

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This management discussion and analysis ("MD&A") of Correvio Pharma Corp. ("Correvio", "we", "us" or "our") for the three and six months ended June 30, 2019 is as of August 13, 2019. We have prepared this MD&A with reference to National Instrument 51-102 "Continuous Disclosure Obligations" of the Canadian Securities Administrators. As a foreign private issuer that files its continuous reports under the U.S./Canada Multijurisdictional Disclosure System, Correvio is permitted to prepare this MD&A in accordance with the disclosure requirements of Canada, which are different from those of the United States. This MD&A should be read in conjunction with our unaudited interim consolidated financial statements for the three and six months ended June 30, 2019 and the related notes thereto. Our interim consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP"). All amounts are expressed in U.S. dollars unless otherwise indicated.*

*This MD&A contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act and applicable Canadian securities laws regarding expectations of our future performance, liquidity and capital resources, as well as marketing plans, future revenues from sales of branded products Aggrastat<sup>®</sup>, Brinavess<sup>®</sup>, Trevyent<sup>®</sup>, Xydalba<sup>™</sup> and Zevtera<sup>®</sup>/Mabelio<sup>®</sup>, whether we will receive, and the timing and costs of obtaining regulatory approvals in the United States, Europe and other countries, the clinical development of our product candidates, including clinical trials for Brinavess<sup>®</sup> in China and publication of results from our observational study in the European Union, the NDA resubmission for Brinavess<sup>®</sup>, the anticipated milestone payments to Basilea Pharmaceutica International Ltd., the submission of regulatory filings for Trevyent<sup>®</sup>, the anticipated use of financial resources and net proceeds from financings, the availability of future proceeds under the CRG Term Loan (as defined herein), the recognition of additional operating liabilities and other non-historical statements, which are based on our current expectations and beliefs, including certain factors and assumptions, as described in our most recent Annual Information Form that is included in our Annual Report on Form 40-F, but are also subject to numerous risks and uncertainties, as described in the "Risk Factors" section of our Annual Information Form that is included on our Annual Report on Form 40-F. As a result of these risks and uncertainties, or other unknown risks and uncertainties, our actual results may differ materially from those contained in any forward-looking statements. The words "believe", "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We undertake no obligation to update forward-looking statements, except as required by law. Additional information relating to Correvio, including our most recent Annual Report on Form 40-F filed with the United States Securities Exchange Commission (the "SEC"), and our most recent Annual Information Form, is available by accessing the SEC's Electronic Document Gathering and Retrieval System ("EDGAR") website at [www.sec.gov](http://www.sec.gov) or the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR") website at [www.sedar.com](http://www.sedar.com).*

## EXPLANATORY NOTE

Correvio was incorporated on March 7, 2018, under the laws of the Canada Business Corporations Act, in connection with a reorganization of Cardiome Pharma Corp. ("Cardiome") by way of a plan of arrangement (the "Arrangement"). On March 19, 2018, Correvio entered into a definitive arrangement agreement (the "Arrangement Agreement") with Cipher Pharmaceuticals Inc. ("Cipher") and Cardiome. Under the terms of the agreement, Cipher acquired Cardiome's Canadian business portfolio in exchange for cash consideration of C\$25.5 million. As a result of the Arrangement, Correvio acquired, and currently holds, all of Cardiome's pre-transaction assets and assumed liabilities, excluding the Canadian business portfolio. Pursuant to the Arrangement, Cardiome shareholders received common shares, on a one-for-one ratio, of Correvio. Correvio obtained a substitution listing on the Nasdaq Stock Market and on the Toronto Stock Exchange and has succeeded to Cardiome's reporting obligations in Canada and the United States.

## OVERVIEW

Correvio is a specialty pharmaceutical company dedicated to offering patients and healthcare providers innovative therapeutic options that effectively, safely, and conveniently manage acute medical conditions to improve health and quality of life. Correvio (formerly known as Cardiome Pharma Corp.) began as a research and development company based in Vancouver, British Columbia, Canada. In November 2013, we acquired Correvio LLC, a privately held pharmaceutical company headquartered in Geneva,

Switzerland, and its subsidiaries, thereby acquiring the marketing rights to Aggrastat® outside of the United States. We then shifted our focus to become a specialty pharmaceutical company. We strive to find innovative, differentiated medicines that provide therapeutic and economic value to patients, physicians and healthcare systems. We currently have two marketed, in-hospital cardiology products, Aggrastat® (tirofiban hydrochloride) and Brinavess® (vernakalant IV). In addition, we have licensed the marketing rights to the following products: a pre-registration drug/device combination product, Trevyent® (treprostinil sodium); a European-approved antibiotic, Xydalba™ (dalbavancin); and a cephalosporin antibiotic, Zevtera®/Mabelio® (ceftobiprole medocaril sodium).

Aggrastat® is a reversible GP IIb/IIIa inhibitor (an intravenous anti-platelet drug) for use in patients with Acute Coronary Syndrome. Aggrastat® is commercially available in markets outside of the United States and is currently registered and approved in more than 60 countries worldwide.

Brinavess® is a novel, relatively atrial-selective antiarrhythmic agent, which was approved in the European Union in September 2010 and is currently registered and approved in over 40 countries (not including the United States) for the rapid conversion of recent onset atrial fibrillation (“AF”) to sinus rhythm in adults, for non-surgery patients with AF of seven days or less and for use in post-cardiac surgery patients with AF of three days or less. Brinavess® is mentioned as a first-line therapy in the European Society of Cardiology AF guidelines for the cardioversion of recent onset AF in patients with no, or minimal/moderate, structural heart disease.

Both Aggrastat® and Brinavess® are commercially available outside of the United States, through our own direct sales force within Europe as well as through our global distributor and partner network in the Middle East, Latin America, Asia and Africa. We have a comprehensive global distributor and partner network that allows our products to be commercialized in many countries worldwide.

Trevyent® is a development stage drug/device combination product that combines SteadyMed Ltd’s (“SteadyMed”) PatchPump™ technology, a drug delivery device, with treprostinil, a vasodilatory prostacyclin analogue to treat pulmonary arterial hypertension (“PAH”). PatchPump™ is a proprietary, disposable, parenteral drug administration platform that is prefilled and preprogrammed at the site of manufacture. SteadyMed was acquired by United Therapeutics Corporation on August 30, 2018. United Therapeutics Corporation controls the marketing, registration and regulatory approvals of Trevyent® in the United States.

Xydalba™ was approved by the European Medicines Agency (the “EMA”) in February 2015 as a treatment for Acute Bacterial Skin and Skin Structure Infections (“ABSSSI”) in adults. Dalbavancin is commercialized under the trade name Xydalba™ in certain countries outside the United States and Dalvance® in the United States. We have launched Xydalba™ commercially in Germany, the United Kingdom, France, Ireland, Finland, Luxembourg, Spain and Sweden, and we expect to commercialize it in Belgium, the Netherlands, and Switzerland.

Zevtera®/Mabelio® is a cephalosporin antibiotic for intravenous administration with rapid bactericidal activity against a wide range of Gram-positive and Gram-negative bacteria, including methicillin-susceptible and resistant Staphylococcus aureus (MSSA, MRSA) and susceptible Pseudomonas spp. Zevtera®/Mabelio® is currently approved for sale in 13 European countries and several non-European countries for the treatment of adult patients with community-acquired pneumonia (CAP) and hospital-acquired pneumonia (HAP), excluding ventilator-associated pneumonia (VAP). Zevtera®/Mabelio® is currently marketed in Germany, Italy, the United Kingdom, France, Austria, Spain and Switzerland.

In May 2015, we entered a commercialization agreement with AOP Orphan Pharma (“AOP”) to sell AOP’s cardiovascular products, Esmocard® and Esmocard Lyo® in Italy and France. Esmocard® and Esmocard

Lyo® are currently being transferred back to its licensor, Amomed Pharma GmbH, and will no longer form part of the products for which we hold licensed marketing rights once the transfer is complete.

### **Aggrastat®**

Aggrastat® contains tirofiban hydrochloride, which is a reversible GP IIb/IIIa inhibitor. Aggrastat® is indicated for the prevention of early myocardial infarction in adult patients presenting with acute coronary syndromes without ST elevation (“NSTEMI-ACS”) with the last episode of chest pain occurring within 12 hours and with electrocardiogram changes and/or elevated cardiac enzymes. Patients most likely to benefit from Aggrastat® treatment are those at high risk of developing myocardial infarction within the first three to four days after onset of acute angina symptoms including, for instance, those that are likely to undergo an early percutaneous coronary intervention (“PCI”). Aggrastat® is also indicated for the reduction of major cardiovascular events in patients with acute myocardial infarction (“STEMI”) intended for primary PCI. Aggrastat® is intended for use with acetylsalicylic acid (“ASA”) and unfractionated heparin. It works by preventing platelets, cells found in the blood, from forming into blood clots within the coronary arteries and obstructing blood flow to the heart muscle which can result in a heart attack. The medicine may also be used in patients whose heart vessels are dilated with a balloon (percutaneous coronary intervention), a procedure used to open up blocked or obstructed arteries in the heart in order to improve the blood flow to the heart muscle (myocardium) with or without the placement of a coronary stent. Aggrastat® is administered intravenously and has been on the market for many years.

In December 2017, we announced the signing of a license and distribution agreement with ZAO Firma Euroservice that will advance Aggrastat® towards registration and commercialization in Russia.

Applications for the extension of the indication statement for Aggrastat® are continuing worldwide. In January 2018, we announced a label expansion for Aggrastat® in China to include patients with STEMI. In addition, a high dose bolus regimen for Aggrastat® was approved in China.

### **Brinavess®**

#### *North America*

In December 2006, our former partner, Astellas Pharma US, Inc. (“Astellas”), filed a New Drug Application (“NDA”) for vernakalant (IV) with the U.S. Food and Drug Administration (“FDA”). In August 2008, the FDA notified Astellas that the application was approvable. After discussions between the FDA and Astellas, a confirmatory Phase 3 clinical trial (“ACT 5”) was initiated in October 2009 under a Special Protocol Assessment. In October 2010, a clinical hold was placed on the vernakalant IV program following a single unexpected serious adverse event of cardiogenic shock experienced by a patient with AF who received vernakalant (IV). The ACT 5 study was terminated. In 2013, when sponsorship of the U.S. Investigational New Drugs (“INDs”) for vernakalant (IV) and vernakalant (oral) and the NDA for vernakalant (IV) were transferred to us from Merck Sharp & Dohme (“MSD”), we initiated discussions with the FDA to determine the next steps for the development of vernakalant (IV) in the United States. Following completion of additional nonclinical studies in 2017, we proposed resubmission of the NDA based on six years of accumulated safety data from sales of Brinavess® in 33 countries, augmented by interim results from over 1,100 patients enrolled in the post-authorization safety study (“PASS”) being conducted in Europe, *SPECTRUM (PASS)*. In August 2017, we received the FDA’s Cardiorenal Division response indicating that they did not agree that the data supported NDA resubmission. In April 2018, we announced the completion of enrollment of the 2,000-patient PASS. Following a request for a Type A meeting with the FDA, in June 2018, we received a written response from the FDA regarding the regulatory path forward. The FDA informed us that it would be permissible to resubmit the Brinavess® NDA and agreed that we may schedule a Pre-NDA meeting. In October 2018, we met with the FDA to discuss the content and format of the NDA

resubmission. On October 29, 2018, we announced that, pending approval of Brinavess<sup>®</sup> by the FDA, Brinavess<sup>®</sup> may qualify for up to a 5-year patent extension from the U.S. Patent and Trademark Office.

On June 24, 2019, we announced that we resubmitted an NDA to the FDA. On July 25, 2019, we announced that the FDA accepted for review our resubmitted NDA. The FDA assigned a target action date of December 24, 2019 under the Prescription Drug User-Fee Act (“PDUFA”). In its acceptance letter, the FDA stated that it is currently planning to hold an advisory committee meeting to discuss the application. We do not plan on pursuing any further development of the vernakalant (oral) program.

#### *Rest of World (Outside North America)*

In April 2009, we entered into two collaboration and license agreements (the “Collaboration Agreements”) with MSD for the development and commercialization of vernakalant. The Collaboration Agreements provided an affiliate of MSD with exclusive rights outside of North America to vernakalant (IV).

Under the terms of the Collaboration Agreements, MSD paid us an initial fee of \$60 million. In addition, we were eligible to receive up to an additional \$200 million in payments, of which we received \$45 million. In July 2009, MSD submitted a Marketing Authorization Application (“MAA”) to the EMA seeking marketing approval for vernakalant (IV) in the European Union. In September 2010, vernakalant (IV) received marketing approval under the trade name Brinavess<sup>®</sup> in the European Union, Iceland and Norway. After receipt of marketing approval, MSD began its commercial launch of Brinavess<sup>®</sup> in a number of European countries.

In September 2012, MSD gave notice to us of its termination of the Collaboration Agreements. In April 2013 we took responsibility for worldwide sales, marketing, and promotion of vernakalant (IV) and in September 2013 we completed the transfer of commercialization responsibility for Brinavess<sup>®</sup> in the European Union and of the responsibility to complete the post-marketing study for Brinavess<sup>®</sup>.

In December 2014, Eddingpharm (Asia) Macao Commercial Offshore Limited (“Eddingpharm”) acquired rights to develop and commercialize Brinavess<sup>®</sup> in China, Taiwan, Macau and Hong Kong. Eddingpharm is responsible for any clinical trials and regulatory approvals required to commercialize Brinavess<sup>®</sup> in the countries covered by the agreement. In May 2018, Eddingpharm enrolled its first patient in a Phase 3 clinical study evaluating Brinavess<sup>®</sup>. Approximately 240 patients are expected to be enrolled at an estimated 30 clinical trial sites in China. In August 2018, Brinavess<sup>®</sup> was selected by the China Food and Drug Administration’s Center for Drug Evaluation as one of 48 therapies assessed as “clinically urgently needed new drugs” and consequently, potentially eligible for priority review.

In January and March 2016, we filed MAAs with the Kingdom of Saudi Arabia’s Saudi Food and Drug Authority and the United Arab Emirates’ (“UAE”) Ministry of Health, respectively, seeking approval of Brinavess<sup>®</sup>. In 2018, the MAA was approved in the UAE.

In November 2017, we announced the launch of Brinavess<sup>®</sup> in South Africa. In February 2018, our partner ATCO Laboratories Ltd. filed an MAA in Pakistan seeking approval of Brinavess<sup>®</sup>.

In August 2018, we announced results from a clinical survey assessing patients with acute AF in Belgian hospitals demonstrating reduced hospitalization in patients treated with Brinavess<sup>®</sup>. As a result of these data, Brinavess<sup>®</sup> received reimbursement approval from the National Institute for Health and Disability Insurance in Belgium.

### *Clinical Development and Post-Approval Studies*

We completed a post-authorization safety study in the European Union as part of our follow-up measures with the EMA. This 2,000-patient observational study has collected information about patients receiving Brinavess<sup>®</sup>, to characterize the normal use and dosing of the product, and to provide better estimates of the incidence of medically significant health outcomes of interest.

In September 2018, we reported preliminary results of the study. Zero deaths were reported and safety outcomes of interest were observed in 0.8% (95% confidence interval: 0.5% - 1.4%) of cases. Over 70% (95% confidence interval: 68.1% - 72.2%) of AF episodes were successfully converted to sinus rhythm in a median time to conversion of 11 minutes. The full clinical study report has been completed. We plan to publish the data in the first half of 2020.

### **Trevyent<sup>®</sup>**

In June 2015, we entered into an exclusive license and supply agreement (the “License Agreement”) with SteadyMed to commercialize the development-stage product Trevyent<sup>®</sup> (treprostinil) in Europe and the Middle East. Pursuant to the License Agreement, SteadyMed granted us an exclusive royalty-bearing license to register and commercialize Trevyent<sup>®</sup> in Europe and the Middle East if Trevyent<sup>®</sup> is approved for the treatment of PAH. Under the License Agreement, SteadyMed will receive up to \$12.3 million in connection with regulatory and sales milestones, including an upfront payment of \$3 million.

PAH is a medical condition affecting the heart and lungs. People who have PAH develop high blood pressure (hypertension) in the arteries of their lungs (the pulmonary arteries). PAH worsens over time and is life-threatening because the pressure in a patient’s pulmonary arteries rises to dangerously high levels, putting a strain on the heart. There is no cure for PAH, but several medications are available to treat symptoms, such as Remodulin<sup>®</sup> (treprostinil sodium), the market-leading prostacyclin PAH therapy.

Trevyent<sup>®</sup> is a development stage drug/device combination product that combines SteadyMed’s PatchPump<sup>™</sup> technology with treprostinil, a vasodilatory prostacyclin analogue to treat PAH. PatchPump<sup>™</sup> is a proprietary, disposable, parenteral drug administration platform that is prefilled and preprogrammed at the site of manufacture.

In January 2016, we announced that the EMA approved our request to review Trevyent<sup>®</sup> under the Centralised Authorisation Procedure drug review process. This procedure results in a single marketing authorization that is valid in all 28 European Union countries and three European Economic Area countries.

In April 2017, we announced that SteadyMed completed a successful clinical study of Trevyent<sup>®</sup>. The study enrolled 60 healthy adult volunteers in an in-clinic setting designed to examine the performance of the PatchPump<sup>™</sup> used by Trevyent<sup>®</sup>. The goals of the study were to evaluate the safety and performance functions of the PatchPump<sup>™</sup> delivery system as well as the tolerability of the on-body application of the product. According to SteadyMed, the results indicated that the PatchPump<sup>™</sup> devices performed as intended in all categories of evaluation, including dose accuracy and precision.

In July 2017, we announced that SteadyMed submitted an NDA to the FDA for Trevyent<sup>®</sup> in the United States. On August 31, 2017, SteadyMed announced that they received a Refusal to File (“RTF”) letter from the FDA relating to the NDA. In December 2017, SteadyMed announced that they had reached agreement with the FDA on the work necessary to resubmit its NDA. SteadyMed resubmitted its NDA to the FDA in June 2019. We plan to commence work on the regulatory filings for Trevyent<sup>®</sup> in Europe later this year.

## **Xydalba™**

In May 2016, we announced the execution of an exclusive license agreement with Allergan plc (“Allergan”), for the rights to commercialize dalbavancin (branded Dalvance® in the United States, where it is marketed by Allergan, and Xydalba™ in the rest of the world) in the United Kingdom, Germany, France, Denmark, Iceland, Finland, Malta, Norway, Sweden, Belgium, the Netherlands, Luxemburg, Ireland and Switzerland. Xydalba™ fits our commercial footprint as a differentiated, specialty in-hospital drug. In December 2016, we initiated the launch of Xydalba™ in the United Kingdom and Germany, and in February 2017, we initiated the launch of Xydalba™ in France. In June 2017, we announced that we entered into a license and distribution agreement with Tzamal Medical Ltd. to advance the commercialization of Xydalba™ in Israel. In October 2017, we initiated the launch of Xydalba™ in Sweden, Finland and the Republic of Ireland.

Xydalba™ is a second generation, semi-synthetic lipoglycopeptide. Xydalba™ is the first and only IV antibiotic approved in Europe for the treatment of ABSSSI with a single dose regimen of 1500 mg administered over 30 minutes or a two-dose regimen of 1000 mg followed one week later by 500 mg, each administered over 30 minutes. This dosing regimen makes it possible to treat patients with ABSSSI in an outpatient setting with 100% compliance, avoiding hospitalization or potentially allowing earlier discharge, without compromising efficacy. Xydalba™ demonstrates bactericidal activity *in vitro* against a range of gram-positive bacteria, such as Staphylococcus aureus (including methicillin-resistant, also known as MRSA, strains) and Streptococcus pyogenes, as well as certain other staphylococcal and streptococcal species.

## **Zevtera®/Mabelio®**

In September 2017, we entered into a distribution and license agreement with Basilea Pharmaceutica International Ltd. (“Basilea”), for the rights to commercialize Zevtera®/Mabelio® (ceftobiprole medocartil sodium) in 34 European countries and Israel. Zevtera®/Mabelio® is a cephalosporin antibiotic for intravenous administration with rapid bactericidal activity against a wide range of gram-positive and gram-negative bacteria, including methicillin-susceptible and resistant Staphylococcus aureus (MSSA, MRSA) and susceptible Pseudomonas spp. Zevtera®/Mabelio® is currently approved for sale in 13 European countries and several non-European countries for the treatment of adult patients with community-acquired pneumonia (CAP) and hospital-acquired pneumonia (HAP), excluding ventilator-associated pneumonia (VAP). As consideration for the rights and licenses granted, we made an upfront payment of CHF 5.0 million (\$5.2 million) to Basilea. Additional payments may be due to Basilea upon the achievement of various milestones. Royalty payments may also be due to Basilea based on achievement of pre-determined levels of annual net sales.

## Product Portfolio

The following table summarizes our portfolio of products and product candidates:

<b>Program</b>	<b>Stage of Development</b>
Aggrastat <sup>®</sup> outside of the United States	Approved in more than 60 countries worldwide.
Brinavess <sup>®</sup> outside of the United States	Approved in approximately 40 countries worldwide, including those in the European Union.
Brinavess <sup>™</sup> United States	On clinical hold. NDA resubmitted to the FDA in June 2019. FDA acceptance of resubmitted NDA in July 2019 for review with a PDUFA date of December 24, 2019.
Trevent <sup>®</sup>	Pre-registration worldwide. NDA resubmitted by SteadyMed to the FDA in June 2019.
Xydalba <sup>™</sup>	Centrally approved in the European Union. MAA filed in Switzerland and pre-registration in the Middle East.
Zevtera <sup>®</sup> /Mabelio <sup>®</sup>	Approved in 13 European countries and several non-European countries.

## CORPORATE UPDATE

### ***Arrangement Agreement***

On March 19, 2018, we entered into the Arrangement Agreement with Cipher and Cardiome. Pursuant to the Arrangement, among other steps and procedures, the following transactions occurred:

- All of Cardiome's outstanding common shares were assigned and transferred to us in exchange for our common shares. Following the completion of the share exchange, each of Cardiome's shareholders holds the same pro rata interest in us as they held in Cardiome immediately prior to such share exchange.
- All of Cardiome's assets and liabilities, other than the Canadian business portfolio and Canadian income tax losses acquired by Cipher, were transferred to and assumed by us.

On May 9, 2018, we received shareholder approval in favor of the Arrangement. The consolidated financial statement information for all periods presented herein include the consolidated operations of Cardiome until May 15, 2018 and the operations of Correvio thereafter. For accounting purposes, the consolidated financial statement information includes the consolidated historical operations and changes in the consolidated financial position of Cardiome to May 15, 2018 and those of Correvio thereafter.

### ***Amendment to the Term Loan Agreement with CRG-Managed Funds***

On May 11, 2017, we amended the terms of our term loan agreement (the "first amendment") with CRG-managed funds (the "CRG Term Loan"). Under the terms of the amended agreement, up to \$50.0 million is available to us consisting of four tranches bearing interest at 13% per annum. The first tranche of \$20.0 million was drawn on June 13, 2016 when we entered into the original term loan agreement and was used to extinguish long-term debt and for general corporate purposes. A second tranche of \$10.0 million was

drawn on the date of the first amendment. A third tranche of \$10.0 million was drawn on August 8, 2017. The fourth tranche was never drawn. The loan matures on March 31, 2022. Under the terms of the agreement, an interest-only period is provided such that principal repayment begins in June 2020. If certain revenue milestones are met by us, the interest-only period may be extended such that there is only one principal payment at maturity.

Under the first amendment, interest is payable on a quarterly basis through the full term of the loan. Interest payments may be split, at our option, between 9% per annum cash interest and 4% per annum paid in-kind interest in the form of additional term loans until March 31, 2020. Subsequent to March 31, 2020, interest shall be payable entirely in cash. If certain revenue milestones are met by us, the period in which we, at our option, may split our interest payments between 9% per annum cash interest and 4% per annum paid in-kind interest in the form of additional term loans may be extended to March 31, 2022. On the maturity date, a back-end facility fee of 8% of the aggregate amount of the term loan, including any paid in-kind interest, will be payable to CRG. During the three and six months ended June 30, 2019, we accrued in-kind interest of \$0.4 million and \$0.9 million, respectively.

In consideration for the first amendment, 700,000 warrants with a strike price of \$4.00 per common share were issued to CRG as of the date of the first amendment. The warrants may also be exercised on a “net” or “cashless” basis and have a term of 5 years.

We are required to meet certain annual revenue covenants, starting with the year ending December 31, 2016. If the revenue covenants are not met, we may exercise a cure right within 90 days of year-end by issuing additional common shares in exchange for cash or by borrowing subordinated debt in an amount equal to two times the difference between the minimum required revenue and our revenue. The cash received from the cure right would be used to repay the principal.

On March 27, 2018, we entered into an agreement with CRG to amend the terms of the loan to adjust the annual revenue covenants (the “second amendment”). In consideration for the second amendment, we issued 800,000 warrants with a strike price of \$2.50 per common share to CRG as of the date of the second amendment. The warrants may also be exercised on a “net” or “cashless” basis and have a term of 5 years.

On May 15, 2018, the CRG Term Loan was amended in connection with the Arrangement; the borrower named in the CRG Term Loan was amended from Cardiome to Correvio.

We were in compliance with the amended annual revenue covenants for the years ended December 31, 2018 and 2017. We are also required to meet an ongoing minimum liquidity covenant. As of the date of this MD&A, we are in compliance with this minimum liquidity covenant.

On March 11, 2019, we announced that CRG provided us with an additional credit facility of \$10.0 million, to be drawn at our discretion, in increments of \$2.5 million through September 30, 2019, subject to the achievement of certain revenue and market capitalization requirements. The facility will bear interest at 13% per annum and will carry the same terms and conditions as the CRG Term Loan.

### ***Base Shelf Prospectus***

On July 5, 2018, we filed a short form base shelf prospectus with the securities regulatory authorities in Canada, other than Quebec, and with the SEC under a registration statement on Form F-10 (together, the “Base Shelf Prospectuses”). The Base Shelf Prospectuses provide for the potential offering in Canada and the United States of up to an aggregate of \$250.0 million of our common shares, preferred shares, debt securities, warrants, subscription receipts and units from time to time over a 25-month period.

***At Market Issuance Sales Agreement with B. Riley FBR, Inc.***

On July 10, 2018, we filed a prospectus supplement pertaining to sales under an at market issuance sales agreement (the “BRFBR Sales Agreement”) with B. Riley FBR, Inc. (“BRFBR”). Under the terms of the BRFBR Sales Agreement, we could offer and sell, from time to time, through at-the-market offerings, our common shares having an aggregate offering price of up to \$30.0 million, subject to an aggregate maximum of \$13.0 million that could be offered and sold under the prospectus supplement. During the first quarter of 2019, we sold 2,970,781 common shares under the BRFBR Sales Agreement for gross proceeds of \$6.3 million. We completed the sale of all common shares qualified under this prospectus supplement. The BRFBR Sales Agreement was terminated on March 1, 2019.

***At Market Issuance Sales Agreement with Cantor Fitzgerald & Co.***

On March 13, 2019, we filed a prospectus supplement pertaining to sales under an at market issuance sales agreement (the “Cantor Sales Agreement”) with Cantor Fitzgerald & Co. In accordance with the terms of the Cantor Sales Agreement, we may offer and sell, from time to time, through at-the-market offerings, our common shares having an aggregate offering price of up to \$50.0 million, subject to an aggregate maximum of \$12.0 million that may be offered and sold under the prospectus supplement. During the three and six months ended June 30, 2019, we sold 1,449,543 and 2,074,543 common shares, respectively, under the Cantor Sales Agreement for gross proceeds of \$3.3 million and \$5.3 million, respectively. We intend to use net proceeds for preparations for future product launches, including the NDA re-filing for Brinavess<sup>®</sup>, business development opportunities and general corporate purposes. As of the date of this MD&A, \$6.7 million remains available for issuance under this prospectus supplement.

***Underwritten Public Offering***

On August 7, 2019, we closed an underwritten public offering (the “Offering”) of 9,200,000 common shares at a price of \$1.50 per common share, for aggregate gross proceeds of \$13.8 million, before deducting the underwriting commission and estimated Offering expenses payable by us. The number of common shares issued includes the exercise in full of the underwriter’s over-allotment option to purchase an additional 1,200,000 common shares on the same terms and conditions.

We intend to use the net proceeds from the Offering (including any net proceeds received in connection with the over-allotment option) for preparations for future product launches, including the NDA filing for Brinavess<sup>®</sup>, with estimated additional costs of approximately \$2.0 million, and potential business development opportunities. In addition, we intend to use \$7.0 million from the Offering for working capital and general corporate purposes, including funds needed to meet our minimum liquidity requirements under the CRG Term Loan. Any remaining net proceeds from the Offering will be used for working capital and general corporate purposes.

## SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following table sets forth selected consolidated data for the three and six months ended June 30, 2019 and 2018 and as at June 30, 2019 and December 31, 2018 as follows:

<i>(In thousands of U.S. dollars, except per share amounts)</i>	Three months ended June 30		Six months ended June 30	
	2019	2018	2019	2018
Statement of operations data:				
Revenue	\$ 7,389	\$ 6,178	\$ 14,640	\$ 12,721
Operating loss	(8,615)	(9,632)	(15,780)	(17,247)
Net (loss) income	(10,469)	5,428	(19,465)	(3,032)
(Loss) earnings per share – basic and diluted	\$ (0.26)	\$ 0.16	\$ (0.49)	\$ (0.09)

	As at	
	June 30, 2019	December 31, 2018
Balance sheet data:		
Cash and cash equivalents	\$ 12,882	\$ 15,596
Total assets	58,748	59,637
Current portion of long-term debt, net of unamortized debt issuance costs	4,520	-
Long-term debt, net of unamortized debt issuance costs	38,626	41,517

## RESULTS OF OPERATIONS

### ***Three and Six Months Ended June 30, 2019 Compared to Three and Six Months Ended June 30, 2018***

We recorded a net loss of \$10.5 million (basic loss per share of \$0.26) for the three months ended June 30, 2019 compared to net income of \$5.4 million (basic earnings per share of \$0.16) for the three months ended June 30, 2018. On a year-to-date basis, we recorded a net loss of \$19.5 million (basic loss per share of \$0.49) for the six months ended June 30, 2019 compared to a net loss of \$3.0 million (basic loss per share of \$0.09) for the six months ended June 30, 2018. The increase in net loss was due to the recognition of a one-time gain on the disposition of the Canadian business portfolio in the second quarter of 2018, pursuant to the Arrangement. This was partially offset by an increase in revenues and a decrease in foreign exchange losses.

### ***Revenue***

Revenue is earned through the sale of our commercialized products. Revenue may fluctuate between periods based on the timing of large and infrequent distributor orders. These distributor orders may impact both quarterly and annual revenue figures, and the related variance compared to prior periods, because a large order may comprise a relatively large proportion of the period's total revenue. As a result, changes in revenues on a period-to-period basis may not provide a clear indication of actual sales trends.

Revenue for the three months ended June 30, 2019 was \$7.4 million compared to \$6.2 million for the three months ended June 30, 2018. The increase in revenue was primarily attributable to an increase in sales of

our antibiotic products (Xydalba™ and Zevtera®/Mabelio®). For the three months ended June 30, 2019, revenue from our cardiology products (Aggrastat® and Brinavess®) was \$4.8 million and revenue from our antibiotic products (Xydalba™ and Zevtera®/Mabelio®) was \$2.6 million. For the three months ended June 30, 2018, revenue from our cardiology products was \$4.7 million and revenue from our antibiotic products was \$1.5 million.

Revenue for the six months ended June 30, 2019 was \$14.6 million compared to \$12.7 million for the six months ended June 30, 2018. The increase in revenue was primarily attributable to an increase in sales of our antibiotic products (Xydalba™ and Zevtera®/Mabelio®). For the six months ended June 30, 2019, revenue from our cardiology products (Aggrastat® and Brinavess®) was \$9.4 million and revenue from our antibiotic products (Xydalba™ and Zevtera®/Mabelio®) was \$5.2 million. For the six months ended June 30, 2018, revenue from our cardiology products was \$9.9 million and revenue from our antibiotic products was \$2.8 million.

### ***Gross Margin***

Gross margin for the three and six months ended June 30, 2019 was 67.3% and 68.2%, respectively, compared to 68.2% and 66.5%, respectively, for the three and six months ended June 30, 2018. The fluctuation in gross margin is primarily due to changes in our product mix.

### ***Selling, General & Administration Expense***

Selling, general and administration (“SG&A”) expense for the three months ended June 30, 2019 and 2018 was \$12.6 million and \$12.6 million, respectively. SG&A expense for the six months ended June 30, 2019 was \$23.8 million compared to \$23.5 million for the six months ended June 30, 2018. During the six months ended June 30, 2019, we had higher regulatory and medical costs associated with the NDA resubmission of Brinavess® which offset the one-time business development and transaction costs associated with the Arrangement, which took place in the second quarter of 2018.

### ***Interest Expense***

Interest expense for the three and six months ended June 30, 2019 was \$1.9 million and \$3.6 million, respectively, compared to \$1.7 million and \$2.7 million for the three and six months ended June 30, 2018. The increase was due to interest being accrued on a higher long-term debt principal amount under the CRG Term Loan as well as an increase in the accretion of our long-term debt under the effective interest method which is recorded as interest expense.

## QUARTERLY FINANCIAL INFORMATION

The following table highlights selected unaudited consolidated financial data for each of the eight most recent quarters that, in management's opinion, have been prepared on a basis consistent with the audited consolidated financial statements for the year ended December 31, 2018. The selected financial information presented below reflects all adjustments, consisting primarily of normal recurring adjustments, which are, in the opinion of management, necessary for a fair presentation of results for the interim periods. These results are not necessarily indicative of results for any future period and you should not rely on these results to predict future performance.

<i>(In thousands of U.S. dollars except per share amounts)</i>	Three months ended			
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018
Revenue	\$ 7,389	\$ 7,251	\$ 8,946	\$ 7,007
Cost of goods sold	2,413	2,241	1,896	2,135
Selling, general and administration	12,615	11,191	9,859	9,186
Interest expense	1,912	1,690	1,561	1,686
Net loss	(10,469)	(8,996)	(6,442)	(7,105)
Loss per share – basic and diluted	(0.26)	(0.23)	(0.18)	(0.20)

<i>(In thousands of U.S. dollars except per share amounts)</i>	Three months ended			
	June 30, 2018	March 31, 2018	December 31, 2017	September 30, 2017
Revenue	\$ 6,178	\$ 6,543	\$ 7,034	\$ 6,021
Cost of goods sold	1,962	2,301	1,931	1,488
Selling, general and administration	12,631	10,902	10,417	8,481
Interest expense	1,667	1,063	1,899	1,762
Gain on disposal of Canadian Operations	18,489	-	-	-
Net income (loss)	5,428	(8,460)	(8,343)	(6,623)
Earnings (loss) per share – basic and diluted	0.16	(0.24)	(0.24)	(0.20)

Variations in our revenue, expense and net loss for the periods above resulted primarily from the following factors:

In the fourth quarter of 2017, our net loss increased by approximately \$1.7 million to \$8.3 million, or a basic loss per share of \$0.24. The increase in net loss from the prior quarter was due to an increase in our SG&A expense. The increase in SG&A was due to non-recurring compensation related to severance payments made to former employees, an increase in fees associated with business development activities and costs associated with the expansion of Zevtera<sup>®</sup>/Mabelio<sup>®</sup>, which we acquired in September 2017.

In the first quarter of 2018, our net loss increased by approximately \$0.2 million to \$8.5 million, or a basic loss per share of \$0.24. The slight increase in net loss from the prior quarter was due to a decrease in our gross margin as well as an increase in SG&A due to transaction costs associated with the Arrangement.

In the second quarter of 2018, we had a net income of \$5.4 million, or a basic earnings per share of \$0.16. The net income was due to a gain of \$18.5 million that we recognized on the disposition of our Canadian business portfolio to Cipher pursuant to the Arrangement. This gain was offset by an increase in SG&A due to business development and transaction costs associated with the Arrangement of approximately \$1.8 million.

In the third quarter of 2018, we had a net loss of \$7.1 million, or a basic loss per share of \$0.20. The \$12.5 million decrease in net income from the prior quarter was due to the one-time gain on disposition of our Canadian business portfolio that we recognized in the second quarter of 2018. This was offset by an increase in revenues and a decrease in SG&A in the third quarter of 2018 due to non-recurring business development and transaction costs associated with the Arrangement incurred in the second quarter of 2018.

In the fourth quarter of 2018, our net loss decreased by approximately \$0.7 million to \$6.4 million, or a basic loss per share of \$0.18. The decrease in net loss from the prior quarter was primarily due to higher revenues and higher gross margin. We recognized \$1.5 million of deferred licensing revenue upon the termination of a distributor agreement in December 2018.

In the first quarter of 2019, our net loss increased by approximately by \$2.6 million to \$9.0 million, or a basic loss per share of \$0.23. The increase in net loss from the prior quarter was due to lower revenues and an increase in SG&A. Our revenues were lower in the first quarter of 2019 due to a one-time \$1.5 million amount of deferred licensing revenue recognized in the prior quarter. Additionally, our SG&A was higher due to an increase in stock-based compensation expense and higher regulatory expenses.

In the second quarter of 2019, our net loss increased by \$1.5 million to \$10.5 million, or a basic loss per share of \$0.26. The increase in net loss from the prior quarter was due to an increase in SG&A due to higher regulatory and medical costs associated with the NDA resubmission of Brinavess<sup>®</sup>.

## LIQUIDITY AND CAPITAL RESOURCES

We have financed our operations through cash flow generated from sales of our products, the issuance of common shares, and debt financing.

### Cash Flows

#### Sources and Uses of Cash

<i>(in thousands of U.S. dollars)</i>	For the Three Months Ended June 30		For the Six Months Ended June 30	
	2019	2018	2019	2018
Cash used in operating activities	\$ (6,150)	\$ (5,409)	\$ (13,761)	\$ (13,937)
Cash provided by investing activities	155	13,937	265	13,735
Cash provided by (used in) financing activities	2,844	(2)	10,787	214
Effect of foreign exchange rate on cash, cash equivalents, and restricted cash	98	(338)	(13)	(247)
Net (decrease) increase in cash, cash equivalents, and restricted cash	\$ (3,053)	\$ 8,188	\$ (2,722)	\$ (235)

At June 30, 2019, we had \$14.8 million in cash, cash equivalents and restricted cash, compared to \$17.6 million at December 31, 2018. The decrease in cash, cash equivalents, and restricted cash for the six months ended June 30, 2019 was mainly attributable to \$13.8 million of cash used in operating activities partially offset by \$10.8 million in cash provided by financing activities.

Cash used in operating activities for the three months ended June 30, 2019 was \$6.2 million, an increase of \$0.8 million from \$5.4 million for the three months ended June 30, 2018. The increase in cash used was due to the timing of accounts receivable, unrealized foreign exchange, partially offset by an increase in revenues and gross margin. Cash used in operating activities for the six months ended June 30, 2019 and 2018 was \$13.8 million and \$13.9 million, respectively.

Cash provided by investing activities for the three and six months ended June 30, 2019 was \$0.2 million and \$0.3 million, respectively, compared to \$13.9 million and \$13.7 million for the three and six months ended June 30, 2018. In the second quarter of 2018, we received \$18.7 million in cash as part of the Arrangement. This was partially offset by a Xydalba™ milestone payment of \$4.5 million to Allergan.

Cash provided by financing activities for the three and six months ended June 30, 2019 was \$2.8 million and \$10.8 million, respectively. During the three months ended June 30, 2019, we received net proceeds of \$3.1 million for shares issued under the Cantor Sales Agreement. During the six months ended June 30, 2019, we received net proceeds of \$5.9 million for shares issued under the BRFB Sales Agreement and net proceeds of \$5.1 million for shares issued under the Cantor Sales Agreement. Cash provided by financing activities for the three and six months ended June 30, 2018 was not material.

### Funding Requirements

We expect to devote financial resources to our operations, sales and commercialization efforts, regulatory approvals and business development. We will require cash to fund operations, pay interest and make principal payments on the CRG Term Loan.

Our future funding requirements will depend on many factors including:

- the cost and extent to which we will be successful in obtaining reimbursement for our products in additional countries where they are currently approved;
- the cost and outcomes of regulatory submissions and reviews for approval of our products in additional countries;
- the extent to which our products will be commercially successful globally;
- the extent to which Aggrastat<sup>®</sup> sales will remain stable as it faces generic competition in certain markets;
- the future development plans for our products in development;
- the consummation of suitable business development opportunities;
- the extent to which we elect to develop, acquire or license new technologies, products or businesses;
- the size, cost and effectiveness of our sales and marketing programs; and
- the consummation, continuation or termination of third-party manufacturing, distribution and sales and marketing arrangements.

As of June 30, 2019, we had \$12.9 million in unrestricted cash and cash equivalents, compared to \$15.6 million at December 31, 2018. We have a history of incurring operating losses and negative cash flows from operations. Based on current projections, we may not have sufficient capital to fund our current planned operations during the next twelve-month period. We are dependent on our ability to raise additional debt or equity financing or monetize intellectual property rights through strategic partnerships or sublicensing arrangements and to meet revenue covenants in order to meet our current planned operations during the next twelve-month period. There can be no assurance that we will be able to raise such additional financing. These factors raise substantial doubt about our ability to continue as a going concern within one year from the interim consolidated financial statements issuance date. However, we believe that the consolidated entity will be successful in the above matters and are currently pursuing multiple opportunities and strategies to ensure that sufficient cash resources are available to meet our current planned operations. On August 7, 2019, we closed the Offering for aggregate gross proceeds of \$13.8 million, before deducting the underwriting commission and estimated Offering expenses payable by us.

## Contractual Obligations

As of June 30, 2019, and in the normal course of business, we have the following obligations to make future payments, representing contracts and other commitments that are known and committed.

Contractual Obligations	Payment due by period							
	(In thousands of U.S. dollars)	2019	2020	2021	2022	2023	There-after	Total
Commitments for clinical and other agreements.....	\$767	\$204	-	-	-	-	-	\$971
Supplier purchase commitment	38	158	-	-	-	-	-	196
CRG Term Loan <sup>(1)</sup> .....	-	16,243	21,658	8,880	-	-	-	46,781
Interest expense on CRG Term Loan <sup>(2)</sup> .....	2,878	5,186	2,491	176	-	-	-	10,731
Operating lease obligations...	534	931	469	225	193	177	-	2,529
<b>Total</b>	<b>\$4,217</b>	<b>\$22,722</b>	<b>\$24,618</b>	<b>\$9,281</b>	<b>\$193</b>	<b>\$177</b>	<b>\$177</b>	<b>\$61,208</b>

<sup>(1)</sup> Based on draws as of the date of this MD&A and assuming continued compliance with all covenants.

<sup>(2)</sup> Based on draws as of the date of this MD&A and does not include interest expense on other amounts that can be drawn. Based on the assumption that all interest is paid in cash.

## Outstanding Share Capital

As of August 13, 2019, there were 50,505,875 common shares issued and outstanding, and 4,867,400 common shares issuable upon the exercise of outstanding stock options (of which 3,150,729 were exercisable) at a weighted average exercise price of CAD \$4.89 per share, and 129,904 restricted share units outstanding.

## CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT ESTIMATES

We prepare our consolidated financial statements in accordance with U.S. GAAP. The accounting policies and methods of computation applied in the consolidated interim financial statements as at and for the three and six months ended June 30, 2019 are the same as those applied in the audited annual financial statements as at and for the year ended December 31, 2018, except as described below.

On January 1, 2019, we adopted Accounting Standards Update No. ("ASU") 2016-02, "Leases", which requires lessees to recognize all leases, including operating leases, with a term greater than 12 months on the balance sheet, for the rights and obligations created by those leases. In July 2018, the FASB issued ASU 2018-11, "Leases", which offered a transition option where companies could elect to apply the guidance using a modified retrospective approach at the beginning of the year of adoption rather than to the earliest comparative period presented in the financial statements. We adopted the new leasing standard on January 1, 2019 using the modified retrospective approach and used the effective date as our date of initial application. A cumulative catch-up adjustment was not required on the date of adoption. We elected the package of practical expedients which permits us to not reassess under our prior conclusions about lease identification, lease classification and initial direct costs. For leases with an initial term of less than 12 months, we have elected not to recognize right-of-use assets and liabilities for any class of asset. We have elected a policy to account for lease and non-lease components as a single component for all asset classes. In general, we account for the underlying leased asset and apply a discount rate at the lease level. However, for vehicle leases, we utilize the portfolio method by aggregating similar leased assets based on the underlying lease term.

We make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, impairment of long-lived assets, amortization, stock-based compensation and other stock-based payments. We base our estimates on historical experience, anticipated results and trends and on various other assumptions that we believe are reasonable under the circumstances. By their nature, estimates are subject to an inherent degree of uncertainty. Actual results could differ from our estimates. The discussion on the accounting policies and estimates that require management's most difficult, subjective and complex judgments, and which are subject to a degree of measurement uncertainty, can be found on pages 18 to 19 of our annual MD&A for the year ended December 31, 2018, a copy of which is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov).

### **Recent Accounting Pronouncements**

#### *Simplifying the Test for Goodwill Impairment*

In January 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment". ASU 2017-04 eliminates the need to determine the fair value of individual assets and liabilities of a reporting unit to measure the goodwill impairment. The goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The revised guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. We adopted the revised guidance and there was no impact on our consolidated financial statements as there was no goodwill impairment in the current period.

### **RELATED PARTY TRANSACTIONS**

During the three and six months ended June 30, 2019 and 2018, we incurred expenses for consulting services provided by a company owned by one of our officers. The amounts charged were recorded at their exchange amounts and were subject to normal trade terms. For the three months ended June 30, 2019 and 2018, we incurred expenses of \$0.1 million and \$0.04 million, respectively, for services provided by the consulting company relating to general corporate matters. For the six months ended June 30, 2019, and 2018, we incurred expenses of \$0.2 million and \$0.1 million, respectively, for services provided by the consulting company relating to general corporate matters. Included in accounts payable and accrued liabilities at June 30, 2019 and 2018 was \$0.2 million and \$0.2 million, respectively, owing to the consulting company. There are ongoing contractual obligations as we have a contract in place with the consulting company in which we are committed to pay the consulting company \$0.2 million annually in exchange for consulting services relating to general corporate matters.

### **OFF-BALANCE SHEET ARRANGEMENTS**

We have no material undisclosed off-balance sheet arrangements that have or are reasonably likely to have, a current or future effect on our results of operations, financial condition, revenues or expenses, liquidity, capital expenditures or capital resources that is material to investors.

## **INTERNAL CONTROL OVER FINANCIAL REPORTING**

We did not make any changes in our internal control over financial reporting during the three and six months ended June 30, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. The design of any system of controls and procedures is based in part upon certain assumptions about the likelihood of certain events occurring. There can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote.

## **FINANCIAL INSTRUMENTS AND RISKS**

We are exposed to credit risks and market risks related to changes in interest rates and foreign currency exchange rates, each of which could affect the value of our current assets and liabilities. We invest our cash reserves in fixed rate, highly liquid and highly rated financial instruments such as treasury bills, commercial papers and banker's acceptances. At June 30, 2019, our cash and cash equivalents were primarily held as cash, the majority of which was denominated in Canadian dollars. We do not believe that the results of operations or cash flows would be affected to any significant degree by a sudden change in market interest rates relative to our investment portfolio, due to the relative short-term nature of the investments and our current ability to hold fixed income investments to maturity. We have not entered into any forward currency contracts or other financial derivatives to hedge foreign exchange risk. We are subject to foreign exchange rate fluctuations that could have a material effect on our future operating results or cash flows. We are exposed to interest rate cash flow risk on our cash and cash equivalents as these instruments bear interest based on current market rates.