will require additional financial resources to ensure that we have sufficient capital to fund our long-term research, development and corporate activities. Our long-term capital requirements will depend on, among other considerations, whether we commence additional clinical trials, the size of any trials, and whether the trials are funded entirely by us or, partially or entirely, by a strategic partner.

We continuously investigate and assess financing alternatives and expect to be able to raise additional capital to fund our capital requirements. However, there is no assurance that initiatives to raise additional capital will be successful. If we are unable to raise additional capital, we may need to defer or discontinue some or all of our research and development activities.

### Cash Flows Used In Operating Activities

Cash flows used in operating activities for the nine months ended January 31, 2019 totaled \$39.7 million (2018 - \$21.5 million), reflecting the large amount of non-cash working capital changes in the current period (a large decrease in trade and other payables) and changes in various components of our working capital.

### Cash Flows from Financing Activities

As described under “Corporate Developments” during the nine months ended January 31, 2018 we issued a total of \$80.2 million (CAD\$102.0 million) of equity units pursuant to various private placements and a prospectus offering. On December 6, 2017 we repaid our CAD\$68.8 million loan and all related interest and fees.

During the nine months ended January 31, 2019, we issued \$35.4 million (CAD\$46.1 million) of equity units pursuant to a private placement and entered into a \$30.0 million loan with Third Eye. During the period, we repaid approximately \$15.5 million of the Third Eye Loan. During the nine months ended January 31, 2019, 219,284 stock options were exercised for proceeds of \$0.2 million (2018 – 59,099 stock options were exercised for proceeds of \$0.1 million). Warrant exercises in the period resulted in proceeds of \$0.6 million.

### Cash Flows Used In Investing Activities

During the nine months ended January 31, 2019, additions to intangible assets (patent-related costs) and property and equipment, alongside net payments of past additions, totaled \$0.5 million (2018 - \$0.2 million).

### Contractual Obligations

As at January 31, 2019, the Group is party to cancellable agreements with contract research organizations and central laboratories conducting the BETonMACE and other trials. Corresponding estimated aggregate expenditures over the next twelve months total approximately \$15 - 20 million (2018 – \$15 - 20 million).

As at January 31, 2019, the Group is also committed to expenditures over the next twelve months of \$8.3 million (2018 – \$6.0 million) under various research and development contracts.

The table below summarizes our contractual obligations related to operating leases for office and laboratory premises, by due date, as at January 31:

<i>(in thousands of US dollars)</i>	2019	2018
Less than one year	\$ 695	\$ 684
Between one year and five years	1,915	2,385
More than five years	-	356
	<b>\$ 2,610</b>	<b>\$ 3,425</b>

Zenith has agreed to pay us for its proportionate share of operating lease payments and operating costs for office and laboratory premises of an estimated \$0.2 million and \$0.1 million, respectively, for the next twelve months.

### Significant Accounting Policies and Estimates

Note 4 to our consolidated financial statements for the year ended April 30, 2018 includes a summary of our significant accounting policies.

The preparation of financial statements requires management to use estimates and assumptions that they believe are reasonable based upon the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods presented. These

estimates and assumptions are subject to inherent risk of uncertainty and actual results may differ from these estimates and assumptions.

Significant estimates are used for, but not limited to, the measurement of the fair value of long-term debt and the fair value of the royalty preferred shares, share-based payment transactions, warrant liability and taxes.

## New standards and interpretations adopted

The Company has adopted the following new standard, with a date of initial application of May 1, 2018:

### IFRS 9 – Financial Instruments

IFRS 9 – *Financial Instruments* (“IFRS 9”) replaces IAS 39 – *Financial Instruments: Recognition and Measurement* for annual periods beginning on or after January 1, 2018. IFRS 9 includes guidance on the classification and measurement of financial assets and liabilities and impairment of financial assets. We have applied IFRS 9, with an initial application date of May 1, 2018. There were no changes to the measurement of our financial assets and liabilities as a result of the adoption of IFRS 9.

## Recent accounting pronouncements

### IFRS 16 – Leases

On January 13, 2016, the IASB issued IFRS 16 – *Leases* which replaces IAS 17. The new standard introduces a single lessee accounting model and requires a lessee 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. This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors. Other areas of the lease accounting model have been impacted, including the definition of a lease.

We will adopt IFRS 16 on May 1, 2019, and have selected the modified retrospective transition approach. We have also elected to apply the optional exemptions for short-term and low-value leases. IFRS 16 is expected to increase our assets and liabilities, increase depreciation expense, increase interest, accretion and finance costs and reduce general and administrative expenses and research and development expenses. Cash payments associated with operating leases are currently presented within operating activities; under IFRS 16, the cash flows will be allocated between financing activities for the repayment of the principal liability and operating activities for the financing expense portion. The overall impact to cash flow will be unchanged. Management is still quantifying the impact of IFRS 16 adoption.

## Off-Balance Sheet Arrangements

As of January 31, 2019, we have not entered into any off-balance sheet arrangements, other than operating leases.

## Summary of Quarterly Results

The following is a summary of selected financial information derived from our unaudited condensed interim consolidated financial statements for each of the eight most recently completed quarters.

(in thousands of US dollars except as otherwise noted)	For the Three Months Ended			
	January 31, 2019	October 31, 2018	July 31, 2018	April 30, 2018
Revenue	-	-	-	-
Total comprehensive (loss)	(13,406)	(39,203)	(49,491)	(8,207)
Net (loss) per shares (\$)	(0.07)	(0.21)	(0.28)	(0.05)

(in thousands of US dollars except as otherwise noted)	For the Three Months Ended			
	January 31, 2018	October 31, 2017	July 31, 2017	April 30, 2017
Revenue	-	-	-	-
Total comprehensive (loss)	(23,872)	(10,875)	(15,356)	(11,587)
Net (loss) per shares (\$)	(0.15)	(0.10)	(0.14)	(0.11)

Items that impact the comparability of quarterly results of operations include:

- Research and development was impacted by the particular stage of the BETonMACE clinical trial during each particular quarter (most notably patient enrollment and drug product shipment and consumption).
- Research and development was also impacted by the timing of costs related to our chemistry and preclinical studies.
- Liability classified warrants issued pursuant to unit offerings with an exercise price denominated in a currency other than an entity's functional currency are remeasured to reflect the change in fair value as at the end of the reporting period, with changes in fair value recognized in the statement of comprehensive loss, resulting in volatility in quarterly income (loss).
- Royalty preferred shares are remeasured to reflect the change in fair value at the end of the reporting period, with changes in fair value recognized in the statement of comprehensive loss, resulting in volatility in quarterly income (loss).
- Interest and accretion was impacted by the amendment and repayment of our CAD\$68.8 million loan in fiscal 2018 and entering into a new US\$30.0 million loan with Third Eye in the current period.
- Share-based payments fluctuate from quarter to quarter based on the timing and fair value of stock option grants. Share-based payments are a non-cash expense.
- The recognition of foreign currency gains and losses resulting from fluctuations in Canadian denominated assets and liabilities (including our Canadian-denominated debt prior to its repayment) and Canadian / US dollar exchange rates.

## Related Party Transactions

Pursuant to a Management Services Agreement dated June 3, 2013 between us and Zenith, Zenith engaged us to perform management and administrative services pertaining to Zenith as required. Zenith pays us a fee based on the cost of our personnel and the proportionate time worked on behalf of Zenith. We are also reimbursed for general and administrative costs.

Effective January 1, 2015 we entered into a Services Agreement whereby Zenith supplies research services to us.

A description of related party transactions (specifically compensation expenses paid to key management personnel, including directors, whom are considered related parties under IFRS) can be found under "Related Party Transactions" in the MD&A for the year ended April 30, 2018. As at January 31, 2019, the transactions with related parties have not changed significantly from these descriptions.

## Outstanding Equity Instruments

As at March 12, 2019, we had authorized an unlimited number of common shares and preferred shares and 75,202,620 royalty referred shares.

	As at March 12, 2019	As at January 31, 2019	As at January 31, 2018
Common Shares	195,670,691	195,264,697	175,040,756
Warrants	31,078,689	30,875,966	19,893,434
Equity Classified Warrants	1,681,468	1,681,468	1,853,017
Stock Options	1,607,900 (1)	1,583,450	2,840,600
Restricted Stock Units	2,360,948 (2)	2,360,948	528,580
Deferred Share Units	155,001	155,001	-
<b>Total</b>	<b>232,554,697</b>	<b>231,921,530</b>	<b>200,156,387</b>
Royalty Preferred Shares	75,202,620	75,202,620	75,202,620

(1) 1,544,507 of 1,607,900 stock options are vested and exercisable

(2) 435,753 of the 2,360,948 restricted stock units are vested

Additional information relating to our securities can be found in Note 7 to the condensed interim consolidated financial statements for the three and nine months ended January 31, 2019.

## Disclosure Controls and Procedures and Internal Controls Over Financial Reporting

During the three months ended January 31, 2019, there were no changes in our internal controls over financial reporting that materially affected or are reasonably likely to materially affect the effectiveness of our internal controls over financial reporting.



---

## Outlook

### BETonMACE

Based on current estimates, the BETonMACE trial is expected to be completed within the first half of calendar 2019 with third party adjudication of all MACE events anticipated to be available within two to three months past trial completion. Within this two to three month adjudication window, we believe the trial has the potential to accumulate beyond 250 events, adding to the power of the trial. The topline results of the study will be made available shortly thereafter. As discussed under “Clinical Trial Developments” herein, the primary endpoint of the BETonMACE trial is designed to demonstrate a relative risk reduction of MACE. The study is an event-based trial and will continue until at least 250 MACE events, defined as CV death, non-fatal MI and stroke have occurred.

On June 14, 2018, we announced that we had received confirmation from the FDA that our on-going Phase 3 study, if successful, is likely to support the filing and approval of a New Drug Application.

### End-Stage Renal Disease Treated with Hemodialysis

On May 15, 2017, we announced the acceptance, by the Cardiovascular and Renal Products Division of the FDA, of our IND application to commence a Phase 2a kidney dialysis trial. The primary objective of the study will be to evaluate if treatment with apabetalone in addition to SoC decreases ALP in comparison to placebo and SoC.

### Fabry Disease

On May 30, 2017, we announced that we had received approval from the TPD to proceed with a clinical trial of apabetalone in patients with Fabry disease. Preclinical investigation of the effects of apabetalone on blood collected from Fabry disease patients is currently underway.

We have continued to explore the biology surrounding BET inhibition. Using a variety of cells, cell-based models and cell lines, as well as our archived clinical trial blood samples, we have identified numerous pathways and genes that are regulated in response to BET inhibition. From this effort we have been able to explore the biological processes underlying CVD and MACE as well as have identified several potential indications based on the data observed.

We continue to explore the preferential binding of apabetalone to the BD2 of BET family members. This BD2 selectivity differentiates apabetalone from other BET inhibitors in pre-clinical development and may aid in the discovery of follow-on compounds in indications other than high risk vascular disease.

We continue to explore additional indications. Mechanistic evidence through analysis of in vitro and clinical data suggests that BET inhibition via apabetalone suppresses pathways and reduces protein levels associated with vascular calcification (published online in January 2019), as noted under “Recent Scientific Developments” herein). We believe that apabetalone and its ability to modulate pathways involved in vascular calcification has the potential to beneficially impact renal patients. With leading experts on our Renal Clinical Advisory Board (“RCAB”) providing input and guidance, a pharmacokinetic clinical study in this therapeutic area was initiated (as outlined in the “Clinical Trial Developments” section above). The primary objective of the Phase 1 study was met, allowing us to proceed with more advanced renal impairment and dialysis trials. After having met with the FDA, we intend to file an official IND application and proceed in 2019 with the planned Phase 2a pharmacokinetic and efficacy / safety clinical trial in patients with end-stage renal disease hemodialysis.

In addition to apabetalone, we have commenced preclinical testing on other BET inhibitors in our library of compounds which demonstrate similar efficacy and potency on important markers of vascular inflammation, acute phase response, complement and coagulation. These compounds will be further analyzed and explored for their potential use in orphan disease indications.

Epidemiological and mechanistic evidence indicate a link between low ApoA-I/HDL, complement overactivation, peripheral inflammation and neurodegenerative diseases such as vascular cognitive dementia. Based on apabetalone’s ability to raise plasma ApoA-I/HDL by ApoA-I production and modulate the complement cascade and other factors important for vascular inflammation, we believe apabetalone has the potential to beneficially impact various neurodegenerative diseases. With leading experts on our neurodegenerative clinical and scientific advisory board providing input and guidance, we continue to consider conducting a clinical trial in this therapeutic area. Preclinical analyses of brain-derived cell lines and animal models of neuroinflammation are currently being pursued.

On October 24, 2017 we announced that we entered into a Right of First Refusal Agreement with Hepalink. Under the Agreement, Hepalink was granted a right of first refusal in connection with the licensing of the right to develop, manufacture, and commercialize pharmaceutical products containing RVX-208 (apabetalone) in the United States until April 15, 2019. Hepalink paid CAD\$8.0 million to us in consideration for the right of first refusal granted. If we and Hepalink enter into a license agreement with respect to the US

Licensing Rights, the Fee shall be credited against any payment obligations of Hepalink USA thereunder. Otherwise, the Fee is refundable, in whole or in part, upon termination of the Agreement.

On December 1, 2017, we closed a private placement of 60,416,667 equity units to Hepalink at a price of CAD\$1.44 per unit for gross proceeds of CAD\$87.0 million (USD\$68.5 million).

As noted above, on December 6, 2017, we repaid our loan and all related interest and fees.

In December 2017, further to a letter of intent regarding a significant equity investment in Resverlogix and/or a significant potential regional licensing arrangement announced in August 2017, we closed a CAD\$87 million equity private placement with Hepalink. We continue discussions for regional licensing opportunities with potential pharma partners, including Hepalink, with the goal of expanding the global development of apabetalone in high risk disease with a high level of unmet medical need. However, there is no assurance that these arrangements will be completed.

On May 7, 2018, we announced that we closed the previously announced US\$30.0 million senior secured loan with Third Eye.

On July 31, 2018 we announced that we intend to pursue a listing of our common shares in the United States. Accordingly, if necessary in order to comply with stock exchange minimum share price requirements and in connection with any future equity financing associated therewith, we received shareholder approval for a consolidation of our common shares at our annual and special meeting of shareholders on September 12, 2018. The Board will have the discretion to proceed with the share consolidation for a period of 12 months following the meeting. Our common shares and warrants would continue to be listed on the Toronto Stock Exchange.

## Risks and Uncertainties

An investment in the Company should be considered highly speculative due to the nature of its activities and the stage of its development. Biotechnology research and development involves a significant degree of risk. The risks and uncertainties set forth below are not the only ones we will face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business and operations and cause the price of the Common Shares to decline. If any of the following risks actually occur, our business may be harmed and our financial condition and results of operations may suffer significantly. In that event, the value of the Common Shares could decline and purchasers of the Common Shares or securities convertible into Common Shares may lose all or part of their investment. Readers should carefully consider the following risk factors in addition to the other information contained herein before investing in the Company.

### Risks Relating to Our Business

**We are a development stage company. If we do not develop commercially successful products, we may be forced to cease operations.**

We are a development stage company, which may require significant additional investment for research and development, manufacturing, clinical testing, and regulatory submissions prior to commercialization. Investors must evaluate our business in light of the uncertainties and complexities affecting a development stage biotechnology company and there can be no assurance that any such product will eventually be developed. Any product would be unsuccessful if it:

- does not demonstrate acceptable safety and efficacy in preclinical studies and clinical trials or otherwise does not meet applicable regulatory standards for approval;
- does not offer therapeutic or other improvements over existing drugs used to treat the same or similar conditions;
- is not capable of being produced in commercial quantities at an acceptable cost, or at all; or
- is not accepted by patients, the medical community or third party payors.

A commitment of substantial time and resources is required to conduct research and clinical trials if we are to complete the development of any product. We have not proven our ability to develop and commercialize products. It is not known whether any of these products will meet applicable health regulatory standards and obtain required regulatory approvals, or (i) whether such products can be produced in commercial quantities at reasonable costs and be successfully marketed, (ii) whether our products will achieve market acceptance, or (iii) if our investment in any such products will be recovered through sales or royalties. Problems frequently encountered in connection with the development and utilization of new and unproven technologies and the competitive environment in which we operate might limit our ability to develop commercially successful products.

Results of early research and development may not be indicative of the results that will be obtained in later stages of research and development. If regulatory authorities do not approve the products or if regulatory compliance is not maintained, we would have limited ability to commercialize our products, and our business and results of operations would be harmed. We may fail to develop any

products, to obtain regulatory approvals, to enter clinical trials, or to commercialize any products. If we are unable to make our product candidates commercially available, we will not generate product revenues, and we may be forced to cease operations.

**We have a history of net losses and negative cash flow. We expect to continue to incur substantial net losses for the foreseeable future, and we may never achieve or maintain positive cash flow.**

To date, we have not recorded any revenues from the sale of biopharmaceutical products, and have incurred significant negative cash flows in many periods since our inception. As at January 31, 2019, we had a deficit of US\$476.3 million. We expect to incur substantial net losses and negative cash flow for the foreseeable future. Such losses and negative cash flow have had, and will continue to have, an adverse effect on our shareholders' equity and working capital.

The process of developing and commercializing our products requires significant preclinical testing and clinical trials as well as regulatory approvals for commercialization and marketing before we could begin product sales. In addition, commercialization of our products would require us to establish a sales and marketing organization or contractual relationships to enable product manufacturing and other related activities. Because of the numerous risks and uncertainties associated with pharmaceutical product development and commercialization, we are unable to accurately predict the timing or amount of future expenses or when, or if, we will be able to achieve or maintain positive cash flow. Currently, we have no products approved for commercial sale, and to date we have not generated any product revenue. We have financed our operations primarily through the sale of equity securities and advances pursuant to credit facilities. The size of our future negative cash flow will depend, in part, on the rate of growth or contraction of our expenses and the level and rate of growth, if any, of our revenues. We expect to report net losses and negative cash flow unless and until such time as payments, if any, from corporate collaborations, product sales and/or royalty payments generate sufficient revenues to fund our continuing operations. Quarter to quarter fluctuations in revenues, expenses, net losses and cash flow are also expected. Even if we do achieve profitability, we may not be able to sustain positive cash flow on an ongoing basis.

**We will need to raise additional capital in the future to fund our operations and repay and comply with our debt. If we cannot raise additional capital, we will have to delay, reduce or cease operations.**

We will need to raise additional capital to fund our operations and to develop our products. We expect to raise additional funds through public or private equity or debt financing and/or from other sources. Our future capital requirements will be substantial and will depend on many factors, such as the following:

- the scope, rate of progress, results and costs of any clinical and preclinical programs;
- timing, costs and outcomes of regulatory proceedings;
- the cost and timing of developing sales and marketing operations or partnerships;
- payments received under any future partnerships;
- prosecution or defense of patent claims;
- the cost and timing of developing manufacturing capacity;
- costs associated with commercialization of our products; and
- competing technological and market developments, including the introduction by others of new therapies in our market.

Our cash as at January 31, 2019 will not be sufficient to fund our contractual commitments for the next year and our planned business operations over the next year and to repay the Third Eye Loan or comply with our loan covenants.

We will have to raise additional capital. If we are not able to raise sufficient capital to fund our operations, we would also have to reduce our cash requirements by eliminating or deferring spending on research, development and corporate activities, or may be forced to cease operations. These conditions result in a material uncertainty which casts significant doubt on our ability to continue as a going concern.

We will also require additional capital to fund research, development and corporate activities beyond the next year. We will continue to explore alternatives to generate additional cash including raising additional equity and product licensing; however, there is no assurance that these initiatives will be successful. We intend to raise capital from equity and/or debt offering and/or partnering in the future.

Further, changing circumstances may cause us to consume capital significantly faster or slower than we currently anticipate. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available financial resources sooner than we currently expect.

There can be no guarantee that we will be able to access capital markets in the future to fund our ongoing operations. If we cannot access capital markets in the future we may be forced to cease operations. Any financing transaction may contain unfavourable terms. If we raise additional funds by issuing equity securities, our stockholders' equity will be diluted. If we raise additional funds through

strategic partnerships, we may be required to relinquish rights to our products, or to grant licenses on terms that are not favourable to us.

**We have been advanced funds under a secured loan agreement and failure to pay all amounts when they become due could result in a loss of all of our assets.**

In May 2018, we obtained a US\$30 million senior secured term loan from Third Eye Capital Corporation, as agent for a syndicate of lenders. The loan bears interest at a rate of 10% per annum, payable monthly, and has a maturity date of May 4, 2019. The loan is secured by all of our assets and contains certain restrictive financial covenants, covenants relating to the completion of the BETonMACE clinical trial (top line data on or before January 31, 2019) and other customary covenants. Pursuant to the loan agreement with Third Eye the Company must maintain a cash balance greater than \$5 million, a current ratio greater than 1:1 (excluding warrant liability, unearned licensing rights fee and debt from current liabilities), and a market capitalization greater than CAD\$150 million, as well as other customary covenants. The Third Eye Loan is subject to mandatory prepayment provisions requiring at least 50% of the net cash proceeds of asset dispositions, licensing, distribution or partnership agreements, royalties, debt or equity issuances, grants and tax refunds to be applied to repayment of the Third Eye Loan.

There is no assurance that we will have sufficient cash available to make interest payments or to repay the principal amount of the loan when it becomes due. In addition, events beyond our control, including the results of clinical trials, regulatory restrictions, competitive conditions and changes in general economic, business and market conditions, may affect our ability to observe or satisfy financial, operational and other covenants, which could result in a default under the loan.

If an event of default under the loan occurs, the lenders could elect to declare all principal amounts outstanding under the loan at such time, together with accrued interest and applicable fees, to be immediately due and payable. If we do not have sufficient capital resources to make monthly interest payments or payments due at maturity or upon default, we may need to seek additional funding through public or private equity or debt financing, or we may be required to divert capital that would otherwise have been used for research or development activities, which could adversely affect our business, financial condition, prospects and results of operations. In addition, mandatory pre-payment provisions under the terms of the loan may restrict our ability to raise capital from other sources to satisfy our obligations under the loan or to fund operating activities. If we are unable to repay amounts owing under the loan, the lenders could proceed to foreclose or otherwise realize upon all of our assets, including our intellectual property, that is security for the indebtedness.

**Unstable market conditions may have serious adverse consequences on our business.**

Our business strategy may be adversely affected by unpredictable and unstable market conditions. If the current equity and credit markets deteriorate it may make any necessary equity or debt financing more difficult, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favourable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. There is a risk that one or more of our current or future strategic partners may encounter difficulties during challenging economic times, which would directly affect our ability to attain our operating goals on schedule and on budget.

**If our clinical trials fail to establish the safety and efficacy of our products, including apabetalone, we will not be able to commercialize our products.**

Drug discovery and development has inherent risk and the historical failure rate is high. Failures in the HDL cholesterol market by some pharmaceutical companies have highlighted the risk of these types of therapies.

On June 27, 2013, we announced topline ASSURE data and that ASSURE did not meet its primary endpoint of a -0.6% change in PAV. However, on September 3, 2013 we announced the results of subgroup analysis of 281 treated patients in ASSURE. Current findings show that the subgroup with below median HDL (<39 mg/dL) baseline population consisted of 92 patients who were taking either rosuvastatin (Crestor®) or atorvastatin (Lipitor®) together with apabetalone. Those patients taking rosuvastatin and apabetalone had a highly statistically significant PAV plaque regression of -1.43% with probability value of  $p < 0.002$  vs. baseline. This PAV regression exceeded the trial's pre-specified PAV endpoint (-0.6%) by more than two-fold. However, those patients taking atorvastatin (Lipitor®) together with apabetalone had a PAV plaque progression of +0.19% with a non-significant probability value vs. baseline.

To obtain regulatory approval to market and sell any of our products, we must satisfy the FDA, the TPD, and other regulatory authorities, through extensive clinical trials and preclinical studies, that our products are safe and efficacious. If we cannot demonstrate that our drugs, including apabetalone, are safe and effective for human use, we may need to abandon one or more of our drug development programs.

We may not have conducted or may not conduct in the future the types of testing ultimately required by regulatory authorities, or future tests may indicate that our products are not safe for use in humans. Preclinical testing and clinical trials are expensive, can take many



years and have an uncertain outcome. In addition, success in initial preclinical testing does not ensure that later preclinical testing or clinical trials will be successful. There are a number of factors that could cause a clinical trial to fail or be delayed including:

- the clinical trials may produce negative or inconclusive results, which may require us to conduct additional preclinical testing or to abandon product candidates that we believed to be promising;
- the regulators may require that we hold, suspend or terminate clinical research for noncompliance with regulatory requirements;
- we, our potential partners, the FDA, the TPD or foreign regulatory authorities could suspend or terminate a clinical trial due to adverse side effect of a drug on subjects or patients in the trial;
- we may decide, or regulators may require us, to conduct additional preclinical testing or clinical trials;
- enrollment in our clinical trials may be slower than anticipated;
- the cost of our clinical trials may be greater than anticipated;
- our product candidates may have unfavourable pharmacology, toxicology or carcinogenicity;
- our product candidates may cause undesirable side effects; and
- the supply or quality of our drugs or other materials necessary to conduct clinical trials may be insufficient, inadequate or delayed.

If any of our product candidates in clinical studies, including apabetalone, do not show sufficient efficacy in patients with the targeted indication, it could negatively impact our development and commercialization or goals for this and other product candidates and, as a result, materially adversely affect our business, financial condition and results of operations.

**We may be required to conduct additional clinical trials to address concerns that the use of our leading product, apabetalone, might increase the risk of liver injury. This may materially adversely affect our business, financial condition and results of operations.**

In our Phase 2 ASSERT clinical trial, some patients had elevations in serum enzymes which are sensitive markers of liver injury; however other clinical laboratory tests indicate there was no impairment in liver function and patients were asymptomatic for liver injury. Most of these liver signals occurred between weeks five and ten with fewer occurrences between weeks ten and thirteen. In our subsequent Phase 2b clinical trials, SUSTAIN and ASSURE, increases in ALTs were observed in a small group of patients. Those who had ALT elevations of 3X ULN all dosed through the trial which potentially illustrated adaptability to the drug. Those who had elevation greater than 5XULN, a high number of those patients had pre-existing liver condition such as hepatitis and took known agents that cause ALT elevations such as acetaminophen, clavulanic acid, diclofenac, and Augmentin. These increases were all observed within weeks 12 and 24 of the trial. Upon stopping apabetalone ALT elevations returned to ULN quickly which further illustrates a lack of hepatotoxicity. We also performed the FDA's liver analysis tool ("eDISH") which further illustrated that there were no Hy's Law (elevated ALT and total bilirubin) cases. With these learnings, we believe that the current therapeutic regimen can be safe with regard to effects on the liver. However, if further tests were to determine such risk did exist, the FDA may require us to conduct additional clinical trials to address these concerns prior to receiving FDA or foreign regulatory approval for apabetalone. These clinical trials would be expensive and could delay any commercialization of apabetalone. Adverse results in these trials could delay or prevent commercialization of apabetalone or could jeopardize existing development in other indications.

**If our testing assumptions are incorrect our products may not be approved for marketing.**

The design of our clinical trials is based on many assumptions about the expected effect of our product candidates. If those assumptions prove incorrect, the clinical trials may not produce statistically significant results. We cannot assure you that the design of, or data collected from, the clinical trials of our product candidates will be sufficient to support the FDA and foreign regulatory approvals.

**We are dependent on third parties to conduct our clinical trials and to provide services for certain important aspects of our business. If these third parties do not perform as contractually required or expected, we may not be able to obtain regulatory approval for our products, or we may be delayed in doing so.**

We rely on third parties, such as contract research organizations, medical institutions, academic institutions, independent clinical investigators and contract laboratories, to conduct our clinical trials and preclinical studies, and we expect to continue to do so in the future. We rely heavily on these parties for successful execution of our clinical trials, but do not control many aspects of their activities. As a result, many important aspects of our product development are outside our direct control. We are responsible for confirming that our preclinical studies are conducted in accordance with applicable regulations and that each of our clinical trials is conducted in accordance with its general investigational plan and protocol. The FDA requires us to comply with regulations and standards, commonly referred to as good laboratory practices, or GLP, for conducting and recording the results of our preclinical studies and good clinical practices for conducting, monitoring, recording and reporting the results of clinical trials, to assure that data and reported results are

accurate and that the clinical trial participants are adequately protected. Our reliance on third parties does not relieve us of these responsibilities. If the third parties conducting our clinical trials do not perform their contractual duties or obligations, do not meet expected recruitment or other deadlines, fail to comply with the FDA's good clinical practice regulations, do not adhere to our clinical trial protocols or otherwise fail to generate reliable clinical data, development, approval and commercialization of our products, including RVX-208, may be extended, delayed or terminated or may need to be repeated, and we may not be able to obtain regulatory approval.

We do not currently own or operate manufacturing facilities for clinical or commercial production of the active pharmaceutical ingredient, or API, used in apabetalone. As a result, we rely on third parties to supply the API. We expect to continue to depend on third parties to supply the API for our lead product candidate and any additional product candidates we develop in the foreseeable future. An API manufacturer must meet high precision and quality standards for that API to meet regulatory specifications and comply with regulatory requirements. A contract manufacturer's failure to comply with applicable regulations and requirements could result in refusal to approve or a delay in approval of apabetalone or other product candidates. We are ultimately responsible for confirming that the APIs used in our product candidates are manufactured in accordance with applicable regulations. Furthermore, if our third party drug suppliers fail to achieve and maintain high manufacturing standards in compliance with applicable regulations, we could be subject to certain product liability claims in the event such failure to comply resulted in defective products that caused injury or harm.

**We rely on partnerships and strategic relationships for our success. The failure to successfully collaborate with third parties may delay, prevent or otherwise impair the development or commercialization of our products or revenue expectations.**

As a result of the costs associated with commercializing a product candidate, we seek strategic partnerships with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing and commercialization of our products, and we intend to attract corporate partners and enter into additional research collaborations. Our goal is to partner apabetalone so that it may be developed for clinical conditions. There can be no assurance, however, that such collaborations will be established, that such collaborations will be established on favourable terms, if at all, or that future collaborations will be successful. In particular, failures in HDL cholesterol therapies may negatively impact our potential partners' willingness to enter into partnering agreements due to the potential risks in the cholesterol market and the high clinical costs to bring such drugs to market. Failure to attract commercial partners for our products may result in our incurring substantial clinical testing, manufacturing and commercialization costs prior to realizing any revenue from product sales or result in delays or program discontinuance if funds are not available in sufficient quantities, and this may materially adversely affect our business, financial condition and results of operations.

Should a collaborative partner fail to develop, manufacture, or commercialize successfully any product to which it has rights, or any partner's product to which we have rights, the business may be adversely affected. Failure of a collaborative partner to continue to participate in any particular program could delay or halt the development or commercialization of products generated from such program. In addition, there can be no assurance that the collaborative partners will not pursue other technologies or develop alternative products either alone or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by our programs.

Furthermore, we may hold licenses for certain technologies and there can be no assurance that these licenses will not be terminated, or that they will be renewed on conditions acceptable to us. We may negotiate additional licenses in respect of technologies developed by other companies and academic institutions. Terms of license agreements to be negotiated may include, inter alia, a requirement to make milestone payments, which may be substantial. We may also be obligated to make royalty payments on the sales, if any, of products resulting from licensed technology and, in some instances, are responsible for the costs of filing and prosecuting patent applications.

We face significant competition in seeking appropriate strategic partners, and these strategic partnerships can be intricate and time consuming to negotiate and document. We may not be able to negotiate additional strategic partnerships on acceptable terms, or at all. We are unable to predict when or if we will enter into any additional strategic partnerships because of the numerous risks and uncertainties associated with establishing strategic partnerships. If we are unable to negotiate additional strategic partnerships for our products, we may be forced to delay or terminate development or commercialization of one or more of our products. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us.

**If we enter into partnerships or other strategic relationships, we may lose important rights to and control over the development of our products.**

As a result of the costs and risks associated with commercializing a product candidate, we will seek strategic partnerships in order to continue to develop and, if approved, market our products. Such strategic partnerships may require us to relinquish control over the timing and manner of clinical trials and commercialization of our product candidates. Strategic partners may experience financial difficulties or choose to terminate the arrangement or independently work on a competing product resulting in the delay or

discontinuation of development or commercialization of our product candidates. Furthermore, disputes may arise between us and our strategic partners that result in the delay or termination of the research, development or commercialization of our product candidates or that result in costly litigation or arbitration that diverts management's attention and consumes resources. Strategic partners may not properly maintain or defend our intellectual property rights or may use our proprietary information in a manner that could jeopardize or invalidate our proprietary information or expose us to potential litigation.

**We may not receive the full payment of all milestone or royalty payments pursuant to partnerships or strategic relationships.**

We may enter into license agreements and other forms of agreements with third parties regarding the development and commercialization of our product candidates. These agreements generally require that the third party pays to us certain amounts upon the attainment of various milestones and possibly include royalties on the sale of the developed product. There can be no guarantee that we will receive the payments described in those agreements since the development of the products may be cancelled if clinical trials do not yield positive results. Under such circumstances, we would not receive royalties as well. Even if the development of a product yields positive results, all of the risks described herein with respect to the obtaining of regulatory approval and market acceptance of the product are applicable. Finally, if there occurs a disagreement between us and the third party, the payment relating to the attainment of milestones or of royalties may be delayed. The occurrence of any of these circumstances could have a material adverse effect on our financial condition and operating results.

**If our products fail to achieve market acceptance for any reason, such failure may materially adversely affect our business, financial condition and results of operations.**

There can be no assurance that any of our product candidates, if approved for marketing, will achieve market acceptance. If our product candidates, once approved, do not receive market acceptance for any reason, it will adversely affect our business, financial condition and results of operations. The degree of market acceptance of any products we develop will depend on a number of factors, including:

- the clinical efficacy and safety of our product candidates;
- our product candidates' potential advantages over existing and future treatment methods;
- the price of our products; and
- reimbursement policies of government and third-party payers, including hospitals and insurance companies.

If after we obtain regulatory approval to sell our products, physicians, and healthcare payors fail to adopt our products or conclude that our products are not safe and effective, physicians could choose not to use them to treat patients. Our competitors may also develop new technologies or products which are more effective or less costly, or that seem more cost-effective than our products.

In addition, regulations affecting the pricing of pharmaceutical products may change in ways adverse to us. While we cannot predict the likelihood of any regulatory proposals, if a government agency were to adopt proposals limiting market or third-party payor pricing for pharmaceutical products, it could materially adversely affect our business, financial condition and results of operations.

**We cannot be certain that we will ever obtain regulatory approvals in European countries, the United States, Canada, China, or any other jurisdictions. The failure to obtain such approvals may materially adversely affect our business, financial condition and results of operations.**

Biotechnology, medical device and pharmaceutical companies operate in a high-risk regulatory environment. The study, manufacture and sale of products are governed by countries' numerous statutes and regulations. We are required to obtain various regulatory approvals prior to being able to study, commercialize and distribute our product candidates. The regulatory review and approval process required to perform a clinical study in any country includes evaluation of preclinical studies and clinical studies, as well as the evaluation of our manufacturing process. This process is complex, lengthy, expensive, resource intensive and uncertain. Securing regulatory approval to market our products also requires the submission of extensive preclinical and clinical data, manufacturing information regarding the process and facility, scientific data characterizing our product and other supporting data to the regulatory authorities in order to establish its safety and effectiveness. We, or our collaborators, may fail to obtain the necessary approvals to commence or continue preclinical or clinical testing of our product candidates, including apabetalone, or to manufacture or market our products in reasonable time frames, if at all.

Governmental authorities in any country may enact regulatory reforms or restrictions on the development of new therapies that could adversely affect our ability to develop our products. Many of the products and processes that are being currently developed by us require significant development, testing and the investment of significant funds prior to their commercialization. There can be no assurance that apabetalone or any other drugs we attempt to develop will actually be developed to a commercial level. Completing clinical testing through late stage trials and obtaining required approvals is expected to take several years and to require the expenditure of substantial resources. There can be no assurance that clinical trials will be completed successfully within any specified

period of time, if at all. Furthermore, clinical trials may be delayed or suspended at any time by us or by the FDA, the TPD or foreign regulatory authorities if it is determined that the subjects or patients are being exposed to unacceptable risks. We may encounter delays or rejections based on varying regulatory interpretations or changes in regulatory agency policies, during the period in which we develop a product.

No assurance can be given that apabetalone or any other product candidate will prove to be safe and effective in clinical trials or that we will receive the requisite regulatory approval. Moreover, any regulatory approval of a drug which is eventually obtained may be granted with specific limitations on the indicated uses for which that drug may be marketed or may be withdrawn if complications occur following initial marketing or if compliance with regulatory standards is not maintained. We have limited experience in filing and pursuing applications necessary to gain these regulatory approvals.

The approval procedures vary among countries and can involve additional product testing and administrative review periods. The time required to obtain approval in various countries vary from one another. Approval in one country does not ensure approval by the regulatory authorities of other countries. The failure to obtain such approvals may materially adversely affect our business, financial condition and results of operations.

**Regulatory authorities may not approve our products even if they meet safety and efficacy endpoints in clinical trials.**

The FDA, the TPD and other foreign regulatory agencies can delay, limit or deny marketing approval for many reasons, including finding a product may not be considered safe and effective; the manufacturing processes or facilities may not meet applicable requirements; or changes in approval policies or regulations. Our product candidates may not be approved even if they achieve their endpoints in clinical trials. Regulatory agencies, including the FDA, or their advisors may disagree with our trial design and our interpretations of data from preclinical studies and clinical trials. Regulatory agencies may change requirements for approval even after a clinical trial design has been approved. Regulatory agencies also may approve a product candidate for fewer or more limited indications than requested or may grant approval subject to the performance of post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates.

**Our products will remain subject to ongoing regulatory review even if they receive marketing approval. If we fail to comply with continuing regulations, we could lose these approvals, and the sale of any future products could be suspended.**

In the event we receive regulatory approval to market a particular product candidate, United States, Canadian or other foreign regulatory authority could condition approval on conducting additional costly post-approval studies or could limit the scope of approved uses. In addition, the product may later cause adverse effects that limit or prevent its widespread use, force us to withdraw it from the market or prevent or delay our ability to obtain regulatory approvals in additional countries. In addition, we will continue to be subject to regulatory review and periodic inspections to ensure adherence to applicable regulations. After receiving marketing approval, the FDA imposes extensive regulatory requirements on the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion and record keeping related to the product. Failure to comply with the regulatory requirements could result in:

- civil or criminal penalties or fines;
- injunctions;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- suspension or withdrawal of regulatory approvals; and
- refusal to approve pending applications for marketing approval of new drugs or supplements to approved applications.

**We may be subject to product liability claims if our products harm people, and we do not have product liability insurance.**

The manufacture and sale of pharmaceutical products involve an inherent risk of product liability claims and associated adverse publicity. We have entered into human clinical trials that involve inherent risks in the testing of unproven products. We currently have only clinical trial liability insurance for our products; we do not have product liability insurance. We do not know if we will be able to maintain existing or obtain additional clinical trial liability insurance or obtain product liability insurance on acceptable terms or with adequate coverage against potential liabilities. This type of insurance is expensive and may not be available on acceptable terms. If we are unable to obtain or maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential clinical trial and product liability claims, we may be unable to commercialize our products. A successful clinical trial liability or product liability claim brought against us in excess of our insurance coverage, if any, may require us to pay substantial amounts. This could have a material adverse effect on our business, financial condition and results of operations.

**The pharmaceutical industry is extremely competitive. If our competitors develop and market products that are more effective, safer or less costly than any future products that we may develop, our commercial opportunity will be reduced or eliminated.**

The technological competition we face from new and established pharmaceutical companies, biopharmaceutical companies and universities is intense and is expected to increase, in particular in the market for therapeutic products to treat, mitigate or prevent cardiovascular disease. Competitors may develop products more quickly and obtain regulatory approval for such products more rapidly, or develop products which are more effective than those which we intend to develop. Our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects or are less expensive than any future products that we may develop and commercialize. In addition, significant delays in the development of our product candidates could allow our competitors to bring products to market before us and impair our ability to commercialize our product candidates. Research and development by others may render our technology or products obsolete or noncompetitive or produce treatments or cures superior to any therapy developed or to be developed by us.

We anticipate that, if approved for the reduction of MACE in cardiovascular / atherosclerotic disease, RVX-208 would be positioned to be used in conjunction with leading standard of care statin treatments such as Lipitor and Crestor to further reduce major adverse cardiac events such as myocardial infarction, stroke and death and potentially compete with other therapeutic programs in development, such as, the LDL reduction programs (PCSK9), peptide programs, ApoA-I infusion treatments, delipitated HDL programs and cholesteryl transfer protein ("CETP") inhibitors.

We anticipate that, if apabetalone is approved for reduction of CVD risk and MACE and it improves other biomarkers such as eGFR, Albumin and ALP, apabetalone would potentially compete with, or be added to, novel and existing CKD products in clinical development.

We anticipate that, if approved for neurodegenerative disorders, apabetalone would potentially be used in conjunction with standard of care therapies such as Aricept to improve therapeutic outcomes and/or compete with other agents and novel approaches to this disease such as small molecules, Namenda and PBT2, and monoclonal antibody technologies ("MOABs") such as Bapineuzumab.

We anticipate that, if approved for reduction of CVD risk and MACE in diabetes mellitus patients, apabetalone would potentially be a complimentary agent added to standard of care diabetes mellitus agents in clinical development.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Established pharmaceutical companies may invest heavily to discover quickly and develop novel compounds or drug delivery technology that could make our product candidates obsolete. Smaller or early stage companies may also prove to be significant competitors, particularly through strategic partnerships with large and established companies. In addition, these third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or discovering, developing and commercializing products before we do. If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition will suffer.

**We are dependent upon retaining and attracting key personnel and others, the loss of which could materially adversely affect our business, financial condition and results of operations.**

We depend on certain members of our management and scientific staff, the loss of whose services might significantly delay or prevent the achievement of research, development or business objectives and would materially adversely affect our business, financial condition and results of operations. We do not have employment agreements with any of our senior management that would prevent them from leaving us. In addition, our success depends, in large part, on our ability to improve our management systems and attract and retain qualified management, scientific and medical personnel, and on our ability to develop and maintain important relationships with commercial partners, leading research institutions and key distributors. We face intense competition for such personnel and relationships. We cannot assure that we will attract and retain such persons or maintain such relationships. In addition, failure to succeed in clinical trials may make it more challenging for us to recruit and retain qualified scientific personnel.

**We may not be able to attract, train and retain a sufficient number of qualified employees to maintain and grow our business.**

We expect that our potential expansion into areas and activities requiring additional expertise, such as further clinical trials, governmental approvals, manufacturing, sales, marketing and distribution will place additional requirements on our management, operational and financial resources. We expect these demands will require an increase in management and scientific personnel and the development of additional expertise by existing management personnel. There is currently aggressive competition for employees who have experience in technology and engineering. The failure to attract and retain such personnel or to develop such expertise could materially adversely affect our business, financial condition and results of operations.



**Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information. Disclosure of this information may materially adversely affect our business, financial condition and results of operations.**

We rely on trade secrets, which we seek to protect, in part, through confidentiality and non-disclosure agreements with our employees, collaborators, suppliers, and other parties. There can be no assurance that these agreements will not be breached, that we would have adequate remedies for any such breach or that our trade secrets will not otherwise become known to or independently developed by our competitors. We might be involved from time to time in litigation to determine the enforceability, scope and validity of our proprietary rights. Any such litigation could result in substantial cost and divert management's attention from our operations.

**We may need to implement additional finance and accounting systems, procedures and controls in the future as we grow and to satisfy new reporting requirements.**

As we grow we may access capital markets more broadly which could require us to implement additional finance and accounting systems along with enhanced internal control systems. This will result in increased costs to us as we continue to undertake efforts to comply with best practices and applicable rules and requirements applicable to public companies. These rules may make it more difficult and costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage as compared to the policies previously available to public companies. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers. In addition, we may need to hire additional legal and accounting staff with appropriate experience and technical knowledge, and we cannot assure that if additional staffing is necessary that we will be able to do so in a timely fashion.

**Our products may not be eligible for reimbursement from government or private third-party payors, or may be eligible for reimbursement at lower prices than we currently anticipate, which could materially adversely affect our business, financial condition and results of operations.**

Our ability to successfully market therapeutic products depends in part on the extent to which reimbursement for the cost of such products and related treatments will be available from government health administration authorities, private health insurers and other healthcare organizations. Significant uncertainty exists as to whether newly-approved pharmaceutical products will qualify for reimbursement from these organizations. Furthermore, challenges to the price of medical products continue to grow in frequency due to increased focus on cost containment and pharmacoeconomic issues. These recent changes will become more pronounced as leading therapeutics in the atherosclerosis market such as statins continue to come off patent. Health authorities will continue to increase their scrutiny and pharmacoeconomic diligence on new products in all disease areas including those for the cardiovascular market. These rapid changes in the healthcare reimbursement marketplace will potentially have a significant impact on the future marketability of new drugs in development and could materially adversely affect our business, financial condition and results of operations. It is expected that new drug entrants will not only have to be effective and safe but also have to provide a clear value proposal to health systems, such as risk reduction in MACE, over the current standard of care therapy, statin therapy.

In light of these market changes in drug development, pricing of drug therapies has come under significant pressure with government authorities and private health insurers around the world. The top current leading reimbursed markets; USA, Japan, Germany, UK, France, Spain, Italy, and Canada have implemented healthcare reforms that focus specifically on value and reimbursement. Reforms such as reference based pricing, pharmacoeconomics, and numbers needed to treat are a few of the many instruments that healthcare organizations utilize to ensure maximum value for reimbursed therapeutics. Healthcare reform is underway in these top global markets and there is additional uncertainty about the viability of current pricing methodologies for reimbursement. There can be no assurance that adequate third-party coverage will be available to establish price levels which would allow us to realize an acceptable return on our investment in product development. If we cannot realize an acceptable return on our investment in product development we may need to delay or cease our product development.

**It may be difficult or impossible for U.S. investors to enforce judgments against us, our directors or our officers in Canada.**

We were formed under the laws of the Province of Alberta. Some of the members of our board of directors and our officers are residents of countries other than the United States. As a result, it may be impossible for U.S. investors to affect service of process within the United States upon us or these persons or to enforce against us or these persons any judgments in civil and commercial matters, including judgments under U.S. federal or state securities laws. In addition, a Canadian court may not permit U.S. investors to bring an original action in Canada or to enforce in Canada a judgment of a state or federal court in the United States.

## Risks Relating to our Intellectual Property

**We may not accurately predict the protection afforded by our patents and proprietary technology and if our predictions are wrong, this may materially adversely affect our business, financial condition and results of operations.**

Our success will depend in part on our ability to obtain, maintain, and enforce patent rights, maintain trade secret protection and operate without infringing the proprietary rights of third parties, both domestically and internationally.

Our patent positions are highly uncertain, and any future patents we receive for our potential products will be subject to this uncertainty, which may adversely affect our business, financial condition and results of operations. There can be no assurance that pending patent applications will be allowed and that we will develop additional proprietary products that are patentable, that issued patents will provide any competitive advantage or will not be challenged by any third parties, or that patents of others will not have an adverse effect on the ability to do business. Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the products, or design around the products patented by us. In addition, we may be required to obtain licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to us. If such licenses are not obtained we could encounter delays in introducing one or more of our products to the market, while we attempt to design around such patents, or could find that the development, manufacturing or sale of products requiring such licenses could be foreclosed. In addition, we could incur substantial costs in defending suits brought against us on such patents or in suits in which we attempt to enforce our own patents against other parties. Such disputes could involve arbitration, litigation or proceedings declared by the U.S. Patent and Trademark Office or International Trade Commission or other foreign patent authorities. Intellectual property litigation can be extremely expensive, and this expense, as well as other consequences should we not prevail, could seriously harm our business. With respect to any infringement claim asserted by a third party, we can give no assurances that we will be successful in the litigation or that such litigation would not have a material adverse effect on our business, financial condition and results of operation.

Until such time, if ever, that patent applications are filed and/or approved, our ability to maintain the confidentiality of the described technology may be crucial to our ultimate possible commercial success. While procedures have been adopted to protect the confidentiality of our technology through signed invention and service agreements, no assurance can be given that such arrangements will be effective, that third parties will not gain access to trade secrets or disclose the technology, or that we can meaningfully protect our rights to our trade secrets.

**Even if valid and enforceable patents cover our products and technologies, such patents will provide protection only for a limited amount of time.**

Even if patents are issued regarding our product candidates or methods of using them, those patents can be challenged by our competitors who can argue that our patents are invalid and/or unenforceable. Third parties may challenge our rights to, or the scope or validity of, our patents. Patents also may not protect our products if competitors devise ways of making these or similar product candidates without legally infringing our patents. The Federal Food, Drug and Cosmetic Act and the FDA regulations and policies provide incentives to manufacturers to challenge patent validity or create modified, non-infringing versions of a drug or device in order to facilitate the approval of generic substitutes. These same types of incentives encourage manufacturers to submit new drug applications that rely on literature and clinical data not prepared for or by the drug sponsor.

We also rely on trade secrets to protect our technology, especially where we do not believe that patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. The employees, consultants, contractors, outside scientific collaborators and other advisors of our company and our strategic partners may unintentionally or willfully disclose our confidential information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming and the outcome is unpredictable. Failure to protect or maintain trade secret protection could adversely affect our competitive business position.

Our research and development collaborators may have rights to publish data and other information in which we have rights. In addition, we sometimes engage individuals or entities to conduct research that may be relevant to our business. The ability of these individuals or entities to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. These contractual provisions may be insufficient or inadequate to protect our trade secrets and may impair our patent rights. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our technology and other confidential information, then our ability to receive patent protection or protect our proprietary information may be jeopardized.

**Litigation or other proceedings or third party claims of intellectual property infringement could require us to spend time and money and could shut down some of our operations.**

Our commercial success depends in part on not infringing patents and proprietary rights of third parties. Others have filed, and in the future are likely to file, patent applications covering products that are similar to our product candidates, as well as methods of making or using similar or identical products. If these patent applications result in issued patents and we wish to use the claimed technology, we would need to obtain a license from the third party. We may not be able to obtain these licenses at a reasonable cost, if at all.

In addition, administrative proceedings, such as interferences and reexaminations before the U.S. Patent and Trademark Office, could limit the scope of our patent rights. We may incur substantial costs and diversion of management and technical personnel as a result of our involvement in such proceedings. In particular, our patents and patent applications may be subject to interferences in which the priority of invention may be awarded to a third party. We do not know whether our patents and patent applications would be entitled to priority over patents or patent applications held by such a third party. Our issued patents may also be subject to reexamination proceedings. We do not know whether our patents would survive reexamination in light of new questions of patentability that may be raised following their issuance.

**We may be subject to claims for intellectual property infringement from former employers of our key employees, which could result in loss of intellectual property, our key employees or both.**

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including competitors or potential competitors. We could be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. In many cases, litigation may be necessary to defend against these claims.

Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. If we fail in defending such claims, in addition to paying money claims, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent the ability to commercialize certain product candidates, which could severely harm our business, financial condition and results of operations.

### **Risks Relating to Owning our Common Shares**

**Our share price has been and may continue to be extremely volatile. It may be difficult to resell our common shares.**

The market price of our common shares has fluctuated substantially in the past, including subsequent to our June 27, 2013 announcement concerning our Phase 2b ASSURE clinical trial, and could fluctuate substantially in the future. During the twelve months preceding January 31, 2019, the closing market price of our common shares ranged from CAD\$1.12 to CAD\$3.90 per share. In addition, the trading prices of life science and biotechnology company stocks in general have experienced extreme price fluctuations in recent years. The valuations of many life science companies without consistent product revenues and earnings are high based on conventional valuation standards, such as price-to-revenue ratios. These trading prices and valuations may not be sustained. Any negative change in the public's perception of the prospects of life science or biotechnology companies could depress our stock price regardless of our results of operations. In addition our stock may fluctuate based on a variety of factors, including actual or anticipated regulatory approvals or disapprovals of our products or competing products, actual or anticipated results and timing of our clinical trials, changes in the expected or actual timing of our development programs, changes in our operating results, conditions or trends in the life science and biotechnology industries, announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments, additions or departures of key personnel, sales and distributions of our common shares by us or our shareholders, changes in general conditions in the economy or other developments affecting us, our clients, or our competitors, some of which may be unrelated to our performance.

Among other things, volatility in our share price could mean that investors will not be able to sell their shares at or above prices at which they were acquired. The volatility also could impair our ability in the future to offer common stock as a source of additional capital. In addition, in the past, stockholders have often instituted securities class action litigation after periods of volatility in the market price of a company's securities. If a stockholder files a securities class action suit against us, we would incur substantial legal fees, and our management's attention and resources would be diverted from operating our business in order to respond to the litigation.

**If we sell common shares in the future, existing common shareholders will experience immediate dilution and our stock price may decrease.**

We will need to raise additional capital to fund our operations and to develop our products. We will likely raise such additional capital through the sale of our common shares and/or warrants from time to time. Any such financing transaction will result in our existing common shareholders experiencing immediate dilution.

**If our estimates regarding timing of milestones are incorrect our share price may decrease.**

For planning purposes, we estimate and may disclose timing of a variety of clinical, regulatory and other milestones. We base our estimates on present facts and a variety of assumptions. Many underlying assumptions are outside our control such as the ability to recruit patients, obtain access to clinical sites as expected or obtain approval from regulatory bodies such as the FDA to enter into trials. If we do not achieve milestones consistent with investors' expectations, the price of our shares would likely decline.

**We do not currently intend to pay dividends on our common shares and, consequently, investors' ability to achieve a return on investment will depend on appreciation in the price of our common shares.**

We have not to date paid any dividends on our Common Shares. We currently intend to invest our future earnings, if any, to fund the development and growth of our business. The payment of dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, future prospects, contractual arrangements, restrictions imposed by applicable law, any limitations on payments of dividends present in any debt agreements we may enter into, the dividends that we may be required to be pay to holders of the royalty preferred shares in accordance with the terms of such securities and other factors our board of directors may deem relevant. If we do not pay dividends, your ability to achieve a return on your investment in the Company will depend on any future appreciation in the market price of our common shares. There is no guarantee that our Common Shares will appreciate in value or even maintain the price at which our holders have purchased their Common Shares.

### **Additional Information**

Additional information relating to Resverlogix, including our Annual Information Form, can also be found on SEDAR at [www.sedar.com](http://www.sedar.com).