UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2017

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Transition Period from to

Commission File Number: [001-34949]

Arbutus Biopharma Corporation

(Exact Name of Registrant as Specified in Its Charter)

British Columbia, Canada	**980,597,776**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

100-8900 Glenlyon Parkway, Burnaby, BC V5J 5J8
(Address of Principal Executive Offices)

604-419-3200
(Registrant's Telephone Number, Including Area Code):

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
Common shares, without par value	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer x	Non-accelerated filer o	Smaller reporting company o
		(Do not check if a smaller reporting company)	

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x

As of June 30, 2017, the last business day of the registrant's most recently completed second fiscal quarter, the approximate aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant was $198,187,182 (based on the closing price of $3.60 per share as reported on the NASDAQ Global Market as of that date).

As of March 6, 2018, the registrant had 55,070,037 Common Shares, no par value, outstanding. In addition, the Company had outstanding 1,164,000 convertible preferred shares, which will be mandatorily convertible into 22,589,601 common shares on October 18, 2021. Assuming the convertible preferred shares were converted as of March 6, 2018, the Company would have had 77,659,638 common shares outstanding at March 6, 2018.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s definitive proxy statement for its 2018 Annual Meeting of Stockholders, which the registrant intends to file pursuant to Regulation 14A with the Securities and Exchange Commission not later than 120 days after the registrant’s fiscal year end of December 31, 2017, are incorporated by reference into Part III of this Form 10-K.

ARBUTUS BIOPHARMA CORPORATION

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Cautionary Note Regarding Forward-looking Statements

This annual report on Form 10-K contains forward-looking statements within the meaning of the Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and forward looking information within the meaning of Canadian securities laws (collectively, "forward-looking statements").

Forward-looking statements in this annual report include statements about Arbutus' strategy, future operations, clinical trials, prospects and the plans of management; the composition and roles of the management team; Arbutus' continued listing on Nasdaq; the effects of Arbutus' products on the treatment of cancer, chronic Hepatitis B infection and other diseases; improving upon the standard of care and contributing to a curative combination treatment regimen; using a combination of HBV drug candidates to effect patient benefit and develop a potential cure; improving our regimen in terms of efficacy, tolerability, duration, and convenience; the structure and timing of a trial for ARB-1467, with interim on-treatment results from this trial are expected in the second half of 2018 followed by final results in 2019; using a combination of HBV drug candidates to effect patient benefit and develop a potential cure; intervening at different points in the viral life cycle; evaluating combinations of two or more drug candidates in cohorts of patients with chronic HBV infection; conducting Phase III clinical trials intended to ultimately support regulatory filings for marketing approval; continuing to expand our HBV pipeline through internal development, acquisitions and in-licenses; the potential of ARB-1740 to be effective at lower clinical doses than ARB-1467; an IND (or equivalent) filing for AB-423 in 2018, with results of additional preclinical studies including AB-506 drug combinations including different MOAs presented in 2018; an IND (or equivalent) filing for AB-452 in 2018, with results of additional preclinical studies including AB-452 drug combinations including different MOA presented in 2018; nominating a HBV-targeting RNAi payload as a clinical development candidate in early 2018; finding partners to enable further development of various non-HBV RNAi asset programs; continuing to explore opportunities to generate value from our LNP platform technology; first regulatory approval for patisiran estimated by second half of 2018; expected payments from Gritstone for achievement of development, regulatory, and commercial milestones, royalties, and reimbursements; site consolidation and organizational changes resulting in increased efficiency, a more flexible variable cost structure, and additional preservation of our cash reserves; LNP technology group remaining intact; reducing our global workforce by approximately 31% and closing our Burnaby, BC facility; incurring restructuring costs related to one-time employee termination benefits, employee relocation costs, and site closure costs currently estimated to be $5.0 million, which will be primarily paid in cash in the second quarter of 2018; negotiating with Roivant, on an exclusive basis, the terms and conditions of a proposal to jointly develop our LNP and GalNAc technologies; the timing and outcome of the second phase of arbitration proceedings with the University of British Columbia in connection with alleged unpaid royalties; the expected return from strategic alliances, licensing agreements, and research collaborations; the use of proceeds from Roivant to develop and advance product candidates through clinical trials, as well as for working capital and general corporate purposes; receiving payments for the Alnylam license agreement; royalty and milestone payments to Blumberg and Drexel under the license agreement; royalty and milestone payments to Enantigen's stockholders; a potential exclusive, royalty bearing, worldwide license with Blumberg; having sufficient cash resources for at least the next 12 months; milestone payments and royalties to Arcturus under the license agreement; when we will adopt recent accounting updates, and the expected impact; Arbutus' intent to retain earnings, if any, to finance the growth and development of their business and not to pay dividends or to make any other distributions in the near future; statements with respect to revenue and expense fluctuation and guidance; predicted tax treatment; and the quantum and timing of potential funding.

With respect to the forward-looking statements contained in this annual report, Arbutus has made numerous assumptions. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Our actual results could differ materially from those discussed in the forward-looking statements as a result of a number of important factors, including the factors discussed in this annual report on Form 10-K, including those discussed in Item 1A of this annual report under the heading "Risk Factors," and the risks discussed in our other filings with the Securities and Exchange Commission and Canadian Securities Regulators. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis, judgment, belief or expectation only as of the date hereof. We explicitly disclaim any obligation to update these forward-looking statements to reflect events or circumstances that arise after the date hereof, except as required by law.

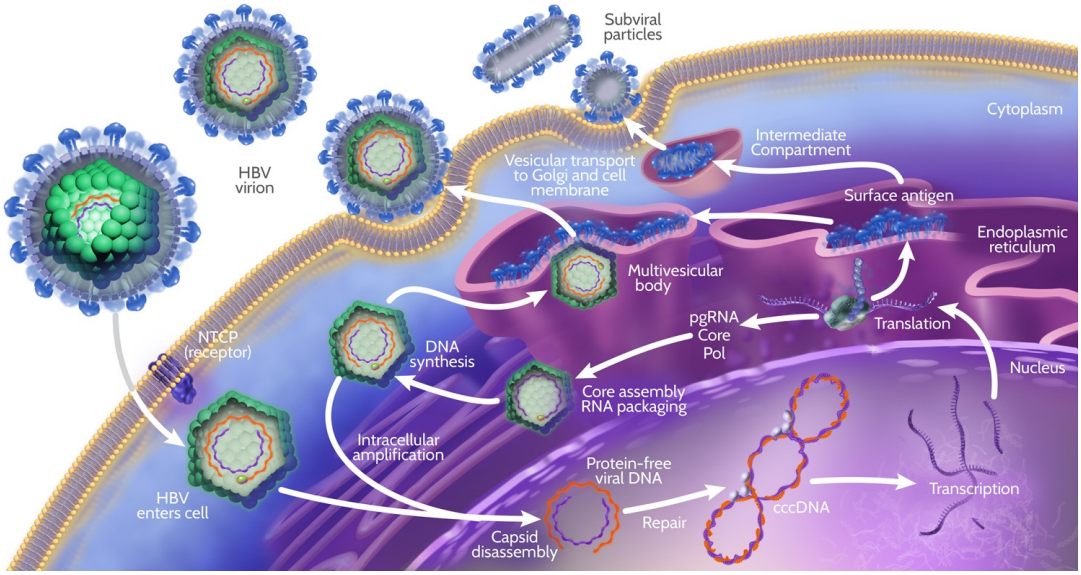
PART I

1. Business Overview

We are a publicly traded (Nasdaq Global Market: ABUS) therapeutic solutions company dedicated to discovering, developing and commercializing a cure for patients suffering from chronic Hepatitis B virus (HBV) infection. To pursue our strategy of developing a curative combination regimen, we have assembled an HBV pipeline consisting of multiple drug candidates with differing and complementary mechanisms of action (MOA). In addition, we have a lipid nanoparticle delivery (LNP) platform with broad applications that extend beyond HBV, and related to the LNP platform we have a royalty entitlement on a drug that may be approved later in 2018. These assets have the potential to provide significant additional capital to fund our HBV development.

HBV represents a significant unmet medical need and is the cause of the most common serious liver infection in the world. The World Health Organization (WHO) estimates that more than 250 million people worldwide are chronically infected (WHO, 2017), and other estimates suggest this could include approximately 2 million people in the United States (Kowdley *et al.*, 2012). Individuals chronically infected with HBV are at an increased risk of developing significant liver disease, including cirrhosis, or permanent scarring of the liver, as well as liver failure and hepatocellular carcinoma (HCC) or liver cancer. According to the Hepatitis B Foundation, HBV is the cause of up to 80% of liver cancers. Individuals with liver cancer typically have a five-year survival rate of only 15%. The WHO estimates that nearly 900,000 people die every year due to the consequences of HBV disease.

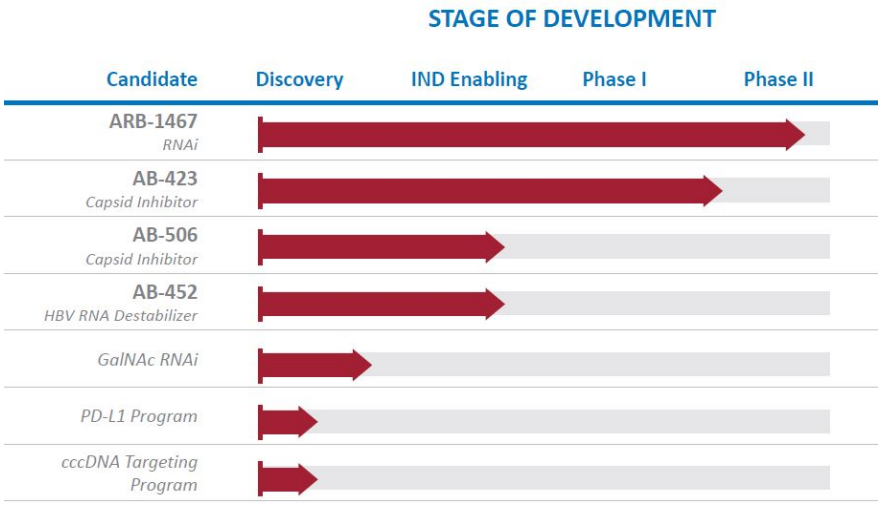
Given the biology of HBV (as shown in the graphic below), we believe combination therapies are the key to HBV treatment and a potential cure, and development can be accelerated when multiple components of a combination therapy regimen are controlled by the same company. Therefore, we are developing multiple drug candidates, each of which have the potential to improve upon the standard of care (SOC) and contribute to a curative combination treatment regimen.



HBV Focused Product Pipeline

Our product pipeline, like our business, is focused on finding a cure for chronic HBV infection, with the objective of developing a suite of products that intervene at different points in the viral life cycle, and have the potential to reactivate the host immune system. We are conducting preclinical combination studies to evaluate combinations of our proprietary pipeline candidates with HBV SOC therapies and with our own proprietary assets. These results support the design and execution of drug combination studies in cohorts of patients with chronic HBV infection. We expect to use these results to adaptively design clinical studies for additional cohorts of patients, testing the combination and the duration of therapy. We plan to continue this process to select a regimen to conduct Phase III clinical trials intended to ultimately support regulatory filings for marketing approval.

Our very broad pipeline of HBV product candidates includes: our lead RNA Interference (RNAi) asset ARB-1467; two capsid assembly inhibitor programs, our first-generation asset AB-423, and a next-generation candidate AB-506; our novel HBV DNA Destabilizer AB-452 candidate; and multiple preclinical agents in development.

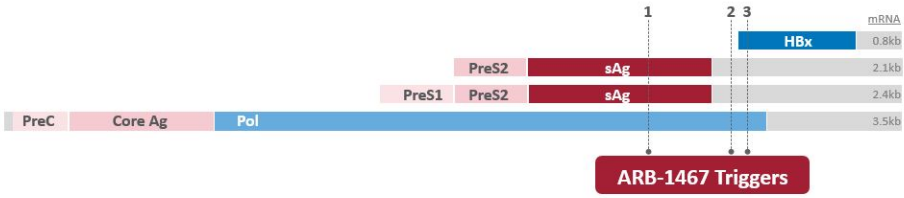


We will continue to expand our HBV pipeline through internal discovery and development and possibly acquisitions and in-licenses. We also have a research collaboration agreement with the Baruch S. Blumberg Institute that provides exclusive rights to in-license any intellectual property generated through the collaboration. For more information about this agreement please refer to the "Strategic Alliances, Licensing Agreements, and Research Collaborations" section of this annual report on Form 10-K below.

RNAi (ARB-1467)

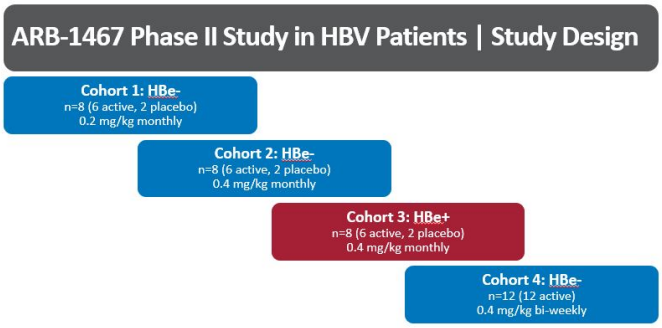
The development of RNAi drugs allows for a completely novel approach to treating disease, which is why RNAi is considered one of the most promising and rapidly advancing frontiers in drug discovery. There are a number of RNAi products currently advancing in human clinical trials. RNAi products are broadly applicable as they can eliminate the production of disease-causing or disease-associated proteins from cells, creating opportunities for therapeutic intervention that have not been achievable with conventional drugs. Our extensive experience in antiviral drug development has been applied to our RNAi program to develop therapeutics for chronic HBV infection. Although small molecule nucleot(s)ide analog (NA) therapy has been the SOC for chronic HBV infected patients, many of these patients continue to express a viral protein called HBV surface antigen (HBsAg). This protein causes inflammation in the liver and is believed to be responsible for preventing the host immune system from clearing the viral infection.

Our RNAi HBV candidate, ARB-1467, is designed to block production of all the viral proteins including HBsAg expression in patients chronically infected with HBV. Reducing HBsAg is thought to be a key prerequisite to enable a patient's immune system to raise an adequate immune response against the virus. The ability of ARB-1467 to inhibit numerous viral elements in addition to HBsAg increases the likelihood of affecting the viral infection. ARB-1467 is being developed as a multi-component (3-trigger) RNAi therapeutic that simultaneously targets three sites on the HBV genome, including the HBsAg coding region. Targeting three distinct and highly conserved sites on the HBV genome is intended to facilitate potent knockdown of all viral messenger RNA (mRNA) transcripts and viral antigens across a broad range of HBV genotypes and reduce the risk of developing antiviral resistance.

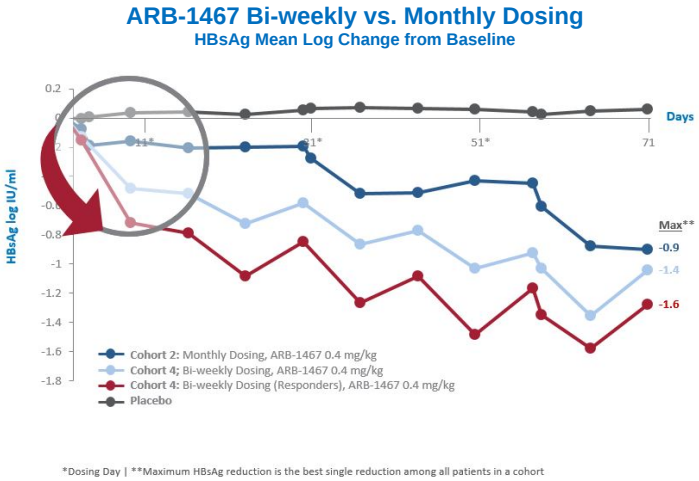


In preclinical models, ARB-1467 treatment resulted in reductions in intrahepatic and serum HBsAg, HBV DNA, covalently closed circular DNA (cccDNA), Hepatitis B e antigen (HBeAg), and Hepatitis B c antigen (HBcAg). ARB-1467 was evaluated in a Phase I Single-Ascending Dose (SAD) trial designed to assess the safety, tolerability, and pharmacokinetics of intravenous administration in healthy adult subjects. In the Phase I SAD study, dosing healthy volunteer subjects was well-tolerated to a dose of 0.4 mg/kg. The maximum tolerated dose was not determined.

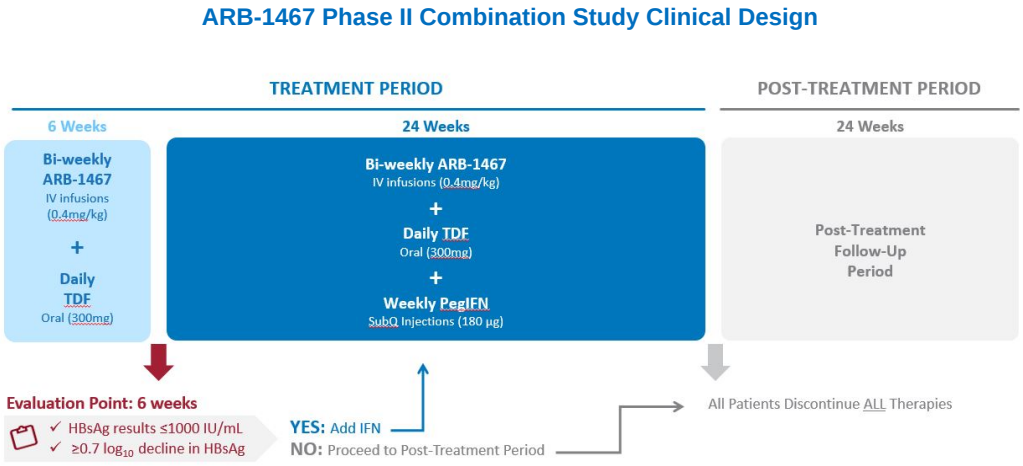
The Phase II trial was a multi-dose study in virally suppressed (NA therapy) patients with chronic HBV. The study enrolled 4 cohorts and explored two doses of ARB-1467 (0.2 and 0.4 mg/kg) at two dose frequencies (monthly and bi-weekly) in two patient populations (HBeAg-negative and positive patients). Cohorts 1, 2, and 4 enrolled HBeAg- patients and Cohort 3 enrolled HBeAg+ patients. The first three cohorts each enrolled eight subjects; six received three monthly doses of ARB-1467, and two received placebo. Cohort 4 enrolled twelve patients, all of whom received five bi-weekly doses of ARB-1467, followed by monthly dosing if pre-defined criteria were met. ARB-1467 was administered at 0.2 mg/kg in Cohort 1 and 0.4 mg/kg in Cohorts 2, 3, and 4. Overall, treatment was well tolerated across all cohorts (Cohorts 1, 2, 3, and 4).



Results from monthly doses in Cohorts 1, 2 and 3 demonstrated a significant reduction in serum HBsAg and a step-wise, additive reduction in serum HBsAg with each subsequent dose. The HBsAg reduction achieved after three monthly doses of 0.4mg/kg in Cohort 2 was greater than that seen at 0.2 mg/kg in Cohort 1, demonstrating a dose-response seen with repeat dosing. We observed no significant differences in serum HBsAg reductions between HBeAg-negative and HBeAg-positive patients. In Cohort 4, five doses of ARB-1467 were administered on a bi-weekly dosing schedule. Results after 5 doses of bi-weekly administration demonstrated a deeper reduction in HBsAg levels compared to the results observed during the monthly administration, with a mean reduction of 1.4 $\log_{10}$ and a maximum reduction of -2.7 $\log_{10}$ drop. Seven of the twelve patients met the predefined response criteria (a reduction greater than 1 $\log_{10}$ and HBsAg levels < 1000 IU/ml) at or before day 71. Five of the seven patients who met the response criteria had their serum HBsAg reduced to low absolute levels (below 50 IU/mL). Results for the extension suggested that monthly dosing was not sufficient to maintain or improve upon these reductions in HBsAg levels so this approach was discontinued and new studies combining the bi-weekly administration of ARB 1467 have been initiated.



We are in the process of initiating a 30-day triple combination study of our RNAi agent ARB-1467 with current SOC NA and pegylated interferon (PegIFN) therapy in treatment naïve patients, to determine if this regimen will result in patients reaching undetectable HBV DNA and HBsAg levels. The Phase II triple combination trial is a 30-week multi-dose study in HBV DNA positive chronic HBV patients. The trial will enroll 20 HBeAg- patients who will receive bi-weekly doses of ARB-1467 at 0.4 mg/kg and daily oral tenofovir (TDF) NA doses for 30 weeks. Predefined treatment responders at 6 weeks will qualify for the addition of weekly PegIFN treatment, while continuing to receive bi-weekly doses of ARB-1467 and daily doses of TDF for the remaining 24 weeks. Patients will be followed for 24 weeks after the treatment period concludes. Interim on-treatment results from this trial are expected in the second half of 2018 followed by final results in 2019. This combination treatment has the potential to result in HBV DNA and HBsAg loss in patients. If these endpoints prove to be durable in a significant proportion of patients this would put this Arbutus therapeutic on a potential late stage development and approval pathway.



RNAi (ARB-1740)

Our second-generation RNAi HBV candidate, ARB-1740, was chemically distinct from ARB-1467 (comprising variations to the trigger sequences) and employed the same LNP formulation as ARB-1467. In preclinical studies, ARB-1740 demonstrated greater potency over ARB-1467, therefore had the potential to be effective at lower clinical doses than ARB-1467. In early 2017, we initiated a Phase II MAD study with ARB-1740 that dosed HBV patients in two cohorts to enable a clinical potency comparison between ARB-1467 and ARB-1740. While ARB-1740 posed no safety concerns, the lack of a significant potency advantage led us to discontinue any further development of ARB-1740 and continue to invest in the development of our more clinically advanced RNAi agent ARB-1467.

Capsid Inhibitors (AB-423 & AB-506)

HBV core protein, which assembles into the HBV capsid, is required for viral replication and may have a role in cccDNA formation. Current NA therapy significantly reduces HBV DNA levels in the serum but HBV replication continues in the liver, thereby enabling HBV infection to persist. Effective therapy for patients requires new agents that will fully block viral replication. We are developing core protein inhibitors (also known as capsid assembly inhibitors) as oral therapeutics for the treatment of chronic HBV infection.

Preclinical studies have shown that our first-generation capsid inhibitor AB-423 is a pan-genotypic, HBV selective agent with a dual MOA. It inhibits pgRNA encapsidation resulting in potent and highly selective inhibition of HBV replication. AB-423 also inhibits cccDNA formation via inhibition of the capsid uncoating step. Combination of AB-423 with ARB-1467 results in additive activity compared to each agent alone. Furthermore, we demonstrated that a combination of AB-423 with an RNAi agent (ARB-1740) showed synergistic activity against HBV rcDNA in vitro, as well as inhibition of HBV DNA and serum HBsAg in in vivo models. In an HBV mouse model, triple combinations consisting of AB-423+RNAi (ARB-1740) with entecavir (ETV) or PegIFN provide the greatest reduction in serum HBV DNA and the RNAi further increased host response when added to AB-423+PegIFN supporting the hypothesis that HBV antigen removal may promote immune recognition and viral clearance.

In 2017, AB-423 was evaluated in a Phase I SAD and MAD trial designed to assess the safety, tolerability, and pharmacokinetics (PK) of oral administration of our lead capsid inhibitor asset in healthy volunteers. We presented clinical data at the American Association for the Study of Liver Diseases (AASLD) annual meeting in October 2017 in a presentation titled, "Single Dose Safety, Tolerability and Pharmacokinetics of AB-423 in Healthy Volunteers from the ongoing Single and Multiple Ascending Dose Study AB-423-001," which showed that AB-423 was well-tolerated with no serious adverse events following single doses up to 800 mg. Multiple doses up to 400 mg twice daily were also well tolerated.

In addition to AB-423, our capsid inhibitor discovery effort generated promising back-up compounds in 2017, which led to the nomination of a next-generation capsid inhibitor AB-506 for Investigational New Drug (IND)/Clinical Trial Authorization (CTA)-enabling studies. AB-506 is a highly selective capsid inhibitor that has shown striking potency and improved PK in preclinical studies. We presented these preclinical data at AASLD annual meeting in October 2017 in a presentation titled, "Antiviral Characterization of a Next Generation Chemical Series of HBV Capsid Inhibitors In Vitro and In Vivo," which showed potent inhibition of HBV replication and pgRNA encapsidation, an accelerated rate of capsid assembly, and binding to the HBV core protein at the dimer:dimer interface that indicates improved target engagement compared to first generation capsid inhibitors.

We will continue to focus on rapidly advancing AB-506 into clinical testing before proceeding with additional clinical evaluation of AB-423. We plan to file an Investigational New Drug (IND)/Clinical Trial Application (CTA) in mid-2018 (pending successful IND/CTA-enabling studies) for AB-506, which has the potential to be a 'best-in-class' capsid inhibitor based on its favorable drug-like properties and potent inhibition of HBV replication. This molecule has the potential for once-daily oral dosing, making it an ideal candidate for inclusion in a combination regimen. Results from additional preclinical studies of AB-506 drug combinations with compounds acting through different mechanisms, will be presented in 2018. Based on comparative clinical data, we will select one of its capsid inhibitors for development as part of a proprietary drug combination.

HBV RNA Destabilizer (AB-452)

In addition to our established clinical programs, we have a number of research programs aimed at the discovery and development of proprietary HBV antivirals with different and complementary MOAs. One of our most advanced preclinical programs is an HBV RNA Destabilizer AB-452 (formerly known as our oral HBsAg inhibitor program), which has novel activity in destabilizing HBV RNA, broad activity against HBV RNAs, and reduces HBsAg. We presented these preclinical data at AASLD annual meeting in October 2017 in a presentation titled, "Identification and Characterization of AB-452, a Potent Small Molecule HBV RNA Destabilizer In Vitro and In Vivo," which showed that AB-452 has shown synergistic effects when combined with two of Arbutus' proprietary HBV RNAi agents in vitro. In vivo, twice-a-day oral administration of AB-452 resulted in up to 1.4 $\log_{10}$ reduction of serum HBsAg in a dose dependent manner and correlated well with liver HBV RNA levels. This molecule has the potential for once daily, oral dosing. Pending successful IND/CTA-enabling studies, this product candidate could be the subject of an IND (or equivalent) filing in 2018. Results of additional preclinical studies including AB-452 drug combinations with different MOA will be presented in 2018.

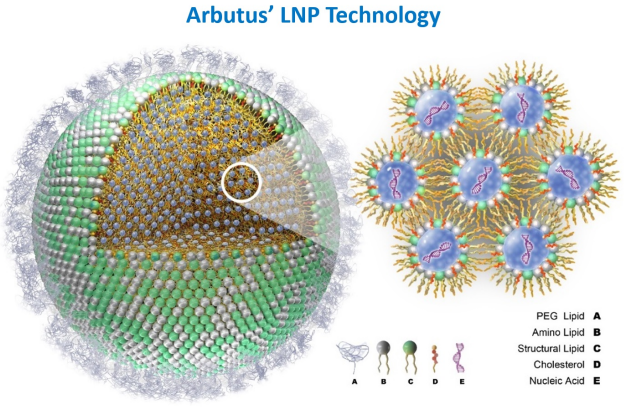
Research Programs

In addition to our clinical candidates, we have a number of research programs aimed at discovery and development of proprietary HBV candidates with different and complementary MOAs. We have also made progress in developing a proprietary N-Acetylgalactosamine (GalNAc) conjugate technology to enable subcutaneous delivery of an RNAi therapeutic targeting HBsAg and/or other HBV targets. We have designed a number of highly potent HBV-targeting RNAi payloads for use with our proprietary GalNAc conjugate platform to enable subcutaneous delivery. In preclinical models, our molecules display acute knockdown of viral proteins and a duration of effect that is highly competitive in the field. We observe a significant dose response and a stepwise reduction in viral proteins when multi-dosing. We expect to nominate a clinical development candidate in early 2018. We also have ongoing discovery efforts focused on cccDNA targeting and checkpoint inhibition.

Proprietary Lipid Nanoparticle (LNP) Drug Delivery Technology

Development of RNAi therapeutic products is currently limited by the instability of the RNAi trigger molecules in the bloodstream and the inability of these molecules to access target cells or tissues following administration. Delivery technology is necessary to protect these drugs in the bloodstream to allow efficient delivery and cellular uptake by the target cells. Arbutus has developed a proprietary delivery platform called LNP. The broad applicability of this platform to RNAi development has established Arbutus as a leader in this new area of innovative medicine.

Our proprietary LNP delivery technology allows for the successful encapsulation of RNAi trigger molecules in LNP administered intravenously, which travel through the bloodstream to target tissues or disease sites. LNPs are designed to protect the triggers, and stay in the circulation long enough to accumulate at disease sites, such as the liver or cancerous tumors. LNPs are then taken up into the target cells by a process called endocytosis. Subsequent activation by the changing environment inside the cell causes the LNP to release the trigger molecules that can then successfully mediate nucleic acid-based therapies.



Ongoing Advancements in LNP Technology

Our LNP technology represents the most widely adopted delivery technology in RNAi, which has enabled several clinical trials and has been administered to hundreds of human subjects with repeat dose administration for over 3 years. We are the leaders in LNP delivery and hold a dominant intellectual property position in this field. We have applied our extensive technical expertise and clinical experience gained from our LNP-based programs to further advance our platform technology and its broad application to mRNA delivery. We last presented LNP *in vivo* data at EuroTIDES in November 2017, showing potent LNP-enabled delivery of mRNA with very high and persistent expression levels.

In October 2017, we signed a licensing agreement with Gritstone Oncology for the development of their RNA-based neoantigen immunotherapy products (see Strategic Alliances, Licensing Agreements, and Research Collaborations) and continue to explore opportunities to generate further value from our LNP platform technology, which is well suited to delivery therapies based on RNAi, mRNA, and gene editing constructs.

In February 2018, we entered into an exclusive negotiating period with Roivant Sciences Ltd. (Roivant), during which we are negotiating the terms of a proposal and a structure to jointly develop Arbutus' LNP and GalNAc delivery technologies with Roivant. More information can be found under the "Reorganization" section of this annual report.

Suspended Non-HBV RNAi Assets

We are focused on discovering, developing and commercializing a cure for patients suffering from chronic HBV infection. As such, we have suspended further development of our non-HBV assets. These programs are available for partnership to enable further development. Our non-HBV assets include:

- LNP-based product candidates TKM-PLK1 for oncology, GI-NET, ACC, and HCC
- LNP-based product candidates TKM-Ebola and TKM-Marburg for hemorrhagic fever viruses;
- TKM-HTG for metabolic disorders; and,
- TKM-ADLH for severe alcohol use disorder.

Partner Programs

Patisiran (ALN-TTR02)

Alnylam Pharmaceuticals, Inc., or Alnylam (Nasdaq: ALNY), has a license to use our intellectual property to develop and commercialize products and may only grant access to our LNP technology to its partners if it is part of a product sublicense. Alnylam's license rights are limited to patents that we have filed, or that claim priority to a patent that was filed, before April 15, 2010. Alnylam's patisiran (ALN-TTR02) program represents the most clinically advanced application of our LNP delivery technology, and results demonstrate that our LNP has been well tolerated and efficacy maintained with long term (>36 months) treatment.

Patisiran is Alnylam`s most clinically advanced RNAi therapeutic in development, targeting transthyretin (TTR) for the treatment of TTR-mediated amyloidosis (ATTR) in patients with FAP. In September 2017, Alnylam successfully completed its APOLLO Phase III clinical trial of LNP-enabled patisiran, which initiated in November 2013. Results showed that patisiran met its primary efficacy endpoint and all secondary endpoints in this trial. As a result, Alnylam completed a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) and a Marketing Authorisation Application (MAA) to the European Medicines Agency (EMA) for patisiran and first regulatory approval, which Alnylam has estimated by second half of 2018. We are entitled to low-to-mid single-digit royalty payments escalating based on sales performance as Alnylam's LNP-enabled products are commercialized, therefore we could receive our first royalty payments in the second half of 2018.

Gritstone Oncology

In October 2017, we entered into a license agreement with Gritstone Oncology, or Gritstone, that granted them worldwide access to our portfolio of proprietary and clinically validated LNP products and associated intellectual property to deliver Gritstone's RNA-based neoantigen immunotherapy products. Gritstone paid us an upfront payment, and will make payments for achievement of development, regulatory, and commercial milestones, royalties, and will reimburse us for conducting technology development and providing manufacturing and regulatory support for Gritstone's product candidates.

Marqibo®

Marqibo®, originally developed by Arbutus, is a novel, sphingomyelin/cholesterol liposome-encapsulated formulation of the FDA-approved anticancer drug vincristine. Marqibo's approved indication is for the treatment of adult patients with Philadelphia chromosome-negative acute lymphoblastic leukemia (Ph-ALL) in second or greater relapse or whose disease has progressed following two or more lines of anti-leukemia therapy. Our licensee, Spectrum Pharmaceuticals, Inc., or Spectrum, launched Marqibo through its existing hematology sales force in the United States. Spectrum has ongoing trials evaluating Marqibo in two additional indications, which are Pediatric ALL and Non-Hodgkin's lymphoma. We are receiving mid-single digit royalty payments based on Marqibo's commercial sales.

Alexion Pharmaceuticals Inc.

In March 2017, we entered into a license agreement with Alexion Pharmaceuticals, Inc., or Alexion (Nasdaq:ALXN), that granted them exclusive use of our proprietary LNP technology in one of Alexion's rare disease programs. Under the terms of the license agreement, Alexion paid us $7.5 million upfront, and was set to pay $75 million for achievement of development, regulatory, and commercial milestones, as well as single digit royalties. Arbutus conducted technology development and provided manufacturing and regulatory support. In July 2017, Alexion terminated its LNP licensing agreement with Arbutus driven by a strategic review of Alexion's business and research and development portfolio, which included a decision to discontinue development of mRNA therapeutics. The preclinical work completed during this period enabled refinement of the LNP formulation process for mRNA development at a larger scale.

DCR-PH1

In November 2014, we signed a licensing and collaboration agreement with Dicerna Pharmaceuticals, Inc. to utilize our LNP delivery technology exclusively in Dicerna's primary hyperoxaluria type 1 (DCR-PH1) development program. Data from the DCR-PH1-102 clinical trial, in which 21 subjects were randomized to receive DCR-PH1 at doses of 0.005, 0.015 and 0.05 mg/kg or placebo, showed an increase in urine glycolate levels, a biomarker of DCR-PH1 treatment activity, in the top two DCR-PH1 dosing groups. In September 2016, Dicerna announced the discontinuation of its DCR-PH1 program. We terminated the agreement with Dicerna in November 2016. More information about our licensing agreement with Dicerna can be found under the "Strategic Alliances, Licensing Agreements, and Research Collaborations" section of this annual report.

Strategic Alliances, Licensing Agreements, and Research Collaborations

Acuitas Therapeutics Inc.

Consistent with the terms of the settlement agreement signed in November 2012, we finalized and entered a cross-license agreement with Acuitas Therapeutics Inc., or Acuitas in December 2013. The terms of the cross-license agreement provide Acuitas with access to certain of our earlier IP generated prior to mid-April 2010 in the fields of gene replacement therapy and antisense. Acuitas may only grant access to our LNP technology to its partners if it is part of a product sublicense. At the same time, the terms provide us with certain access to Acuitas' technology and licenses in the RNAi field, along with a percentage of each milestone and royalty payment with respect to certain products. Acuitas has agreed that it would not compete in the RNAi field for a period of five years, ending in November 2017. Arbutus considered Acuitas to be in material breach of their cross-license agreement and in February 2018, Arbutus and Acuitas reached a settlement terminating Acuitas' right to further use or sublicense Arbutus' LNP technology. Please refer to "Item 3. Legal Proceedings" for additional information.

Merck & Co., Inc. and Alnylam License Agreement

As a result of the settlement between Protiva Biotherapeutics, Inc. (Protiva), and Merck & Co., Inc. in 2008, we acquired a non-exclusive royalty-bearing world-wide license agreement with Merck. Under the license, Merck will pay up to $17 million in milestones for each product they develop covered by our IP, except for the first product for which Merck will pay up to $15 million in milestones, and will pay royalties on product sales. Merck's license rights are limited to patents that Protiva filed, or that claim priority to one of Protiva's patents that was filed, before October 9, 2008. Merck does not have rights to Protiva patents filed after October 9, 2008 unless they claim priority to a patent filed before that date. On March 6, 2014, Alnylam announced that they acquired all RNAi related assets and licenses from Merck, which included our license agreement.

Dicerna Pharmaceuticals, Inc.

In November 2014, we signed a licensing agreement and a development and supply agreement with Dicerna to license our third generation LNP delivery technology for exclusive use in Dicerna's PH1 development program (DCR-PH1). Dicerna's product incorporates its DsiRNA molecule, for the treatment of PH1, a rare, inherited liver disorder that often results in kidney failure and for which there are no approved therapies. Under the agreements, Dicerna paid Arbutus $2.5 million upfront with $22 million in aggregate in potential development milestones, plus a mid-single-digit royalty on future PH1 sales. This partnership also included a supply agreement under which we would provide clinical drug supply and regulatory support for the rapid advancement of this product candidate. Dicerna announced the discontinuation of its DCR-PH1 program in September 2016, and we terminated the agreement with Dicerna in November 2016.

Monsanto Company

In January 2014, we signed an Option Agreement and a Service Agreement with Monsanto Company, or Monsanto, and granted Monsanto an option to obtain a license to use our proprietary LNP delivery technology. Following the completion of the Phase A extension period in October 2015, no further research activities were conducted under the arrangement, as Monsanto did not elect to proceed to Phase B of the research plan. On March 4, 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of Protiva Agricultural Development Company Inc., or PADCo, and PADCo is no longer an indirect wholly owned subsidiary of us. In connection with Monsanto's exercise of its option, on March 4, 2016, we entered into an amended Option Agreement. We also entered into an amended Service Agreement on March 4, 2016 to give effect to the grant back to Protiva of new intellectual property created by Monsanto in connection with the exercise of its option. In addition, we entered into an amended License and Services Agreement to recognize Monsanto's early exercise of option before Protiva's completion of Phases B and C, and introduce a new Technology Transfer Completion Criteria through the amended Option Agreement.

Spectrum Pharmaceuticals, Inc.

In September 2013, we announced that our licensee, Spectrum, had launched Marqibo® through its existing hematology sales force in the United States. Since then commercial sales have occurred. Arbutus is receiving mid-single digit royalty payments based on Marqibo®'s commercial sales. Marqibo®, which is a novel sphingomyelin/cholesterol liposome-encapsulated formulation of the FDA-approved anticancer drug vincristine, was originally developed by Arbutus. We out-licensed the product to Talon Therapeutics in 2006, and in July 2013, Talon was acquired by Spectrum. Marqibo®'s approved indication is for the treatment of adult patients with Philadelphia chromosome-negative acute lymphoblastic leukemia (Ph-ALL) in second or greater relapse or whose disease has progressed following two or more lines of anti-leukemia therapy. Spectrum has ongoing trials evaluating Marqibo® in two additional indications, which are: Pediatric ALL and Non-Hodgkin's lymphoma.

Marina Biotech, Inc. /Arcturus Therapeutics, Inc.

In November 2012, we disclosed that we had obtained a worldwide, non-exclusive license to a novel RNAi trigger technology called Unlocked Nucleobase Analog (UNA) from Marina Biotech Inc., or Marina, for the development of RNAi therapeutics. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects. In August 2013, Marina assigned its UNA technology to Arcturus Therapeutics, Inc., or Arcturus, and the UNA license agreement between us and Marina was assigned to Arcturus. The terms of the license are otherwise unchanged.

U.S. National Institutes of Health

On October 13, 2010 we announced that together with collaborators at the University of Texas Medical Branch (UTMB), we were awarded a new NIH grant, worth $2.4 million, to support research to develop RNAi therapeutics to treat Ebola and Marburg hemorrhagic fever viral infections using our LNP delivery technology. In February 2014, we along with UTMB and other collaborators were awarded additional funding of $3.4 million over five years from the NIH in support of this research.

University of British Columbia

Certain early work on LNP delivery systems and related inventions was undertaken at the University of British Columbia, or UBC. These inventions are licensed to us by UBC under a license agreement, initially entered in 1998 as amended in 2001, 2006 and 2007. We have granted sublicenses under the UBC license to Alnylam as well as to Spectrum (Talon Therapeutics Inc., acquisition). Alnylam has in turn sublicensed back to us under the licensed UBC patents. In mid-2009, we and our subsidiary Protiva entered into a supplemental agreement with UBC, Alnylam and Acuitas Technologies, Inc., in relation to a separate research collaboration to be conducted among UBC, Alnylam and Acuitas to which we have license rights. The settlement agreement signed in late 2012 to resolve the litigation among Alnylam, Acuitas, Arbutus and Protiva provided for the effective termination of all obligations under such supplemental agreement as between and among all litigants. UBC filed a demand for arbitration against us for allegedly unpaid royalties based on publicly available information, and an unspecified amount based on non-public information. Please refer to "Item 3. Legal Proceedings" for additional information.

Cytos Biotechnology Ltd.

On December 30, 2014, Arbutus Inc., our wholly owned subsidiary, entered into an exclusive, worldwide, sub-licensable (subject to certain restrictions with respect to licensed viral infections other than hepatitis) license to six different series of compounds from Cytos Biotechnology Ltd., or Cytos. The licensed compounds included Qbeta-derived virus-like particles that encapsulate TLR9, TLR7 or RIG-I agonists that may or may not be conjugated with antigens from the hepatitis virus or other licensed viruses. In partial consideration for this license, we would pay Cytos up to a total of $67 million for each of the six licensed compound series upon the achievement of specified development and regulatory milestones; for hepatitis and each additional licensed viral infection, up to a total of $110 million upon the achievement of specified sales performance milestones; and tiered royalty payments in the high-single to low-double digits, based upon the proportionate net sales of licensed products in any commercialized combination. In August 2016, we discontinued the TLR9 development program based on significant levels of research and analysis, and provided notice of termination of the license agreement with Cytos. This termination became effective in November 2016.

The Baruch S. Blumberg Institute and Drexel University

In February 2014, Arbutus Inc., our wholly owned subsidiary, entered into a license agreement with The Blumberg S. Blumberg Institute, or Blumberg, and Drexel University, or Drexel, that granted an exclusive (except as to certain know-how and subject to retained non-commercial research rights), worldwide, sub-licensable license to three different compound series: cccDNA inhibitors, capsid assembly inhibitors and HCC inhibitors.

In partial consideration for this license, Arbutus Inc. paid a license initiation fee of $150,000 and issued warrants to Blumberg and Drexel. No warrants were outstanding as at the date Arbutus merged with Arbutus Inc. Under this license agreement, Arbutus Inc. also agreed to pay up to $3.5 million in development and regulatory milestones per licensed compound series, up to $92.5 million in sales performance milestones per licensed product, and royalties in the mid-single digits based upon the proportionate net sales of licensed products in any commercialized combination. We are obligated to pay Blumberg and Drexel a double-digit percentage of all amounts received from the sub-licensees, subject to customary exclusions.

In November 2014, Arbutus Inc. entered into an additional license agreement with Blumberg and Drexel pursuant to which it received an exclusive (subject to retained non-commercial research rights), worldwide, sub-licensable license under specified patents and know-how controlled by Blumberg and Drexel covering epigenetic modifiers of cccDNA and STING agonists. In consideration for these exclusive licenses, Arbutus Inc. made an upfront payment of $50,000. Under this agreement, we will be required to pay up to $1.0 million for each licensed product upon the achievement of a specified regulatory milestone and a low single digit royalty, based upon the proportionate net sales of compounds covered by this intellectual property in any commercialized combination. We are also obligated to pay Blumberg and Drexel a double-digit percentage of all amounts received from its sub-licensees, subject to exclusions.

License Agreements between Enantigen and Blumberg and Drexel

In October 2014, Arbutus Inc., our wholly owned subsidiary, acquired all of the outstanding shares of Enantigen Therapeutics, Inc., or Enantigen, pursuant to a stock purchase agreement. Through this transaction, Arbutus Inc. acquired a HBV surface antigen secretion inhibitor program and a capsid assembly inhibitor program, each of which are now assets of Arbutus, following our merger with Arbutus Inc.

Under the stock purchase agreement, we agreed to pay up to a total of $21.0 million to Enantigen's selling stockholders upon the achievement of specified development and regulatory milestones, for the first two products that contain either a capsid compound, or a HBV surface antigen compound that is covered by a patent acquired under this agreement; or a capsid compound from an agreed upon list of compounds. The amount paid could be up to a total of $102.5 million in sales performance milestones in connection with the sale of the first commercialized product by us for the treatment of HBV, regardless of whether such product is based upon assets acquired under this agreement; and low single digit royalty on net sales of such first commercialized HBV product, up to a maximum royalty payment of $1.0 million that, if paid, would be offset against our milestone payment obligations.

Under the stock purchase agreement, we also agreed that Enantigen would fulfill its obligations as they relate to the three patent license agreements with Blumberg and Drexel. Pursuant to each patent license agreement, Enantigen is obligated to pay Blumberg and Drexel up to approximately $500,000 in development and regulatory milestones per licensed product, royalties in the low single digits, and a percentage of revenue it receives from its sub-licensees.

Research Collaboration and Funding Agreement with Blumberg

In October 2014, Arbutus Inc., our wholly owned subsidiary, entered into a research collaboration and funding agreement with Blumberg under which we will provide $1,000,000 per year of research funding for three years, renewable at our option for an additional three years, for Blumberg to conduct research projects in HBV and liver cancer. Blumberg has exclusivity obligations to us with respect to HBV research funded under the agreement. In addition, we have the right to match any third party offer to fund HBV research that falls outside the scope of the research being funded under the agreement. Blumberg has granted us the right to obtain an exclusive, royalty bearing, worldwide license to any intellectual property generated by any funded research project. If we elect to exercise the right to obtain such a license, we will have a specified period of time to negotiate and enter into a mutually agreeable license agreement with Blumberg. This license agreement will include the following pre-negotiated upfront, milestone, and royalty payments: an upfront payment in the amount of $100,000; up to $8,100,000 upon the achievement of specified development and regulatory milestones; up to $92,500,000 upon the achievement of specified commercialization milestones; and royalties at a low single to mid-single digit rates based upon the proportionate net sales of licensed products from any commercialized combination.

On June 5, 2016, we entered into an amended and restated research collaboration and funding agreement with Blumberg, primarily to: (i) increase the annual funding amount to Blumberg from $1,000,000 to $1,100,000; (ii) extend the initial term through to October 29, 2018; (iii) provide an option for us to extend the term past October 29, 2018 for two additional one year terms; and (iv) expand our exclusive license under the agreement to include the sole and exclusive right to obtain and exclusive, royalty-bearing, worldwide, and all-fields license under Blumberg's rights in certain other inventions described in the agreement.

NeuroVive Pharmaceutical AB

In September 2014, Arbutus Inc. entered into a license agreement with NeuroVive that granted them an exclusive, worldwide, sub-licensable license to develop, manufacture and commercialize, for the treatment of HBV, oral dosage form sanglifehrin based cyclophilin inhibitors (including OCB-030). In 2015, we discontinued the OCB-030 development program based on significant research and analysis. In July 2016, we provided NeuroVive with a notice of termination of the license agreement. The parties agreed to terminate the agreement in October 2016.

Financial Information

For financial information about our Company, please see Item 8. Financial Statements and Supplementary Data.

Patents and Proprietary Rights

Our commercial success depends in part on our ability to obtain and maintain proprietary protection for our drug candidates, novel discoveries, product development technologies and other know-how, to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing or in licensing U.S. and foreign patents and patent applications related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on trademarks, trade secrets, know how, continuing technological innovation and potential in licensing opportunities to develop and maintain our proprietary position.

In addition to our proprietary expertise, we own a portfolio of patents and patent applications directed to HBV cccDNA formation inhibitors, HBV core/capsid protein assembly inhibitors, HBV surface antigens secretion inhibitors, HBV cccDNA epigenetic modifiers, STING agonists, LNP inventions, LNP compositions for delivering nucleic acids such as mRNA and siRNA, the formulation and manufacture of LNP-based pharmaceuticals, chemical modification of RNAi molecules, and RNAi drugs and processes directed at particular disease indications. A large number of patent applications filed with the US and European Patent Offices have been granted. In the US our patents might be challenged by interference or opposition proceedings. In Europe, upon grant, a period of nine months is allowed for notification of opposition to such granted patents. If our patents are subjected to interference or opposition proceedings, we would incur significant costs to defend them. Further, our failure to prevail in any such proceedings could limit the patent protection available to our therapeutic HBV programs or RNAi platform, including our product candidates.

We have a portfolio of around 125 patent families, in the U.S. and abroad, that are directed to our therapeutic HBV product candidates and various aspects of LNPs and LNP formulations. The portfolio includes over 100 issued patents throughout the world, and an extensive portfolio of pending patent applications, including the following patents and applications in the United States and Europe (1):

Subject Matter	Status	Expiration Date*
LNP Compositions and Methods of Use (siRNA)	U.S. Pat. No. 7,982,027; applications pending in other jurisdictions	2024
LNP Compositions (interferingRNA)	U.S. Pat. No. 7,799,565; patents issued in other jurisdictions	2025
LNP Compositions (Nucleic Acid)	U.S. Pat. Nos. 8,058,069; 8,492,359 and 8,822,668; applications pending in other jurisdictions	2029
LNP Compositions and Methods of Use (PLK-1)	U.S. Pat. No.8,283,333; applications pending in other jurisdictions	2030
LNP Compositions (Nucleic Acid)	U.S. Pat. No. 9,006,417	2031
LNP Manufacturing Process	U.S. Pat. Nos. 7,901,708 and 8,329,070; European Pat. Nos. 1519714 and 2338478; application pending in the U.S.	2023
LNP Manufacturing Process	U.S. Pat. No. 9,005,654; application pending in Europe	2026
Lipid Compositions	U.S. Pat. No. 7,745,651; European Pat. No. 1781593; application pending in the U.S.	2025
Lipid Compositions	U.S. Pat. Nos. 7,803,397 and 8,936,942; European Pat. No. 1664316	2024
Modified siRNA Compositions	U.S. Pat. Nos. 8,101,741, 8,188,263 and 9,074,208; applications pending in other jurisdictions	2026
Modified siRNA Compositions	U.S. Pat. No. 7,915,399	2027
siRNA and LNP Compositions (Ebola Virus)	U.S. Pat. No. 7,838,658	2026
siRNA and LNP Compositions and Methods of Treatment (Ebola Virus)	U.S. Pat. No. 8,716,464	2030
siRNA and LNP Compositions (PLK1)	U.S. Pat. No. 9,006,191; European Pat. No. 2238251	2028
Immunostimulatory Compositions, Methods of Use and Production	U.S. Pat. No. 8,691,209; European Pat. No. 1450856	2022
siRNA and LNP Compositions (HBV)	Patent applications pending in U.S. and other jurisdictions	2035
HBV Capsid Assembly Inhibitor Compositions and Methods of Treatment	Patent applications pending in U.S. and other jurisdictions	2032
Non-Liposomal Systems For Nucleic Acid Delivery	U.S. Pat. No. 9,518,272	2031
Lipid Compositions For Nucleic Acid Delivery	U.S. Pat. No. 9,504,651	2023

(1) Patent information current as of March 6, 2018.

* Once issued, the term of a US patent first filed after mid-1995 generally extends until the 20th anniversary of the filing date of the first non-provisional application to which such patent claims priority. It is important to note, however, that the United States Patent & Trademark Office, or USPTO, sometimes requires the filing of a Terminal Disclaimer during prosecution, which may shorten the term of the patent. On the other hand, certain patent term adjustments may be available based on USPTO delays during prosecution. Similarly, in the pharmaceutical area, certain patent term extensions may be available based on the history of the drug in clinical trials. We cannot predict whether or not any such adjustments or extensions will be available or the length of any such adjustments or extensions.

Scientific Advisers

We seek advice from our scientific advisory board, which consists of a number of leading scientists and physicians, on scientific and medical matters. The current members of our scientific advisory board are:

Name	Position(s)/Institutional Affiliation(S)
Adrian Di Bisceglie, MD	Professor of Internal Medicine and Chairman of the Department of Medicine at St Louis University, St Louis University School of Medicine, Chief of Hepatology
Charlie Rice, Ph.D.	Maurice and Corinne Greenberg Professor in Virology, Rockefeller University
Scott Biller, Ph.D.	Chief Scientific Officer at Agios Pharmaceuticals
Ulrike Protzer, Ph.D.	Director, Institute of Virology, Technische Universität München / Helmholtz Zentrum München - German Center for Environmental Health
Fabien Zoulim, MD, Ph.D.	Professor of Medicine, Lyon University, Head of Hepatology Department, Hospices Civils de Lyon
Kyong-Mi Chang	Associate Professor of Medicine, Division of Gastroenterology, University of Pennsylvania Perelman School of Medicine

Site Consolidation

On February 8, 2018, we announced a site consolidation and organizational restructuring to better align our HBV business in Warminster, PA. These organizational changes are expected to result in increased efficiency, a more flexible variable cost structure, and additional preservation of our cash reserves. Our LNP technology group will remain intact.

To achieve this alignment, we will reduce our global workforce by approximately 35% and plan to close our Burnaby, BC facility. We will incur restructuring costs related to one-time employee termination benefits, employee relocation costs, and site closure costs currently estimated to be $5.0 million, which will be primarily paid in cash in the second quarter of 2018.

On February 14, 2018, we announced that we have entered into an exclusivity agreement with Roivant (Exclusivity Agreement) providing for a period that expires on March 15, 2018. Pursuant to the Exclusivity Agreement, during this period, we agree to negotiate with Roivant, on an exclusive basis, the terms and conditions of a proposal to jointly develop our LNP and GalNAc technologies, There are no assurances that we will reach an agreement with Roivant regarding any such transaction or that any such transaction will be consummated.

As a result of our site consolidation we expect to reduce our workforce by approximately 31%.

Employees

At December 31, 2017, Arbutus had 130 employees, 92 of whom were engaged in research and development. None of our employees are represented by a labor union or covered by a collective bargaining agreement, nor have we experienced any work stoppages. We believe that relations with our employees are good.

Corporate Information

Arbutus Biopharma Corporation (“Arbutus”, “we”, “us”, and “our”) is a publicly traded industry-leading therapeutic solutions company focused on discovering, developing and commercializing a cure for patients suffering from chronic HBV infection.

Arbutus was incorporated pursuant to the British Columbia Business Corporations Act, or BCBCA, on October 6, 2005, and commenced active business on April 30, 2007, when Arbutus and its parent company, Inex Pharmaceuticals Corporation, or Inex, Inex, were reorganized under a statutory plan of arrangement (the Plan of Arrangement) completed under the provisions of the BCBCA. The Plan of Arrangement saw Inex’s entire business transferred to and continued by Arbutus.

On March 4, 2015, we completed a business combination pursuant to which Arbutus Inc. (formerly known as OnCore Biopharma, Inc., or OnCore), became our wholly-owned subsidiary. This combined company intends to focus on developing a curative regimen for HBV patients by combining multiple therapeutic approaches.

Effective July 31, 2015, our corporate name changed from Tekmira Pharmaceuticals Corporation to Arbutus Biopharma Corporation. Also effective July 31, 2015, the corporate name of our wholly owned subsidiary, OnCore Biopharma, Inc. changed to Arbutus Biopharma, Inc. (“Arbutus Inc.”). We have two wholly owned subsidiary: Arbutus Inc.and Protiva Biotherapeutics Inc. (“Protiva”). Effective January 1, 2018, Protiva was amalgamated with Arbutus. Unless stated otherwise or the context otherwise requires, references herein to “Arbutus”, “we”, “us” and “our” refer to Arbutus Biopharma Corporation, and, unless the context requires otherwise, one or more subsidiaries through which we conduct business.

Arbutus' head office and principal place of business is located at 100-8900 Glenlyon Parkway, Burnaby, British Columbia, Canada, V5J 5J8 (telephone: (604) 419-3200). The Company's registered and records office is located at 700 West Georgia St, 25th Floor, Vancouver, British Columbia, Canada, V7Y 1B3. Arbutus has US operations located at 701 Veterans Circle, Warminster, Pennsylvania, USA, 18974.

Investor Information

We are a reporting issuer in Canada under the securities laws of each of the Provinces of Canada. Arbutus' common shares trade on the Nasdaq Global Market under the symbol "ABUS". We maintain a website at http://www.arbutusbio.com. The information on our website is not incorporated by reference into this annual report on Form 10-K and should not be considered to be a part of this annual report on Form 10-K. Our website address is included in this annual report on Form 10-K as an inactive technical reference only. Our reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, including our annual reports on Form 10-K (annual reports on Form 20-F up to year ended December 31, 2012), our quarterly reports on Form 10-Q (quarterly reports on Form 6-K up to quarter-ended September 30, 2013) and our current reports on Form 8-K, and amendments to those reports, are accessible through our website, free of charge, as soon as reasonably practicable after these reports are filed electronically with, or otherwise furnished to, the SEC. We also make available on our website the charters of our audit committee, executive compensation and human resources committee and corporate governance and nominating committee, whistleblower policy, insider trading policy, corporate disclosure policy, related persons transactions policy and majority voting policy, as well as our code of business conduct and ethics for directors, officers and employees. In addition, we intend to disclose on our web site any amendments to, or waivers from, our code of business conduct and ethics that are required to be disclosed pursuant to the SEC rules.

You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains reports, proxy and information statements, and other information regarding Arbutus and other issuers that file electronically with the SEC. The SEC's website address is http://www.sec.gov.

Executive Officers of the Registrant

Set forth below is information about our executive officers, as of March 15, 2018.

Name	Age	Position(s)
Mark Murray	69	President and Chief Executive Officer, and Director
Michael Sofia	60	Chief Scientific Officer
William Symonds	50	Chief Development Officer and Director
Peter Lutwyche	52	Chief Technology Officer
Elizabeth Howard	64	Executive Vice President and General Counsel
Koert VandenEnden[1]	39	Interim Chief Financial Officer

(1) Bruce Cousins' employment with the Company ended on February 16, 2018. Koert VandenEnden has been appointed interim Chief Financial Officer and we are searching for a permanent CFO.

Dr. Mark Murray has served as our President, Chief Executive Officer and Director since May 2008, when Dr. Murray joined Arbutus in connection with the closing of the business combination between Arbutus and Protiva. He previously was the President and CEO and founder of Protiva since its inception in the summer of 2000. Dr. Murray has over 20 years of experience in both the R&D and business development and management facets of the biotechnology industry. Dr. Murray held senior management positions at ZymoGenetics and Xcyte Therapies prior to joining Protiva. Since entering the biotechnology industry, Dr. Murray has successfully completed numerous and varied partnering deals, directed successful product development programs, been responsible for strategic planning programs, raised over $30 million in venture capital and executed extensive business development initiatives in the U.S., Europe and Asia. During his R&D career, Dr. Murray worked extensively on three programs that resulted in FDA approved drugs, including the first growth factor protein approved for human use, a program he led for several years following its discovery. Dr. Murray obtained his Ph.D. in Biochemistry from the University of Oregon Health Sciences University and was a Damon Runyon-Walter Winchell post-doctoral research fellow for three years at the Massachusetts Institute of Technology.

Dr. Michael Sofia has served as our Chief Scientific Officer since our acquisition of OnCore Biopharma, Inc. Dr. Sofia has won the Lasker-Debakey Clinical Medical Research Award for his outstanding discovery, contribution, and achievement in the field of medicine. Dr. Sofia has also won the Economist's 2015 Innovation Award in the Bioscience category for developing a rapid cure for hepatitis C virus infection (HCV). Dr. Sofia was one of OnCore Biopharma's co-founders and served as its Chief Scientific Officer and Head of Research and Development since July 2014. He previously served as President and a member of its board of directors from May 2012 to August 2014. Since April 2012, Dr. Sofia has been a professor at the Baruch S. Blumberg Institute and since March 2013, Dr. Sofia has been an adjunct professor at the Drexel University School of Medicine. Previously, Dr. Sofia was the Senior Vice-President, Chemistry, Site Head and then Senior Advisor at Gilead Sciences, Inc. from January 2012 to December 2012. Prior to that, Dr. Sofia was the Senior Vice-President, Chemistry at Pharmasset, Inc. from August 2005 to January 2012 where he was responsible for the discovery of sofosbuvir, which ultimately resulted in the acquisition of Pharmasset by Gilead for $11 billion. From 1999 to 2005, Dr. Sofia served as a Group Director, New Leads Chemistry at Bristol-Myers Squibb. From 1993 to 1999, Dr. Sofia established and directed the research programs at Transcell Technologies, first as Director of Chemistry and then as Vice-President of Research. Dr. Sofia received his B.A. degree from Cornell University, his Ph.D. degree from the University of Illinois at Urbana-Champaign and was an NIH postdoctoral fellow at Columbia University.

Dr. William Symonds has served as our Chief Development Officer since March 2015. Dr. Symonds has served as a director of Arbutus and previously OnCore since August 2014 and as its Chief Development Officer since March 2015. Dr. Symonds is also currently Chief Development Officer at Roivant Sciences, Inc. Prior to that, Dr. Symonds served as Vice-President, Liver Disease Therapeutic Area at Gilead Sciences, Inc. from February 2012 until April 2014, and was the Senior Vice-President, Clinical Pharmacology and Translational Medicine at Pharmasset, Inc. from 2007 to January 2012. From 1993 to 2007, Dr. Symonds held various positions of increasing responsibility at GlaxoSmithKline, most recently as Director, Antiviral Clinical Pharmacology and Discovery Medicine. Dr. Symonds received his Doctor of Pharmacy degree from Campbell University and completed a fellowship in clinical pharmacokinetics at the Clinical Pharmacokinetics Laboratory in Buffalo, New York.

Dr. Peter Lutwyche has served as our Chief Technology Officer since 2015. Dr. Lutwyche's responsibilities at Arbutus include manufacturing, process development and quality control for all Arbutus product candidates, as well as supporting Arbutus' collaborative partners as they advance products that utilize Arbutus's technology. Previously Dr. Lutwyche held various positions up to Director, Pharmaceutical Development at QLT Inc. from 1998 to 2008. During his tenure at QLT, Dr. Lutwyche contributed to the development and commercialization of Visudyne as well as leading manufacturing and chemistry efforts for numerous pre-clinical and clinical stage products. Prior to QLT, he was a research scientist at Inex Pharmaceuticals Corporation working with lipid-based formulations of nucleic acids and antibiotics. Dr. Lutwyche holds a Ph.D. in Chemistry from the University of British Columbia.

Dr. Elizabeth Howard serves as our Executive Vice President and General Counsel. Dr. Howard has been practicing law for more than 20 years. Prior to joining Arbutus in March 2016, she was an intellectual property partner at Orrick, where she co-chaired Orrick's life sciences practice focusing on patent infringement litigation. Her practice also included trade secrets disputes and handling anti-counterfeiting matters in the pharmaceutical industry. In addition to litigating in numerous federal district courts and California state courts, Dr. Howard has appeared before the U.S. Patent and Trademark Office in interference proceedings, arbitrated before numerous tribunals, and litigated before the U.S. International Trade Commission (ITC). Dr. Howard also served as a deputy district attorney in the county of Santa Clara. Additionally, Dr. Howard counseled clients in negotiation and drafting of agreements in licensing or other technology transactions. She also speaks and publishes regularly on intellectual property matters affecting the life sciences industry. Dr. Howard has been listed as a "leading lawyer" in "PLC Which Lawyer" for her litigation successes in life sciences, and named to the Daily Journal's list of "Top 75 IP Litigators in California" in 2013. Before law school, Dr. Howard was an NSF Plant Molecular Biology Postdoctoral Fellow at the CSIRO Division of Plant Industry in Canberra, Australia, and a Research Geneticist at the University of California, Berkeley. Dr. Howard obtained her doctorate with Dr. Elizabeth Blackburn (2009 Nobel Laureate, Physiology or Medicine). Dr. Howard holds a B.A. with honors from the University of California, Santa Barbara, a Ph.D. in Molecular Biology from the University of California, Berkeley, a J.D. from the University of California, Hastings College of the Law, and is a member of the United States Patent Bar.

Mr. Koert VandenEnden joined Arbutus as its Vice President of Finance in October 2016 and has since become the Company's Interim CFO as of February 2018. He brings to Arbutus extensive global financial, technical and business experience from his tenure at a global public accounting firm followed by senior financial leadership roles in industry. Before joining Arbutus, Mr. VandenEnden was the Director of Finance with Global Relay, having joined in 2013. He led the accounting and finance team and oversaw the company's financial operations, including operational accounting, long range financial planning, and various financial planning and compliance matters. Prior to that, Mr. VandenEnden was a Chartered Accountant with KPMG LLP for over 12 years. Mr. VandenEnden is a CPA and CA, and holds a BComm with Honors from the University of British Columbia.

Item 1A. Risk Factors

Our business is subject to numerous risks. We caution you that the following important factors, among others, could cause our actual results to differ materially from those expressed in forward-looking statements made by us or on our behalf in filings with the SEC and Canadian securities regulators, press releases, communications with investors and oral statements. All statements other than statements relating to historical matters should be considered forward-looking statements. When used in this annual report, the words "believe," "expect," "plan," "anticipate," "estimate," "predict," "may," "could," "should," "intend," "will," "target," "goal" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these words. Any or all of our forward-looking statements in this annual report on Form 10-K and in any other public statements we make may turn out to be wrong. They can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors mentioned in the discussion below will be important in determining future results. Consequently, no forward-looking statement can be guaranteed. Actual future results may vary materially from those anticipated in forward-looking statements. We explicitly disclaim any obligation to update any forward-looking statements to reflect events or circumstances that arise after the date hereof, unless required by law. You are advised, however, to consult any further disclosure we make in our reports filed with the SEC and Canadian securities regulators.

Risks Related to Our Business

We are in the early stages of our development, there is a limited amount of information about us upon which you can evaluate our Hepatitis B (HBV) candidates and other prospects as well as our delivery technologies.

We have not begun to market or generate revenues from the commercialization of any HBV products and our other delivery technologies. We have only a limited history upon which one can evaluate our business and prospects as our therapeutic products are still at an early stage of development and thus we have limited experience and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical area. For example, to execute our business plan, we will need to successfully:

- execute research and development activities using our HBV technology; and technologies involved in the development of HBV therapeutics;
- build, maintain and protect a strong intellectual property portfolio;
- gain acceptance for the development and commercialization of any product we develop;
- develop and maintain successful strategic relationships; and
- manage our spending and cash requirements as our expenses are expected to increase due to research and preclinical work, clinical trials, regulatory approvals, and commercialization and maintaining our intellectual property portfolio.

If we are unsuccessful in accomplishing these objectives, we may not be able to develop products, raise capital, expand our business or continue our operations. The approach we are taking to discover and develop novel drug products is unproven and may never lead to marketable drug products.

We intend to concentrate our internal research and development efforts in the future primarily on the discovery and development of therapeutics targeting chronic HBV in order to ultimately develop a cure for the disease. Our future success depends in part on the successful development of these therapeutics. Our approach to the treatment of HBV is unproven, and we do not know whether we will be able to develop any drugs of commercial value.

There is no known cure for HBV. Any compounds that we develop may not effectively address HBV persistence. Even if we are able to develop compounds that address one or more of these key factors, targeting these key factors has not been proven to cure HBV. If we cannot develop compounds to achieve our goal of curing HBV internally, we may be unable to acquire additional drug candidates on terms acceptable to us, or at all. Even if we are able to acquire or develop drug candidates that address one of these mechanisms of action in preclinical studies, we may not succeed in demonstrating safety and efficacy of the drug candidate in human clinical trials. If we are unable to identify suitable compounds for preclinical and clinical development, we will not succeed in realizing our goal of a cure for HBV.

We also intend to continue research and development efforts on RNAi technology and products based on RNAi technology as well as capsid inhibitors and other assets. While RNAi technology is based on a naturally occurring process that takes place inside cells, which can suppress the production of specific proteins, and has the potential to generate therapeutic drugs that take advantage of that process, neither we nor any other company has received regulatory approval to market a therapeutic product based on RNAi technology. The scientific discoveries that form the basis for our efforts to discover and develop new products are relatively new. While there are a number of RNAi therapeutics in development, very few product candidates based on these discoveries have ever been tested in humans and there can be no assurance that any RNAi therapeutic product will be approved for commercial use.

If we are not successful in developing a product with our research and development efforts, we may be required to change the scope and direction of our product development activities. In that case, we may not be able to identify and implement successfully an alternative product development strategy.

We expect to depend in part on our existing collaborators for a significant portion of our revenues and to develop, conduct clinical trials with, obtain regulatory approvals for, and manufacture, market and sell some of our product candidates. If these collaborations are unsuccessful, or anticipated milestone payments are not received, our business could be adversely affected.

We expect that we will depend in part on our licensing agreements with Alnylam, Gritstone, and Spectrum to provide revenue to fund our operations, especially in the near term. Furthermore, our strategy is to enter into various additional arrangements with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing and commercialization of our products. We may be unable to continue to establish such collaborations, and any collaborative arrangements we do establish may be unsuccessful, or we may not receive milestone payments as anticipated.

Should any collaborative partner fail to develop or ultimately successfully commercialize any of the products to which it has obtained rights, our business may be adversely affected. In addition, once initiated, there can be no assurance that any of these collaborations will be continued or result in successfully commercialized products. Failure of a collaborative partner to continue funding any particular program could delay or halt the development or commercialization of any products arising out of such program. In addition, there can be no assurance that the collaborative partners will not pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by our programs.

We expect to spend substantial amounts to acquire additional drug candidates, to conduct further research and development and preclinical testing and clinical trials of our drug candidates, to seek regulatory approvals for our drug candidates and to launch and commercialize any drug candidates for which we receive regulatory approval. These expenditures will include costs associated with our and our subsidiary’s licensing agreements with Blumberg or Drexel. Under the terms of these agreements, we are obligated to make significant cash payments upon the achievement of specified development, regulatory and sales performance milestones, as well as royalty payments in connection with the sale of licensed products, to our licensors.

We rely on third parties to conduct our clinical trials, and if they fail to fulfill their obligations, our development plans may be adversely affected.

We rely on independent clinical investigators, contract research organizations and other third-party service providers to assist us in managing, monitoring and otherwise carrying out our clinical trials. We have contracted with, and we plan to continue to contract with, certain third parties to provide certain services, including site selection, enrollment, monitoring and data management services. Although we depend heavily on these parties, we do not control them and therefore, we cannot be assured that these third parties will adequately perform all of their contractual obligations to us. If our third-party service providers cannot adequately fulfill their obligations to us on a timely and satisfactory basis or if the quality or accuracy of our clinical trial data is compromised due to failure to adhere to our protocols or regulatory requirements, or if such third parties otherwise fail to meet deadlines, our development plans may be delayed or terminated.

We have no sales, marketing or distribution experience and would have to invest significant financial and management resources to establish these capabilities.

We have no sales, marketing or distribution experience. We currently expect to rely heavily on third parties to launch and market certain of our products, if approved. However, if we elect to develop internal sales, distribution and marketing capabilities, we will need to invest significant financial and management resources. For products where we decide to perform sales, marketing and distribution functions ourselves, we could face a number of additional risks, including:

- we may not be able to attract and build a significant marketing or sales force;
- the cost of establishing a marketing or sales force may not be justifiable in light of the revenues generated by any particular product; and
- our direct sales and marketing efforts may not be successful.

If we are unable to develop our own sales, marketing and distribution capabilities, we will not be able to successfully commercialize our products, if approved, without reliance on third parties.

We will rely on third-party manufacturers to manufacture our products (if approved) in commercial quantities, which could delay, prevent or increase the costs associated with the future commercialization of our products.

Our product candidates have not yet been manufactured for commercial use. If any of our product candidates become approved for commercial sale, in order to supply our or our collaborators' commercial requirements for such an approved product, we will need to establish third-party manufacturing capacity. Any third-party manufacturing partner may be required to fund capital improvements to support the scale-up of manufacturing and related activities. The third-party manufacturer may not be able to establish scaled manufacturing capacity for an approved product in a timely or economic manner, if at all. If a manufacturer is unable to provide commercial quantities of such an approved product, we will have to successfully transfer manufacturing technology to a new manufacturer. Engaging a new manufacturer for such an approved product could require us to conduct comparative studies or utilize other means to determine bioequivalence of the new and prior manufacturers' products, which could delay or prevent our ability to commercialize such an approved product. If any of these manufacturers is unable or unwilling to increase its manufacturing capacity or if we are unable to establish alternative arrangements on a timely basis or on acceptable terms, the development and commercialization of such an approved product may be delayed or there may be a shortage in supply. Any inability to manufacture our products in sufficient quantities when needed would seriously harm our business.

Manufacturers of our approved products, if any, must comply with current good manufacturing practices (cGMP) requirements enforced by the FDA and Health Canada through facilities inspection programs. These requirements include quality control, quality assurance, and the maintenance of records and documentation. Manufacturers of our approved products, if any, may be unable to comply with these cGMP requirements and with other FDA, Health Canada, state, and foreign regulatory requirements. We have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any quantities supplied is compromised due to our manufacturer's failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products, which would seriously harm our business.

Risks Related to Our Financial Results and Need for Financing

We will require substantial additional capital to fund our operations. If additional capital is not available, we may need to delay, limit or eliminate our research, development and commercialization processes and may need to undertake a restructuring.

Within the next several years, substantial additional funds will be required to continue with the active development of our pipeline products and technologies. In particular, our funding needs may vary depending on a number of factors including:

- revenues earned from our partners, including Alnylam, Gritstone, and Spectrum;
- closure costs associated with our organizational restructuring and expected savings from gains in efficiency:
- the extent to which we continue the development of our product candidates or form collaborative relationships to advance our products;
- our decisions to in-license or acquire additional products or technology for development;
- our ability to attract and retain corporate partners, and their effectiveness in carrying out the development and ultimate commercialization of our product candidates;
- whether batches of drugs that we manufacture fail to meet specifications resulting in delays and investigational and remanufacturing costs;
- the decisions, and the timing of decisions, made by health regulatory agencies regarding our technology and products;
- competing technological and market developments;
- prosecuting and enforcing our patent claims and other intellectual property rights; and
- impact of the potential spin out of certain of Arbutus' assets.

We will seek to obtain funding to maintain and advance our business from a variety of sources including public or private equity or debt financing, collaborative arrangements with pharmaceutical and biotechnology companies, licensing our LNP technology, and government grants and contracts. There can be no assurance that funding will be available at all or on acceptable terms to permit further development of our products especially in light of the current difficult climate for investment in biotechnology companies.

If adequate funding is not available, we may be required to delay, reduce or eliminate one or more of our research or development programs or reduce expenses associated with non-core activities. We may need to obtain funds through arrangements with collaborators or others that may require us to relinquish most or all of our rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise seek if we were better funded. Insufficient financing may also mean failing to prosecute our patents or relinquishing rights to some of our technologies that we would otherwise develop or commercialize.

We have incurred losses in nearly every year since our inception and we anticipate that we will not achieve sustained profits for the foreseeable future. To date, we have had no product revenues.

With the exception of the years ended December 31, 2006 and December 31, 2012, we have incurred losses each fiscal year since inception until December 31, 2017 and have not received any revenues other than from research and development collaborations, royalties, license fees and milestone payments. From inception to December 31, 2017, we have an accumulated net deficit of $738.1 million. As we continue our research and development and clinical trials and seek regulatory approval for the sale of our product candidates, we do not expect to attain sustained profitability for the foreseeable future. We do not expect to achieve sustained profits until such time as strategic alliance payments, product sales and royalty payments, if any, generate sufficient revenues to fund our continuing operations. We cannot predict if we will ever achieve profitability and, if we do, we may not be able to remain consistently profitable or increase our profitability.

We are subject to risks associated with currency fluctuations, and changes in foreign currency exchange rates could impact our results of operations.

Prior to January 1, 2016, our functional currency was the Canadian dollar. On January 1, 2016, our functional currency changed from the Canadian dollar to the U.S. dollar based on our analysis of the changes in the primary economic environment in which we operate. As a result, changes in the exchange rate between the Canadian dollar and the U.S. dollar could materially impact our reported results of operations and distort period to period comparisons. In particular, to the extent that foreign currency-denominated (i.e., non-U.S. dollar) monetary assets do not equal the amount of our foreign currency denominated monetary liabilities, foreign currency gains or losses could arise and materially impact our financial statements. As a result of such foreign currency fluctuations, it could be more difficult to detect underlying trends in our business and results of operations. In addition, to the extent that fluctuations in currency exchange rates cause our results of operations to differ from our expectations or the expectations of our investors, the trading price of our Common Shares could be adversely affected.

From time to time, we may engage in exchange rate hedging activities in an effort to mitigate the impact of exchange rate fluctuations. Any hedging technique we implement may fail to be effective. If our hedging activities are not effective, changes in currency exchange rates may have a more significant impact on our financial results and the trading price of our common shares.

Changes in tax laws or exposures to additional tax liabilities could negatively impact our operating results.

Changes in tax laws or regulations could negatively impact our effective tax rate and results of operations. On December 22, 2017, the U.S. enacted The Tax Cuts and Jobs Act (the TCJA). The TCJA introduces significant changes to U.S. corporate income tax law that will have a meaningful impact on our provision for income taxes. Such changes include, among other things, reducing the marginal U.S. corporate income tax rate from 35 percent to 21 percent, introducing a capital investment deduction, limiting the current deduction for net interest expense, limiting the use of net operating losses to offset future taxable income and making extensive changes to the way in which income earned outside the U.S. is taxed in the U.S. Accounting for the income tax effects of the TCJA requires significant judgments to be made in interpreting its provisions. Due to the timing of the enactment and the complexity involved in applying the provisions of the TCJA, we made reasonable estimates of the effects and recorded provisional amounts in the financial statements for fiscal year 2017. These provisional amounts are based on the initial analysis of the TCJA. Anticipated guidance from the U.S. Treasury about implementing the TCJA, and the potential for additional guidance from the Securities and Exchange Commission or the Financial Accounting Standards Board related to the TCJA, may result in adjustments to these estimates which could materially affect our financial position and results of operations as well as the effective tax rate in the period in which the adjustments are made.

Risks Related to Managing Our Operations

Our planned reorganization, including a site consolidation and organizational restructuring, may cause disruptions in the operation of our business and may not yield the anticipated benefits.

On February 8, 2018 we announced a site consolidation and organizational restructuring to better align our HBV business in Warminster, PA. To achieve this alignment, we will reduce our global workforce by approximately 31% and plan to close our Burnaby facility. We will incur restructuring costs related to one-time employee termination benefits, employee relocation costs, and site closure costs currently estimated to be $5.0 million, which will be primarily paid in cash in the second quarter of 2018. The reorganization may negatively affect our current business operations, including disrupting clinical development and harming relationships with employees, existing or potential customers, and collaborators. Further, the restructuring may exceed estimated costs and may not follow the anticipated timeline. We may not experience the anticipated benefits of the restructuring to the extent expected.

If we are unable to attract and retain qualified key management, scientific staff, consultants and advisors, our ability to implement our business plan may be adversely affected.

We depend upon our senior executive officers as well as key scientific, management and other personnel. The competition for qualified personnel in the biotechnology field is intense. We rely heavily on our ability to attract and retain qualified managerial, scientific and technical staff. The loss of the service of any of the members of our senior management, including Dr. Mark Murray, our President and Chief Executive Officer, may adversely affect our ability to develop our technology, add to our pipeline, advance our product candidates and manage our operations. We recently experienced turnover in our Chief Financial Officer role and currently have an interim Chief Financial Officer in place. We will be searching for a new, permanent Chief Financial Officer which may prove difficult and may take an extended period of time due to the competition to hire from a limited pool of qualified candidates. This transition period may prove to be disruptive to our business and may inhibit our ability to execute our business plan efficiently. We do not carry key person life insurance on any of our employees.

We rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by other entities and may have commitments under consulting or advisory contracts with those entities that may limit their availability to us. If we are unable to continue to attract and retain highly qualified personnel, our ability to develop and commercialize our product candidates will be limited.

We may have difficulty managing our growth and expanding our operations successfully as we seek to evolve from a company primarily involved in discovery and preclinical testing into one that develops products through clinical development and commercialization.

As product candidates we develop enter and advance through clinical trials, we will need to expand our development, regulatory, manufacturing, clinical and medical capabilities or contract with other organizations to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various collaborators, suppliers and other organizations. Our ability to manage our operations and growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures. We may not be able to implement improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems or controls.

We could face liability from our controlled use of hazardous and radioactive materials in our research and development processes.

We use certain radioactive materials, biological materials and chemicals, including organic solvents, acids and gases stored under pressure, in our research and development activities. Our use of radioactive materials is regulated by the Canadian Nuclear Safety Commission and the U.S. Nuclear Regulatory Commission for the possession, transfer, import, export, use, storage, handling and disposal of radioactive materials. Our use of biological materials and chemicals, including the use, manufacture, storage, handling and disposal of such materials and certain waste products is regulated by a number of federal, state and local laws and regulations. Although we believe that our safety procedures for handling such materials comply with the standards prescribed by such laws and regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources. We are not specifically insured with respect to this liability.

Our business, reputation, and operations could suffer in the event of information technology system failures, such as a cybersecurity breach.

We are increasingly dependent on sophisticated software applications and computing infrastructure to conduct critical operations. Disruption, degradation, or manipulation of these applications and systems through intentional or accidental means could impact key business processes. Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, cybersecurity breaches and other forms of unauthorized access, as well as natural disasters, terrorism, war, and telecommunication and electrical failures. Such events could result in exposure of confidential information, the modification of critical data, and/or the failure or interruption of critical operations. For example, the loss of pre-clinical trial data or data from completed or ongoing clinical trials for our product candidates could result in delays in our regulatory filings and development efforts and significantly increase our costs. To the extent that any disruption or security breach will result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed. While we have implemented security measures, including controls over unauthorized access, our internal computer systems and those of our contractors and consultants are vulnerable to damage from these events. There can be no assurance that our efforts to protect data and systems will prevent service interruption or the loss of critical or sensitive information from our or third party providers’ databases or systems that could result in financial, legal, business or reputational harm to us or that our insurance would provide any or adequate coverage of any such loss.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial reports, which could have a material adverse effect on our stock price and our ability to raise capital.

A failure to maintain effective internal control over financial reporting or disclosure controls and procedures could adversely affect our ability to report our financial results accurately and on a timely basis, which could result in material misstatement in our financial statements, a loss of investor confidence in our financial reporting or adversely affect our access to sources of liquidity. Furthermore, because of the inherent limitations of any system of internal control over financial reporting, including the possibility of human error, the circumvention or overriding of controls and fraud, even effective internal controls may not prevent or detect all misstatements. Frequent or rapid changes in procedures, methodologies, systems and technology exacerbate the challenge of developing and maintaining a system of internal controls and can increase the cost and level of effort to develop and maintain such systems.

See Item 9A, "Controls and Procedures" in this Form 10-K for additional information and management's assessment of internal controls.

We rely on and will incur additional expense in connection with our research collaboration with Blumberg.

In June 2016, Arbutus Inc. entered into an amended agreement with Blumberg under which Arbutus Inc. will provide annual funding in the amount of $1.1 million per year through October 29, 2018, and which is renewable for two additional one year terms at our option, for Blumberg to conduct research projects in HBV and liver cancer pursuant to a research plan to be agreed upon by the parties. In exchange, Arbutus Inc. has the right to obtain an exclusive, royalty bearing, worldwide license to intellectual property generated by Blumberg in the course of the funded research and we believe that Blumberg's HBV research platform will continue to be a source of potentially novel hepatitis B targets, drug candidates, assays and other HBV specific technologies. As a result, we are dependent, in part, upon the success of Blumberg in performing its responsibilities under this research collaboration. Blumberg may not cooperate with us or perform its obligations under the agreement. We cannot control the amount and timing of Blumberg's resources that will be devoted to research and development activities related to our research collaboration. Further, development costs associated with our research projects may be difficult to anticipate and exceed our expectations. If funding is unable to continue to financially support the collaboration, if we do not obtain exclusive licenses from Blumberg to the resulting intellectual property, or if we fail to comply with our obligations under those license agreements, its development efforts may be materially harmed.

Risks Related to Development, Clinical Testing and Regulatory Approval of Our Product Candidates

If testing of a particular product candidate does not yield successful results, then we will be unable to commercialize that product candidate.

We must demonstrate our product candidates' safety and efficacy in humans through extensive clinical testing. Our research and development programs are at an early stage of development. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of any products, including the following:

- decreased demand for our product candidates;
- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- inability to commercialize our product candidates.

Although we currently have product liability insurance coverage for our clinical trials for expenses or losses, our insurance coverage is limited to $10 million per occurrence, and $10 million in the aggregate, and may not reimburse us or may not be sufficient to reimburse us for any or all expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. On occasion, large judgments have been awarded in class action lawsuits based on products that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to fall and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

The manufacture and sale of human therapeutic products are governed by a variety of statutes and regulations. There can be no assurance that our product candidates will obtain regulatory approval.

To obtain marketing approval, U.S. and Canadian laws require:

- controlled research and human clinical testing;
- establishment of the safety and efficacy of the product for each use sought;
- government review and approval of a submission containing manufacturing, pre-clinical and clinical data;
- adherence to Good Manufacturing Practice Regulations during production and storage; and
- control of marketing activities, including advertising and labeling.

The product candidates we currently have under development will require significant development, preclinical and clinical testing and investment of significant funds before their commercialization. Some of our product candidates, if approved, will require the completion of post-market studies. There can be no assurance that such products will be developed. The process of completing clinical testing and obtaining required approvals is likely to take a number of years and require the use of substantial resources. If we fail to obtain regulatory approvals, our operations will be adversely affected. Further, there can be no assurance that product candidates employing a new technology will be shown to be safe and effective in clinical trials or receive applicable regulatory approvals.

Other markets have regulations and restrictions similar to those in the U.S. and Canada. Investors should be aware of the risks, problems, delays, expenses and difficulties which we may encounter in view of the extensive regulatory environment which affects our business in any jurisdiction where we develop product candidates.

Research and development goals may not be achieved in the time frames that we publicly estimate, which could have an adverse impact on our business and could cause our stock price to decline.

We set goals, and make public statements regarding our expectations, regarding the timing of certain accomplishments, developments and milestones under our research and development programs. The actual timing of these events can vary significantly due to a number of factors, including, without limitation, the amount of time, effort and resources committed to our programs by us and any collaborators and the uncertainties inherent in the clinical development and regulatory approval process. As a result, there can be no assurance that we or any collaborators will initiate or complete clinical development activities, make regulatory submissions or receive regulatory approvals as planned or that we or any collaborators will be able to adhere to our current schedule for the achievement of key milestones under any of our programs. If we or any collaborators fail to achieve one or more of the milestones as planned, our business could be materially adversely affected and the price of our Common Shares could decline.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our drug candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could, among other things, prevent or delay marketing approval of our drug candidates, restrict or regulate post approval activities and affect our ability to profitably sell any products for which we obtain marketing approval.

For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or collectively the Affordable Care Act, was enacted to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Additionally, the Drug Supply Chain Security Act, enacted in 2013, imposed new obligations on manufacturers of pharmaceutical products related to product tracking and tracing.

Members of Congress and the Trump Administration have considered legislation to fundamentally change or repeal the Affordable Care Act. While Congress has not passed repeal legislation to date, the Tax Cuts and Jobs Act
(TCJA) includes a provision repealing the individual insurance coverage mandate included in the Affordable Care Act, effective January 1, 2019. Further, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the Affordable Care Act to waive, defer, grant exemptions from, or delay the implementation of any provision of the Affordable Care Act that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. On October 13, 2017, the President signed an Executive Order terminating the cost-sharing subsidies that reimburse insurers under the Affordable Care Act. Several state Attorneys General filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. In addition, the Centers for Medicare and Medicaid Services has recently proposed regulations that would give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the Affordable Care Act for plans sold through such marketplaces. Congress may consider other legislation to replace elements of the Affordable Care Act. The implications of the Affordable Care Act, its possible repeal, any legislation that may be proposed to replace the Affordable Care Act, or the political uncertainty surrounding any repeal or replacement legislation for our business and financial condition, if any, are not yet clear.

We cannot predict what healthcare reform initiatives may be adopted in the future. Further federal and state legislative and regulatory developments are likely, and we expect ongoing initiatives in the United States to increase pressure on drug pricing. Such reforms could have an adverse effect on anticipated revenues from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop drug candidates.

Legislative and regulatory proposals have also been made to expand post approval requirements and restrict sales and promotional activities for pharmaceutical products. Any healthcare reforms enacted in the future may, like the Affordable Care Act, be phased in over a number of years but, if enacted, could reduce our revenue, increase our costs, or require us to revise the ways in which we conduct business or put us at risk for loss of business. We are not sure whether additional legislative changes will be enacted, or whether the current regulations, guidance or interpretations will be changed, or what the impact of such changes on our business, if any, may be.

Coverage and adequate reimbursement may not be available for our drug candidates, which could make it difficult for us to sell our products profitably.

Market acceptance and sales of any drug candidates that we develop will depend in part on the extent to which reimbursement for these products and related treatments will be available from third party payors, including government health administration authorities and private health insurers. Third party payors decide which drugs they will pay for and establish reimbursement levels. Third party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. However, decisions regarding the extent of coverage and amount of reimbursement to be provided for each of our drug candidates will be made on a plan by plan basis. One payor's determination to provide coverage for a product does not assure that other payors will also provide coverage, and adequate reimbursement, for the product. Additionally, a third party payor's decision to provide coverage for a drug does not imply that an adequate reimbursement rate will be approved. Each plan determines whether or not it will provide coverage for a drug, what amount it will pay the manufacturer for the drug, and on what tier of its formulary the drug will be placed. The position of a drug on a formulary generally determines the copayment that a patient will need to make to obtain the drug and can strongly influence the adoption of a drug by patients and physicians. Patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Third party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Inadequate coverage and reimbursement may impact the demand for, or the price of, any product for which we obtain marketing approval. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize any drug candidates that we develop.

Additionally, there have been a number of legislative and regulatory proposals to change the healthcare system in the United States and in some foreign jurisdictions that could affect our ability to sell any future drugs profitably. These legislative and regulatory changes may negatively impact the reimbursement for any future drugs, following approval.

We are subject to U.S. and Canadian healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, fines, disgorgement, exclusion from participation in government healthcare programs, curtailment or restricting of our operations and diminished profits and future earnings.

Healthcare providers, physicians and others will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with healthcare providers, patients and third party payors will expose us to broadly applicable U.S. and Canadian fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and collaborative partners through which we market, sell and distribute any products for which we obtain marketing approval.

Efforts to ensure that our collaborations with third parties, and our business generally, will comply with applicable U.S. and Canadian healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental laws and regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs, contractual damages, reputational harm, disgorgement, curtailment or restricting of our operations, any of which could substantially disrupt our operations and diminish our profits and future earnings. If any of the physicians or other providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations.

Risks Related to Patents, Licenses and Trade Secrets

Other companies or organizations may assert patent rights that prevent us from developing or commercializing our products.

RNA interference and capsid inhibitors as well as our other novel HBV assets are relatively new scientific fields that have generated many different patent applications from organizations and individuals seeking to obtain patents in the field. These applications claim many different methods, compositions and processes relating to the discovery, development and commercialization of these therapeutic products. Because the field is so new, very few of these patent applications have been fully processed by government patent offices around the world, and there is a great deal of uncertainty about which patents will be issued, when, to whom, and with what claims. It is likely that there could be litigation and other proceedings, such as interference and opposition proceedings in various patent offices, relating to patent rights in RNAi, capsid inhibitors and other small molecule compounds targeted at HBV.

In addition, there are many issued and pending patents that claim aspects of RNAi trigger chemistry technology that we may need to apply to our product candidates. There are also many issued patents that claim genes or portions of genes that may be relevant for RNAi trigger drug products we wish to develop. Thus, it is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we will not be able to market products or perform research and development or other activities covered by these patents.

Our patents and patent applications may be challenged and may be found to be invalid, which could adversely affect our business.

Certain Canadian, U.S. and international patents and patent applications we own involve complex legal and factual questions for which important legal principles are largely unresolved. For example, no consistent policy has emerged for the breadth of biotechnology patent claims that are granted by the U.S. Patent and Trademark Office or enforced by the U.S. federal courts. In addition, the coverage claimed in a patent application can be significantly reduced before a patent is issued. Also, we face the following intellectual property risks:

- some or all patent applications may not result in the issuance of a patent;
- patents issued may not provide the holder with any competitive advantages;
- patents could be challenged by third parties;
- the patents of others, including Alnylam, could impede our ability to do business;
- competitors may find ways to design around our patents; and
- competitors could independently develop products which duplicate our products.

A number of industry competitors and institutions have developed technologies, filed patent applications or received patents on various technologies that may be related to or affect our business. Some of these technologies, applications or patents may conflict with our technologies or patent applications. Such conflict could limit the scope of the patents, if any, that we may be able to obtain or result in the denial of our patent applications. In addition, if patents that cover our activities are issued to other companies, there can be no assurance that we would be able to obtain licenses to these patents at a reasonable cost or be able to develop or obtain alternative technology. If we do not obtain such licenses, we could encounter delays in the introduction of products, or could find that the development, manufacture or sale of products requiring such licenses is prohibited. In addition, we could incur substantial costs in defending patent infringement suits brought against us or in filing suits against others to have such patents declared invalid. As publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain we or any licensor was the first creator of inventions covered by pending patent applications or that we or such licensor was the first to file patent applications for such inventions. Any future proceedings could result in substantial costs, even if the eventual outcomes are favorable. There can be no assurance that our patents, if issued, will be held valid or enforceable by a court or that a competitor's technology or product would be found to infringe such patents.

Our business depends, in part, on our ability to use RNAi technology that we have licensed or will in the future license from third parties, including Alnylam, and, if these licenses were terminated or if we were unable to license additional technology we may need in the future, our business will be adversely affected.

We currently hold licenses for certain technologies that are or may be applicable to our current and subsequent product candidates. These include a license to patents held or applied for by Alnylam and a license to UNA technology from Arcturus Therapeutics. The licenses are subject to termination in the event of a breach by us of the license, if we fail to cure the breach following notice and the passage of a cure period. The UBC license, which is sublicensed to Alnylam, is subject to termination with respect to one or more particular patents if we and Alnylam were to cease patent prosecution or maintenance activities with respect to such patent(s), or in the event of a breach by us of the license, if we fail to cure the breach following notice and the passage of a cure period. There can be no assurance that these licenses will not be terminated. We may need to acquire additional licenses in the future to technologies developed by others, including Alnylam. For example, Alnylam has granted us a worldwide license for the discovery, development and commercialization of RNAi products directed to thirteen gene targets (three exclusive and ten non-exclusive licenses). Licenses for the five non-exclusive targets and one exclusive target have already been granted. We have rights to select the gene targets for up to two more exclusive licenses and five more nonexclusive licenses from Alnylam, which would be made available to us only if they have not been previously selected by Alnylam or one of its other partners. This will limit the targets available for selection by us, and we may never be able to select gene targets or may be required to make our selection from gene targets that have minimal commercial potential. Furthermore, future license agreements may require us to make substantial milestone payments. We will also be obligated to make royalty payments on the sales, if any, of products resulting from licensed RNAi technology. For some of our licensed RNAi technology, we are responsible for the costs of filing and prosecuting patent applications. The termination of a license or the inability to license future technologies on acceptable terms may adversely affect our ability to develop or sell our products.

Our business depends, in part, on our ability to use the technology that we have licensed or will in the future license from third parties, including Blumberg, and, if these licenses were terminated or if we were unable to license additional technology we may need in the future, our business will be adversely affected.

We have licensed certain of our intellectual property from Blumberg. Our current technology licenses are important to our business and we expect to enter into additional licenses in the future. If we fail to comply with our obligations under these agreements or any future license agreements, we may be subject to a bankruptcy, or if we grant a sublicense in the future and our sublicense does not comply with our obligations under these agreements or becomes subject to a bankruptcy, the licensor may have the right to terminate the license, in which event we would not be able to develop or market products covered by the license or may face other penalties under the agreements, which could have a materially adverse effect on our business. In addition, applicable laws involving bankruptcy or similar proceeding by licensors in some jurisdictions outside the United States may provide the trustee or receiver in such proceeding with the right to set aside or otherwise terminate or seek to modify the license. Any termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or amended agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property and technologies that form the basis of our technology, which may then be in licensed by one or more of our competitors.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights which could have a material adverse effect on our business, financial condition and results of operations and could cause the market value of our Common Shares to decline.

There has been significant litigation in the biotechnology industry over contractual obligations, patents and other proprietary rights, and we may become involved in various types of litigation that arise from time to time. Involvement in litigation could consume a substantial portion of our resources, regardless of the outcome of the litigation. Counterparties in litigation may be better able to sustain the costs of litigation because they have substantially greater resources. If claims against us are successful, in addition to any potential liability for damages, we could be required to obtain a license, grant cross-licenses, and pay substantial milestones or royalties in order to continue to develop, manufacture or market the affected products. Involvement and continuation of involvement in litigation may result in significant and unsustainable expense, and divert management's attention from ongoing business concerns and interfere with our normal operations. Litigation is also inherently uncertain with respect to the time and expenses associated therewith, and involves risks and uncertainties in the litigation process itself, such as discovery of new evidence or acceptance of unanticipated or novel legal theories, changes in interpretation of the law due to decisions in other cases, the inherent difficulty in predicting the decisions of judges and juries and the possibility of appeals. Ultimately we could be prevented from commercializing a product or be forced to cease some aspect of our business operations as a result of claims of patent infringement or violation of other intellectual property rights and the costs associated with litigation, which could have a material adverse effect on our business, financial condition, and operating results and could cause the market value of our Common Shares to decline.

Confidentiality agreements with employees and others, including collaborators, may not adequately prevent disclosure of trade secrets and other proprietary information.

Much of our know-how and technology may constitute trade secrets. There can be no assurance, however, that we will be able to meaningfully protect our trade secrets. In order to protect our proprietary technology and processes, we rely in part on confidentiality agreements with our collaborators, employees, vendors, consultants, outside scientific collaborators and sponsored researchers, and other advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover trade secrets and proprietary information, and in such cases we could not assert any trade secret rights against such party. Costly and time consuming litigation could continue to be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We have licensed important portions of our intellectual property from Blumberg and Drexel, and are subject to significant obligations under those license agreements.

The rights we hold under our license agreements with Blumberg and Drexel are important to our business. Our discovery and development platform is built, in part, around patents exclusively in licensed from these parties.

We have licenses with Blumberg and Drexel, both directly and through its acquisition of Enantigen, that grant us the exclusive (except in some cases as to know how that is not unique or specific to the licensed products or compound series, which are non-exclusive and subject to retained rights for non-commercial research use), worldwide license to make, have made, use, import, offer for sale and sell products incorporating one or more licensed compounds, which include capsid assembly inhibitors, inhibitors of secretion of HBV antigens, cccDNA inhibitors and hepatocellular carcinoma inhibitors, either for general use in humans or for use in the field of HBV research, diagnosis and treatment.

Under our agreements with Blumberg and Drexel, we are subject to significant obligations, including diligence obligations with respect to development and commercialization activities, payment obligations upon achievement of certain milestones and royalties on product sales, as well as other material obligations. Under our direct agreement with Blumberg and Drexel, we agreed to pay up to $3.5 million in development and regulatory milestones per licensed compound series, up to $92.5 million in sales performance milestones per licensed product, and royalties in the mid-single digits in connection with the sale of licensed products. Under each of the three license agreements that our subsidiary, Enantigen, has with Blumberg and Drexel, we are obligated to pay up to $0.5 million in development and regulatory milestones per licensed product and royalties in the low single digits in connection with the sale of licensed products. If these payments become due under the terms of the agreements, we may be negatively affected.

If there is any conflict, dispute, disagreement or issue of non-performance between us and Blumberg and Drexel regarding our rights or obligations under these license agreements, including any conflict, dispute or disagreement arising from our failure to satisfy diligence or payment obligations under such agreements, Blumberg and Drexel may have a right to terminate the license. The loss of any of these license agreements could materially and adversely affect our ability to use intellectual property that could be critical to our drug discovery and development efforts, as well as our ability to enter into future collaboration, licensing and/or marketing agreements for one or more affected drug candidates or development programs.

Some of our licensors have retained rights to develop and commercialize certain of our drug candidates to treat diseases other than HBV and, as a result, our development and commercialization efforts may be negatively affected.

Our license agreements provide us with the rights to develop and commercialize our drug candidates for HBV; however, some of our licensors have retained rights to develop and commercialize certain of its drug candidates to treat diseases other than HBV, and to license those rights to other third parties.

Risks Related to Competition

The pharmaceutical market is intensely competitive. If we are unable to compete effectively with existing drugs, new treatment methods and new technologies, we may be unable to successfully commercialize any product candidates that we develop.

The pharmaceutical market is intensely competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies and other public and private research organizations are pursuing the development of novel drugs for the same diseases that we are targeting or expect to target. Many of our competitors have:

- much greater financial, technical and human resources than we have at every stage of the discovery, development, manufacture and commercialization process;
- more extensive experience in pre-clinical testing, conducting clinical trials, obtaining regulatory approvals, and in manufacturing, marketing and selling pharmaceutical products;
- product candidates that are based on previously tested or accepted technologies;
- products that have been approved or are in late stages of development; and
- collaborative arrangements in our target markets with leading companies and research institutions.

We will face intense competition from products that have already been approved and accepted by the medical community for the treatment of the conditions for which we are currently developing products. We also expect to face competition from new products that enter the market. We believe a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may try to develop products. These products, or other of our competitors' products, may be more effective, safer, less expensive or marketed and sold more effectively than any products we develop.

We are aware of several companies that are working to develop drugs that would compete against our drug candidates for HBV treatment. As a significant unmet medical need exists for HBV, there are several large and small pharmaceutical companies focused on delivering therapeutics for treatment of HBV. Further, it is likely that additional drugs will become available in the future for the treatment of HBV. We will face competition from other drugs currently approved or that will be approved in the future for the treatment of chronic hepatitis B.

We anticipate significant competition in the HBV market with several early phase product candidates announced. We will also face competition for other product candidates that we expect to develop in the future.

If we successfully develop product candidates, and obtain approval for them, we will face competition based on many different factors, including the following:

- safety and effectiveness of our products;
- ease with which our products can be administered and the extent to which patients and physicians accept new routes of administration;
- timing and scope of regulatory approvals for these products;
- availability and cost of manufacturing, marketing and sales capabilities;
- price;
- reimbursement coverage; and
- patent position.

Our competitors may develop or commercialize products with significant advantages over any products we develop based on any of the factors listed above or on other factors. Our competitors may therefore be more successful in commercializing their products than we are, which could adversely affect our competitive position and business. Competitive products may make any products we develop obsolete or uncompetitive before we can recover the expenses of developing and commercializing our product candidates. Such competitors could also recruit our employees, which could negatively impact our level of expertise and the ability to execute on our business plan. Furthermore, we also face competition from existing and new treatment methods that reduce or eliminate the need for drugs, such as the use of advanced medical devices. The development of new medical devices or other treatment methods for the diseases we are targeting and may target could make our product candidates non-competitive, obsolete or uneconomical.

We face competition from other companies that are working to develop novel products using technology similar to ours. If these companies develop products more rapidly than we do or their technologies, including delivery technologies, are more effective than ours, then our ability to successfully commercialize products will be adversely affected.

We face significant competition from other biotechnology and pharmaceutical companies targeting HBV.

As a significant unmet medical need exists for HBV, there are several large and small pharmaceutical companies focused on delivering therapeutics for treatment of HBV. These companies include Gilead Sciences, Johnson and Johnson, Assembly Biosciences, Roche, Replicor, Spring Bank, Alnylam, Arrowhead, ContraVir, Dicerna, Intellia, Cocrystal, and Enanta. Further, it is likely that additional drugs will become available in the future for the treatment of HBV.

We are aware of several companies that are working to develop drugs that would compete against our drug candidates for HBV treatment. Many of our existing or potential competitors have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of drug candidates, as well as in obtaining regulatory approvals of those drug candidates in the United States and in foreign countries. Our current and potential future competitors also have significantly more experience commercializing drugs that have been approved for marketing. Mergers and acquisitions in the pharmaceutical and biotechnology industries could result in even more resources being concentrated among a small number of our competitors.

Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing, on an exclusive basis, drug candidates that are more effective or less costly than any drug candidate that we may develop.

We will face competition from other drugs currently approved or that will be approved in the future for the treatment of HBV. Therefore, our ability to compete successfully will depend largely on our ability to:

- discover, develop and commercialize drugs that are superior to other products in the market;
- demonstrate through our clinical trials that our drug candidates are differentiated from existing and future therapies;
- attract qualified scientific, product development and commercial personnel;
- obtain patent or other proprietary protection for our drugs and technologies;
- obtain required regulatory approvals;
- successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new drugs; and
- negotiate competitive pricing and reimbursement with third party payors.

The availability of our competitors' products could limit the demand, and the price we are able to charge, for any drug candidate we develop. The inability to compete with existing or subsequently introduced drug candidates would have a material adverse impact on our business, financial condition and prospects.

Established pharmaceutical companies may invest heavily to accelerate discovery and development of novel compounds or to in license novel compounds that could make our drug candidates less competitive. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. Accordingly, our competitors may succeed in obtaining patent protection, discovering, developing or receiving FDA approval for or commercializing medicines before we do, which would have a material adverse impact on our business.

Risks Related to the Ownership of our Common Shares

If our stock price fluctuates, our investors could incur substantial losses.

The market price of our Common Shares may fluctuate significantly in response to factors that are beyond our control. The stock market in general has recently experienced extreme price and volume fluctuations. The market prices of securities of pharmaceutical and biotechnology companies have been extremely volatile, and have experienced fluctuations that often have been unrelated or disproportionate to the operating performance of these companies. These broad market fluctuations could result in extreme fluctuations in the price of our Common Shares, which could cause our investors to incur substantial losses.

There is no assurance that an active trading market in our Common Shares will be sustained.

Our Common Shares are listed for trading on the Nasdaq exchange. However, there can be no assurances that an active trading market in our Common Shares on these stock exchanges will be sustained.

We are incorporated in Canada, with our assets and officers located both in Canada and the United States, with the result that it may be difficult for investors to enforce judgments obtained against us or some of our officers.

Arbutus is incorporated under the laws of the Province of British Columbia and some of Arbutus' assets and officers are located outside the United States. While we have appointed National Registered Agents, Inc. as our agent for service of process to effect service of process within the United States upon us, it may not be possible for you to enforce against us or those persons in the United States, judgments obtained in U.S. courts based upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States. In addition, there is doubt as to whether original action could be brought in Canada against us or our directors or officers based solely upon U.S. federal or state securities laws and as to the enforceability in Canadian courts of judgments of U.S. courts obtained in actions based upon the civil liability provisions of U.S. federal or state securities laws.

Conversely, most of Arbutus' directors and officers reside outside Canada, and with the reorganization around Warminster, PA, the majority of Arbutus' physical assets may also be located outside Canada . While we have appointed Farris, Vaughan, Wills & Murphy LLP as our agent for service of process in Canada, it may not be possible for you to enforce in Canada against our assets or those directors and officers residing outside Canada, judgments obtained in Canadian courts based upon the civil liability provisions of the Canadian securities laws or other laws of Canada.

If we are deemed to be a "passive foreign investment company" for the current or any future taxable year, investors who are subject to United States federal taxation would likely suffer materially adverse U.S. federal income tax consequences.

We generally will be a "passive foreign investment company" under the meaning of Section 1297 of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), (a "PFIC") if (a) 75% or more of our gross income is "passive income" (generally, dividends, interest, rents, royalties, and gains from the disposition of assets producing passive income) in any taxable year, or (b) if at least 50% or more of the quarterly average value of our assets produce, or are held for the production of, passive income in any taxable year. We have determined that we have not been a PFIC for the three taxable years ended December 31, 2017. If we are a PFIC for any taxable year during which a U.S. person holds our Common Shares, it would likely result in materially adverse U.S. federal income tax consequences for such U.S. person, including, but not limited to, any gain from the sale of our Common Shares would be taxed as ordinary income, as opposed to capital gain, and such gain and certain distributions on our Common Shares would be subject to an interest charge, except in certain circumstances. It may be possible for U.S. persons to fully or partially mitigate such tax consequences by making a "qualifying electing fund election," as defined in the Code (a "QEF Election"), but there is no assurance that we will provide such persons with the information that we are required to provide to them in order to assist them in making a QEF Election. In addition, U.S. persons that hold Common Shares issuable upon exercise of warrants are generally not eligible to make certain elections available under the Code that are intended to mitigate the adverse tax consequences of PFIC rules with respect to such warrant shares unless such holders also elect to make a deemed taxable sale of their warrant shares. The PFIC rules are extremely complex and investors are urged to consult their own tax advisers to assess the implications of these rules as applicable to their own facts and circumstances.

Our articles and certain Canadian laws could delay or deter a change of control.

Our preferred shares are available for issuance from time to time at the discretion of our board of directors, without shareholder approval. Our articles allow our board, without shareholder approval, to determine the special rights to be attached to our preferred shares, and such rights may be superior to those of our Common Shares.

In addition, limitations on the ability to acquire and hold our Common Shares may be imposed by the Competition Act in Canada. This legislation permits the Commissioner of Competition of Canada to review any acquisition of a significant interest in us. This legislation grants the Commissioner jurisdiction to challenge such an acquisition before the Canadian Competition Tribunal if the Commissioner believes that it would, or would be likely to, result in a substantial lessening or prevention of competition in any market in Canada. The Investment Canada Act subjects an acquisition of control of a company by a non-Canadian to government review if the value of our assets, as calculated pursuant to the legislation, exceeds a threshold amount. A reviewable acquisition may not proceed unless the relevant minister is satisfied that the investment is likely to result in a net benefit to Canada. Any of the foregoing could prevent or delay a change of control and may deprive or limit strategic opportunities for our shareholders to sell their shares.

The exercise of all or any number of outstanding stock options, the award of any additional options, bonus shares or other stock-based awards or any issuance of shares to raise funds or acquire a business may dilute your Common Shares.

We have in the past and may in the future grant to some or all of our directors, officers and employees options to purchase our Common Shares and other stock-based awards as non-cash incentives to those persons. The issuance of any equity securities could, and the issuance of any additional shares will, cause our existing shareholders to experience dilution of their ownership interests.

Any additional issuance of shares or a decision to acquire other businesses through the sale of equity securities may dilute our investors' interests, and investors may suffer dilution in their net book value per share depending on the price at which such securities are sold. Such issuance may cause a reduction in the proportionate ownership and voting power of all other shareholders. The dilution may result in a decline in the price of our Common Shares or a change in control.

We do not expect to pay dividends for the foreseeable future.

We have not paid any cash dividends to date and we do not intend to declare dividends for the foreseeable future, as we anticipate that we will reinvest future earnings, if any, in the development and growth of our business. Therefore, investors will not receive any funds unless they sell their Common Shares, and shareholders may be unable to sell their shares on favorable terms or at all. We cannot assure you of a positive return on investment or that you will not lose the entire amount of your investment in our Common Shares. Prospective investors seeking or needing dividend income or liquidity should not purchase our Common Shares.

The value of our securities, including our Common Shares, might be affected by matters not related to our operating performance and could subject us to securities litigation.

The value of our Common Shares may be reduced for a number of reasons, many of which are outside our control, including:

- general economic and political conditions in Canada, the United States and globally;
- governmental regulation of the health care and pharmaceutical industries;
- failure to achieve desired drug discovery outcomes by us or our collaborators;
- failure to obtain industry partner and other third party consents and approvals, when required;
- stock market volatility and market valuations;
- competition for, among other things, capital, drug targets and skilled personnel;
- the need to obtain required approvals from regulatory authorities;
- revenue and operating results failing to meet expectations in any particular period;
- investor perception of the health care and pharmaceutical industries;
- limited trading volume of our Common Shares;
- announcements relating to our business or the businesses of our competitors; and
- our ability or inability to raise additional funds.

The concentration of the Common Shares ownership with insiders, as well as director nomination rights held by the largest shareholder, will likely limit the ability of the other shareholders to influence corporate matters.

As of December 31, 2017, executive officers, directors, five percent or greater shareholders, and their respective affiliated entities of the Arbutus beneficially own, in the aggregate, approximately ~53% of Arbutus' outstanding Common Shares. As a result, these shareholders, acting together, have significant influence over most matters that require approval by Arbutus' shareholders, including the election of directors and approval of significant corporate transactions. Corporate actions might be taken even if other shareholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a corporate transaction that other shareholders may view as beneficial.

Further, on October 16, 2017 and January 12, 2018, respectively, Arbutus completed an issuance and sale to Roivant Sciences Ltd. of two tranches of series A participating convertible preferred shares in the capital of Arbutus, for an aggregate of 1,164,000 preferred shares. The preferred shares do not have voting rights prior to conversion (except as required by applicable law). The preferred shares plus an amount equal to 8.75% per annum, compounded annually, will initially be convertible into 22,833,922 Common Shares of Arbutus, no par value, which conversion will occur mandatorily four years after issuance. Assuming conversion of all of the preferred shares held by Roivant, Roivant will hold 38,847,462, or, without further dilution, 49.9% of the outstanding Common Shares in the capital of Arbutus (based on the total number of issued and outstanding Common Shares as at March 31, 2017, but assuming only the conversion of all of the preferred shares into Common Shares). The ownership by Roivant of these preferred shares and underlying Common Shares will likely further limit the ability of the other shareholders to influence corporate matters.

In addition, at the special meeting of Arbutus' shareholders held on January 11, 2018, the shareholders approved amendments to Arbutus' Articles such that Roivant has the right to nominate a certain number of directors to the board of directors of Arbutus, which right will terminate upon the earlier of (i) October 16, 2019 and (ii) when Roivant no longer meets certain beneficial ownership thresholds. With respect to the beneficial ownership thresholds, for so long as Roivant has beneficial ownership or exercises control or direction over not less than (i) 30% of the issued and outstanding Common Shares, Roivant has the right to nominate three individuals for election to the board of directors of Arbutus, one of whom must be "independent" within the meaning of applicable law and the rules and regulations of The Nasdaq Stock Market LLC, not including the rules related to the independence of audit committee members; (ii) 20% of the issued and outstanding Common Shares, Roivant has the right to nominate two individuals for election to the board of directors of Arbutus; and (iii) 10% of the issued and outstanding Common Shares, Roivant has the right to nominate one individual for election to the board of directors of Arbutus. For so long as Roivant has the right to nominate one or more directors to Arbutus' board of directors, the total number of directors of Arbutus will not, without the prior written consent of Roivant, be permitted to exceed seven directors, the majority of whom must be "independent".

If securities analysts do not publish research or reports about the business of Arbutus, or if they publish negative evaluations, the price of Arbutus' Common Shares could decline.

The trading market for the Arbutus Common Shares may be impacted by the availability or lack of research and reports that third-party industry or financial analysts publish about Arbutus. There are many large, publicly traded companies active in the biopharmaceutical industry, which may mean it will be less likely that Arbutus receives widespread analyst coverage. Furthermore, if one or more of the analysts who do cover Arbutus downgrade its stock, its stock price would likely decline. If Arbutus does not receive adequate coverage by reputable analysts that have an understanding of Arbutus' business and industry, it could fail to achieve visibility in the market, which in turn could cause its stock price to decline.

Item 1B. Unresolved Staff Comments

There are currently no unresolved staff comments.

Item 2. Properties

Our head office and principal place of business is currently located at 100-8900 Glenlyon Parkway, Burnaby, British Columbia, Canada, V5J 5J8. The Company leases a 51,000 square foot facility under an agreement that expires on July 31, 2019, but we have the option to extend the lease to 2024, 2029, and 2034.

Our U.S. Office is located at 701 Veterans Circle, Warminster, Pennsylvania, 18974 in approximately 35,000 square feet of leased lab facilities and office space. We believe that the total space available to us under our current lease will meet our needs for the foreseeable future and that additional space would be available to us on commercially reasonable terms if required.

As part of our reorganization (see Item 1. Business) we expect to move our principal place of business to Warminster, PA and close the Burnaby, BC site.

Item 3. Legal Proceedings

We are involved with various legal matters arising in the ordinary course of business. We make provisions for liabilities when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Such provisions are reviewed at least quarterly and adjusted to reflect the impact of any settlement negotiations, judicial and administrative rulings, advice of legal counsel, and other information and events pertaining to a particular case. Litigation is inherently unpredictable. Although the ultimate resolution of these various matters cannot be determined at this time, we do not believe that such matters, individually or in the aggregate, will have a material adverse effect on our consolidated results of operations, cash flows, or financial condition.

Acuitas Therapeutics Inc.

On August 29, 2016, Arbutus provided Acuitas with notice that Arbutus considered Acuitas to be in material breach of their cross-license agreement. The cross-license agreement provides that it may be terminated upon any material breach by the other party 60 days after receipt of written notice of termination describing the material breach in reasonable detail. On October 25, 2016, Acuitas filed a Notice of Civil Claim in the Supreme Court of British Columbia seeking an order that Arbutus perform its obligations under the cross license agreement, for damages ancillary to specific performance, injunctive relief, interest and costs. We disputed Acuitas' position and filed a counterclaim seeking, among other relief, a declaration that the cross-license agreement had been terminated.

On January 10, 2017, we filed an application seeking an order to enjoin Acuitas from entering into any further agreements purporting to sublicense Arbutus' technology from the date of the order to the date of trial or further order from the court. Acuitas filed a response to Arbutus' application and the matter was the subject of a hearing on January 26, 2017, which resulted in the Supreme Court of British Columbia granting a pre-trial injunction against Acuitas. Under the terms of the pre-clinical trial injunction, Acuitas was prevented from entering into any new agreements which include sublicensing of Arbutus' LNP. On March 7, 2017, Acuitas appealed the injunction decision and on April 3, 2017, the appeal was denied. On September 29, 2017, the injunction order was extended by consent to March 2, 2018. On February 21, 2018, the contractual issues concerning the cross-license agreement (excluding the claims for damages) were settled out of court, resulting in the termination of Acuitas' rights to further use or sublicense our LNP technology, making permanent the effect of the Court's prior injunction. We have now consolidated our LNP intellectual property estate, which is the most clinically validated delivery technology suitable for RNAi, mRNA therapeutics, and gene editing applications. The settlement stipulates that the four non-exclusive viral vaccine sublicenses previously granted to Moderna are the only sublicenses to survive. These four sublicenses, previously granted by Acuitas to Moderna under the pre-April 15, 2010 LNP patent families are each limited to a specific viral target. Moderna has no other rights to Arbutus' broad suite of LNP intellectual property. No other sublicenses of Arbutus technology were provided to third parties by Acuitas and accordingly, no other sublicenses of Arbutus technology by Acuitas survived the settlement. This milestone further establishes us as the owner and only source of an industry-leading LNP delivery technology with the ability to develop a full range of nucleic acid-based applications.

University of British Columbia (UBC)

Certain early work on liposomal delivery systems and related inventions was undertaken at Inex Pharmaceuticals Inc. and assigned to UBC. These inventions are licensed to us by UBC under a license agreement initially entered into in 1998 and subsequently amended in 2001, 2006 and 2007. We have granted sublicenses to these inventions to Alnylam. Alnylam has in turn sublicensed these inventions back to us for discovery, development and commercialization of RNAi products.

On November 10, 2014, the University of British Columbia filed a demand for arbitration against Arbutus Biopharma Corp., BCICAC File No.: DCA-1623. We received UBC's Statement of Claims on January 16, 2015. In its Statement of Claims, UBC alleges that it is entitled to $3.5 million in allegedly unpaid royalties based on publicly available information, and an unspecified amount based on non-public information. UBC also seeks interest and costs, including legal fees. Arbutus filed its Statement of Defense to UBC's Statement of Claims on April 27, 2015, denying that UBC is entitled to any unpaid royalties. Arbutus also filed a Counterclaim involving a patent application that Arbutus alleges UBC wrongly licensed to a third party rather than to Arbutus. Arbutus seeks any license payments for said application, and an exclusive worldwide license to said application. The proceeding has been bifurcated into phases, beginning with a liability phase, addressing UBC's Claims and Arbutus' Counterclaim, that took place June 2017. The arbitrator determined in the first phase which agreements are sublicense agreements within UBC's claim, and which are not. No finding was made as to whether any licensing fees are due to UBC under these agreements; this will be the subject of the second phase of arbitration. The arbitrator also held that the patent application that is the subject of the Counterclaim was not required to be licensed to Arbutus. A schedule for the remaining phases has not yet been set.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common shares trade on the Nsdaq Global Market under the symbol "ABUS" following our Company name change to Arbutus Biopharma Corporation on July 31, 2015. From November 15, 2010 to July 31, 2015 our common shares traded on the NASDAQ Global Market under the symbol "TKMR". Our common shares previously traded on the Toronto Stock Exchange (TSX) in Canada under the symbol "TKM". We voluntarily delisted from the TSX on March 3, 2015. As at March 6, 2018, there were 105 registered holders of common shares and 55,070,037 common shares issued and outstanding.

The following table shows the high and low intraday trading prices of our common shares on the Nasdaq Global Market periods listed:

	Nasdaq High (US$)	Nasdaq Low (US$)
Year Ended:		
December 31, 2017	$ 8.25	$ 2.35
December 31, 2016	$ 5.48	$ 2.35
Quarter Ended:		
December 31, 2017	$ 8.25	$ 4.30
September 30, 2017	$ 7.85	$ 3.40
June 30, 2017	$ 3.85	$ 2.95
March 31, 2017	$ 3.49	$ 2.35
December 31, 2016	$ 3.56	$ 2.35
September 30, 2016	$ 4.49	$ 3.36
June 30, 2016	$ 5.48	$ 3.09
March 31, 2016	$ 4.71	$ 2.72
Month Ended:		
February 28, 2018	$ 5.95	$ 4.85
January 31, 2018	$ 5.90	$ 4.90

Material Modifications to the Rights of Security Holders/Use of Proceeds

Not applicable.

Purchase of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

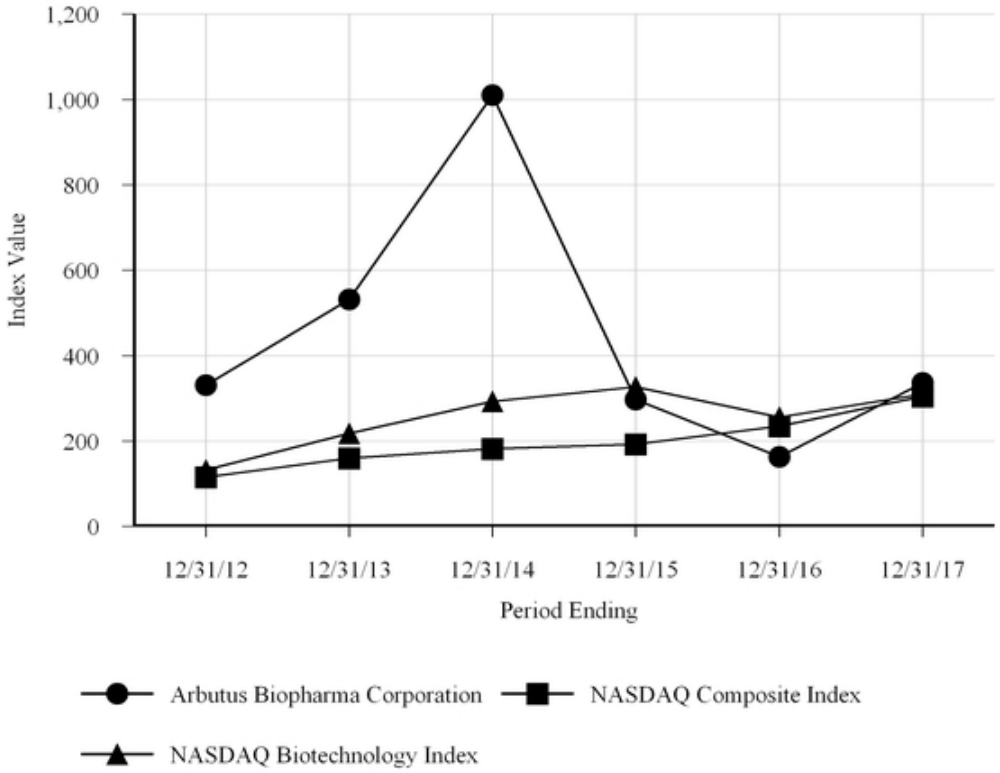
Recent Sales of Unregistered Securities

None.

Stock Performance Graph

The following performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

The following graph compares the cumulative shareholder return on an investment of US$100 in the Common Shares of the Company on the Nasdaq from December 31, 2012, with a cumulative total shareholder return on the Nasdaq Composite and Nasdaq Biotechnology Indices.



Geographic Breakdown of Shareholders

As of March 6, 2018, our shareholder register indicates that our common shares are held as follows:

Location	Number of Shares	Percentage of Total Shares	Number of Registered Shareholders of Record
Canada	16,379,874	29.7%	85
United States	22,675,939	41.2%	16
Other	16,014,224	29.1%	4
Total	55,070,037	100%	105

As of March 6, 2018 we also have 1,164,000 preferred shares issued and outstanding. These shares are held by Roivant Sciences Ltd, a company registered in Bermuda. These shares are convertible to 22,589,601 common shares on October 18, 2021. Based on the number of shares outstanding as at March 6, 2018, upon conversion to common shares on October 18, 2021, Roivant would own 49.9% of the common shares of the Company. The preferred shares are not voting. See notes to the Financial Statements for further information on the preferred shares.

Our securities are recorded in registered form on the books of our transfer agent, CST Trust Company, located at 1600-1066 West Hastings Street, Vancouver, BC, V6E 3X1. However, the majority of such shares are registered in the name of intermediaries such as brokerage houses and clearing houses (on behalf of their respective brokerage clients). We are permitted, upon request to our transfer agent, to obtain a list of our beneficial shareholders who do not object to their identities being disclosed to us. We are not permitted to obtain from our transfer agent a list of our shareholders who have objected to their identities being disclosed to us.

Shares registered in intermediaries were assumed to be held by residents of the same country in which the clearing house was located.

Dividends

We have not declared or paid any dividends on our common or preferred shares since the date of our incorporation. We intend to retain our earnings, if any, to finance the growth and development of our business and do not expect to pay dividends or to make any other distributions, other than the coupon attached to the preferred shares, in the near future. Our board of directors will review this policy from time to time having regard to our financing requirements, financial condition and other factors considered to be relevant.

Item 6. Selected Financial Data

The following table presents selected financial data derived from Arbutus' audited consolidated financial statements for each of the five years for the period ending December 31. You should read this information in conjunction with our financial statements for the periods presented, as well as Item 1 " *Business* " and Item 7 " *Management's Discussion and Analysis of Financial Condition and Results of Operations* " included elsewhere in this Annual Report. Historical results are not necessarily indicative of future results.

Summary Financial Information
Under U.S. GAAP (in thousands of US dollars, except number of shares and per share amounts)

	Year Ended December 31,				
	2017	**2016**	**2015**	**2014**	**2013**
	$	**$**	**$**	**$**	**$**
Operating Data					
Revenue	10,700	1,491	23,276	15,465	14,105
Expenses	121,630	493,130	127,195	27,617	27,050
Loss from operations	(110,930)	(491,639)	(103,919)	(12,152)	(12,945)
Net income (loss)	(84,413)	(384,164)	(78,903)	(147,063)	29,611
Net loss attributable to common shares	(85,324)	—	—	—	—
Weighted average number of common shares—basic	54,723,272	53,074,401	45,462,324	15,303,000	13,728,000
Weighted average number of common shares—diluted	54,723,272	53,074,401	45,462,324	15,303,000	14,321,000
Income (loss) per common share—basic	(1.56)	(7.24)	(1.38)	(0.92)	2.16
Income (loss) per common share—diluted	(1.56)	(7.24)	(1.38)	(0.92)	2.07
Balance Sheet Data					
Total current assets	129,366	132,564	116,418	70,343	51,243
Total assets	237,161	275,919	118,178	71,716	52,595
Total current liabilities	14,627	10,585	20,206	12,522	10,954
Total long-term liabilities	40,061	62,329	9,937	—	722
Share capital	968,728	903,936	316,212	242,045	206,572
Total stockholders' equity	182,473	203,005	88,035	59,194	40,919
Number of preferred shares outstanding	500,000	—	—	—	—
Number of common shares outstanding	55,060,650	54,841,494	22,438,169	19,049,000	14,305,356

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Arbutus is a publicly traded (Nasdaq Global Market: ABUS) therapeutic solutions company dedicated to discovering, developing and commercializing a cure for patients suffering from chronic HBV infection. To pursue our strategy of developing a curative combination regimen, we have assembled an HBV pipeline consisting of multiple drug candidates with complementary mechanisms of action. HBV represents a significant unmet medical need and is the cause of the most common serious liver infection in the world. The World Health Organization estimates that 257 million people worldwide are chronically infected, and other estimates suggest this could include approximately 2 million people in the United States. Given the complex biology of HBV, we believe combination therapies are the key to HBV treatment and a potential cure, and development can be accelerated when multiple components of a combination therapy regimen are controlled by the same company.

Arbutus' head office and principal place of business is currently located at 100-8900 Glenlyon Parkway, Burnaby, British Columbia, Canada, V5J 5J8. This facility includes 51,000 square feet of combined research and development laboratory and office space. Our primary U.S. site is located at 701 Veterans Circle, Warminster, Pennsylvania, USA, 18974. This facility includes 35,000 square feet of combined research and development laboratory and office space. As part of our reorganization, we expect to move our principal place of business to Warminster, PA and close the Burnaby, BC site.

We continued the development of our lead clinical candidate ARB-1467 in 2017. We announced Phase II data demonstrating significant reductions in serum HBsAg, including step-wise, additive reductions with each subsequent dose of ARB-1467, proving both its safety and efficacy in patients. These data are the first of their kind for an RNAi product candidate in chronic HBV patients. We advanced ARB-1467 into the first drug combination study with HBV standard or care therapies for deeper reductions in HBsAg and HBV DNA in patients, which are the endpoints accepted as an HBV cure.

Our first-generation capsid inhibitor AB-423 entered into healthy volunteer clinical studies in 2017 and initiated Investigational New Drug (IND)-enabling studies on a next generation capsid inhibitor AB-506 as well as a novel HBV RNA Destabilizer AB-452 (formerly known as our oral HBsAg inhibitor program) for potential clinical advancement in 2018.

We continued a number of research programs aimed at discovery and development of novel HBV candidates with different and complementary mechanisms of action. We have designed a number of highly potent HBV-targeting RNAi payloads for use with our proprietary GalNAc conjugate platform to enable subcutaneous delivery and have ongoing discovery efforts focused on cccDNA targeting and checkpoint inhibition.

We presented clinical and preclinical data from our proprietary HBV assets in 2017.

Change in Functional Currency

Prior to January 1, 2016, our functional currency was the Canadian dollar. As such, all dollar amounts in this MD&A related to periods prior to and including the year ended December 31, 2015 are presented in U.S. dollars with the functional currency as the Canadian dollar. On January 1, 2016, our functional currency changed from the Canadian dollar to the U.S. dollar based on our analysis of changes in the primary economic environment in which we operate. The change in functional currency is accounted for prospectively from January 1, 2016 and financial statements for the periods prior to and including the year ended December 31, 2015 will not be restated for the change in functional currency. Past translation gains and losses from the application of the U.S. dollar as the reporting currency while the Canadian dollar was the functional currency are included as part of cumulative currency translation adjustment, which is reported as a component of shareholder's equity under accumulated other comprehensive loss.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The significant accounting policies that we believe to be most critical in fully understanding and evaluating our financial results are revenue recognition, stock-based compensation, and goodwill and intangible asset impairment. These accounting policies require us to make certain estimates and assumptions. We believe that the estimates and assumptions upon which we rely are reasonable, based upon information available to us at the time that these estimates and assumptions are made. Actual results may differ from our estimates. Our critical accounting estimates affect our net income or loss calculation.

Revenue Recognition / Our primary sources of revenue have been derived from research and development collaborations and contracts, and licensing fees comprised of initial fees and milestone payments. Payments received under research and development agreements and contracts, which are non-refundable, are recorded as revenue as services are performed and as the related expenditures are incurred pursuant to the agreement, provided collectability is reasonably assured. Revenue earned under research and development collaborations and contracts where we do not bear any risk of product manufacture failure is recognized in the period the work is performed. Revenue earned under contractual arrangements upon the achievement of substantive milestones is recognized in its entirety in the period the payment has been received. We evaluate whether milestones under research and development arrangements are substantive by considering: whether substantive uncertainty exists upon the execution of the arrangement; the event can only be achieved based in whole or in part on our performance or occurrence of a specific outcome resulting from our performance; any future performance required and payment is reasonable relative to all deliverables; and, payment terms in the arrangement. Initial fees and non-substantive milestone payments are deferred and amortized into income over the estimated period of our involvement as we fulfill our obligations under our agreements.

The revenue that we recognize is a critical accounting estimate because of the volume and nature of the revenues we receive. Some of the research, development and licensing agreements that we have entered into contain multiple revenue elements that are to be recognized for accounting in accordance with our revenue recognition policy. We need to make estimates as to what period the services will be delivered with respect to up-front licensing fees and milestone payments received because these payments are deferred and amortized into income over the estimated period of our ongoing involvement. The actual period of our ongoing involvement may differ from the estimated period determined at the time the payment is initially received and recorded as deferred revenue. This may result in a different amount of revenue that should have been recorded in the period and a longer or shorter period of revenue amortization. When an estimated period changes we amortize the remaining deferred revenue over the estimated remaining time to completion. The rate at which we recognize revenue from payments received for services to be provided under research and development agreements depends on our estimate of work completed to date and total work to be provided. The actual total services provided to earn such payments may differ from our estimates. Refer to Note 2 to our consolidated financial statements for our analysis of the impact of the adoption of ASC 606 - Revenue from Contracts with Customers, effective January 1, 2018.

Our revenue for 2017 was $10.7 million (2016 - $1.5 million, 2015 - $23.3 million). Our deferred revenue balance at December 31, 2017 was $2.7 million (December 31, 2016 - nil).

Stock-based compensation / The stock-based compensation that we record is a critical accounting estimate due to the value of compensation recorded, the volume of our stock option activity, and the many assumptions that are required to be made to calculate the compensation expense.

Compensation expense is recorded for stock options issued to employees and directors using the fair value method. We must calculate the fair value of stock options issued and amortize the fair value to stock compensation expense over the vesting period, and adjust the expense for stock option forfeitures and cancellations. We use the Black-Scholes model to calculate the fair value of stock options issued which requires that certain estimates, including the expected life of the option and expected volatility of the stock, be made at the time that the options are issued. This accounting estimate is reasonably likely to change from period to period as further stock options are issued and adjustments are made for stock option forfeitures and cancellations. Effective October 1, 2016, we early adopted ASU 2016-09 and elected an entity-wide accounting policy to recognize forfeitures as they occur. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered stock option. For the purpose of calculating fair value, the expected life of stock options granted is five years for employees and eight years for directors and executives. We amortize the fair value of stock options using the straight-line method over the vesting period of the options, generally a period of three years for employees and immediate vesting for directors.

We recorded stock-based compensation expense for our equity-classified awards in 2017 of $14.9 million (2016 of $38.2 million, 2015 - $22.1 million) which includes compensation expense related to the expiration of repurchase rights on certain shares held by the founders of Arbutus Inc. of $8.0 million (2016 - $32.0 million) - refer to Note 2 to our consolidated financial statements.

Goodwill and intangible assets - Impairment / Intangible assets classified as indefinite-lived and goodwill are not amortized, but are evaluated for impairment annually using a measurement date of December 31. In addition, if there is a major event indicating that the carrying value of an asset may not be recoverable, then management will perform an impairment test in an interim period by comparing the discounted cash flow values to each asset's carrying value to determine if a write down is necessary. Such indicators include, but are not limited to, on an ongoing basis: (a) industry and market considerations such as an increased competitive environment or an adverse change in legal factors including an adverse assessment by regulators; (b) an accumulation of costs significantly in excess of the amount originally expected for the development of the asset; (c) current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of the asset; (d) adverse research and development program results; and (e) if applicable, a sustained decrease in share price.

In assessing impairment, significant judgments are required to be made by management to estimate the timing and extent of future net cash flows, appropriate discount rates, probability of program success and other estimates and assumptions that could materially affect the determination of fair value. These judgments include the use of, but are not limited to: projected results of operations and forecast cash flows based on our corporate budgets as approved by our board of directors, third party forecasts and data and other macroeconomic indicators that forecasts market conditions and our estimated future revenues and growth, market-based discount rates and other market-comparative data. As assumptions related to the probability of program success and timing and amount of potential future cash flows related to these programs is highly uncertain due to the unpredictable nature of each phase of these programs, management risk adjusts the estimated cash flows to reflect these uncertainties.

During the year ended December 31, 2017, we recorded a total net impairment charge of $23.9 million (impairment charge of $40.8 million less a corresponding income tax benefit of $16.9 million) against our identified intangible assets for the discontinuance of STING agonists, which represented the entire remaining acquired Immune Modulator drug class.

We perform our annual impairment analysis at December 31st each year. Effective October 1, 2017, we early adopted ASU 2017-04 and eliminated Step 2 from the goodwill impairment test, which required a hypothetical purchase price allocation, and permits a qualitative assessment to determine if a quantitative assessment (Step 1) is required. At December 31, 2017, we performed a qualitative assessment using factors including but not limited to: (a) macroeconomic conditions; (b) industry and market considerations; (c) cost factors; (d) overall financial performance; (e) other relevant entity-specific events; (f) events affecting a reporting unit; and (g) if applicable, a sustained decrease in share price in absolute terms and relative to peers. Based on our qualitative assessment, we concluded that as at December 31, 2017, it was not more likely than not that the fair value of the Company`s single reporting unit was less than its carrying amount; therefore, a quantitative assessment was not necessary.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions and factors, and any key assumptions in the cash flow projections are interdependent on each other. A change in any one or combination of these assumptions could impact the estimated fair value of the reporting unit. Although we believe our assumptions are reasonable, the significant level of judgment needed to determine our assumptions, the uncertainty inherent in these assumptions and the extended time frame over which we are required to make our estimates, increases the risk that actual results will vary significantly. Given the dependency of our cash flow models on the successful development, production and sale of products from our existing programs, if any significant programs are unsuccessful then, excluding other possible changes in our forecasts, our estimated future cash flows will be reduced and such reduction may be significant enough to result in an impairment of the carrying value of our intangible assets. The outcome of our programs are subject to a variety of risks, including but not limited to, technological risk associated with IPR&D assets, dependency on regulatory approval and competitive, legal and other regulatory forces. See the "Risk Factors" in this annual report on Form 10-K for additional risk factors.

SUMMARY OF QUARTERLY RESULTS

The following table presents our unaudited quarterly results of operations for each of our last eight quarters. These data have been derived from our unaudited condensed consolidated financial statements, which were prepared on the same basis as our annual audited financial statements and, in our opinion, include all adjustments necessary, consisting solely of normal recurring adjustments, for the fair presentation of such information.

(in millions $ except per share data) – unaudited

	Q4 2017	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016
Total revenue	**2.5**	**6.9**	**1.0**	**0.2**	**(0.2)**	**0.8**	**0.3**	**0.6**
Expenses	(62.8)	(19.8)	(20.5)	(18.5)	(257.2)	(19.7)	(195.6)	(20.6)
Other income (losses)	—	1.3	1.2	(0.3)	(1.4)	(0.6)	0.4	4.1
Loss before income taxes	**(60.3)**	**(11.6)**	**(18.3)**	**(18.6)**	**(258.8)**	**(19.5)**	**(194.9)**	**(15.9)**
Income tax benefit	**24.3**	**—**	**—**	**—**	40.1	—	64.9	—
Net loss	**(36.0)**	**(11.6)**	**(18.3)**	**(18.6)**	**(218.7)**	**(19.5)**	**(130.0)**	**(15.9)**
Basic and diluted net loss per common share	**$ (0.67)**	**$ (0.21)**	**$ (0.33)**	**$ (0.34)**	**$ (4.05)**	**$ (0.37)**	**$ (2.47)**	**$ (0.31)**

Quarterly Trends

Revenue / Our revenue is derived from research and development collaborations and contracts, licensing fees, milestone and royalty payments.

In March 2017, we signed a License Agreement with Alexion that granted them exclusive use of our proprietary lipid nanoparticle ("LNP") technology in one of Alexion's rare disease programs. Under the terms of the license agreement, we received a $7.5 million non-refundable upfront payment in April 2017, which was recognized over the expected period we provide services to Alexion. In Q3 2017, we received notice of termination from Alexion for our LNP license agreement, and completed close out procedures. The termination was driven by a strategic review of Alexion's business and research and development portfolio, which included a decision to discontinue development of mRNA therapeutics. As such, we recorded the remaining deferred revenue of $6.7 million for the non-refundable upfront payment, as well as revenue for any work done related to closeout procedures.

On October 16, 2017, the Company entered into a license agreement with Gritstone that entitles Gritstone to research, develop, manufacture and commercialize products with our LNP technology. The total potential payments under this arrangement include upfront, development and commercial milestone payments and royalty payments on future product sales. During Q4 2017, we recorded $2.5 million in revenue under this arrangement.

Expenses / Expenses consist primarily of clinical and pre-clinical trial expenses, personnel expenses, consulting and third party expenses, reimbursable collaboration expenses, consumables and materials, patent filing expenses, facilities, stock-based compensation and general corporate costs. Impairment of intangible assets and goodwill is also included in operating expenses.

Since Q1 2016, we have incurred significant R&D expense related to our HBV programs, including initiation of our ARB-1467 in Phase 2 clinical trials, and incurred costs since Q4 2016 to advance our AB-423 to Phase 1 clinical trials. In Q2 and Q3 2017, we also incurred costs related to our recently nominated product candidates: a second capsid inhibitor (AB-506) and a HBV RNA destabilizer (AB-452, formerly known as our oral surface antigen (HBsAg) inhibitor program). In Q4 2017, we continued a number of research programs aimed at discovery and development of novel HBV candidates with different and complementary mechanisms of action, prepared for the initiation of combination studies for ARB-1467 and incurred R&D expense related to services provided to Gritstone.

In Q2, 2016, we recorded an impairment charge of $156.3 million (before deferred tax) for the discontinuance of the ARB-1598 program in the Immune Modulators drug class after extensive research and analysis, as well as a delay for additional exploration of the biology of the cccDNA Sterilizer drug class. In Q4 2016, we recorded an impairment charge of $96.9 million for our intangible assets (before deferred tax) and impairment charge of $138.1 million for our goodwill which resulted from a change in estimated cost of capital and resulting discount rate used in our annual impairment assessment.

In Q4 2017, we recorded an impairment charge of $40.8 million (before deferred tax) for the discontinuance of our STING agonist program, which represented the entire remaining acquired Immune Modulator drug class.

Following the merger with Arbutus Inc. in March 2015, we have recorded non-cash compensation expense of $56.9 million related to the expiry of repurchase rights on shares issued as part of the consideration paid for the merger with Arbutus Inc. - see "Results of Operations". The final tranche of repurchase rights expired in Q3 2017 so no further expense will be recorded.

Other income (losses) / Other income (losses) consist primarily of changes in the fair value of our contingent consideration, interest income and expense and foreign exchange gains and losses. We have recorded increases in the fair value of contingent consideration since first recording this liability as a result of the merger with Arbutus Inc. in March 2015. This reflects the progress of our HBV programs that bring us closer to triggering the contingent amounts.

We have recorded foreign exchange gains and losses over the past eight quarters, largely related to Canadian dollar cash and investment holdings and fluctuations in the U.S./Canadian dollar exchange rate. We expect to record future foreign exchange gains and losses, on translation from the Canadian dollar, to the U.S. dollar, as the functional currency for the company changed to the U.S. dollar effective January 1, 2016. This change in functional currency results in a smaller proportion of our cash and investments being held in a foreign currency and therefore reduces the level of gains and losses we expect to record in this respect compared to periods prior to January 1, 2016.

Income tax benefit / Income tax benefit primarily relates to the decrease in deferred tax liability associated with the impairment charge recorded on acquired intangible assets. In Q2 2016 and in Q4 2016, we recorded $64.8 million and $40.1 million in income tax benefit associated with the impairment charges described above. In Q4 2017, we recorded a total of $24.3 million of income tax benefit, which consists of $16.9 million related to the impairment charge and a $7.4 million benefit on our remaining intangible assets due to a reduction in US federal taxes - see Note 8 of our consolidated financial statements.

Net loss / Fluctuations in our net loss are explained by changes in revenue, expenses, other income (losses) and income tax as discussed above.

Fourth quarter of 2017 / Our Q4 2017 net loss was $37 million ($0.67 basic and diluted loss per common share) as compared to a net loss of $218.7 million ($4.05 basic and diluted per common share) for Q4 2016.

Revenue in Q4 2017 was related to the earned portion of the upfront payment received from our license agreement with Gritstone.

Research, development, collaborations and contracts expenses remained consistent at $17.8 million in Q4 2017 as compared to $17.2 million in Q4 2016. In Q4 2017, we incurred expenses related to our HBV programs as we continue to move candidates through clinical trials. In Q4 2017, we continued a number of research programs aimed at discovery and development of novel HBV candidates with different and complementary mechanisms of action, and incurred R&D expense related to our services provided to Gritstone. In Q4 2017, we recorded an impairment charge of $40.8 million related to our intangible assets (before deferred tax) as we discontinued our STING agonist program, which represented the entire remaining acquired Immune Modulator drug class.

RESULTS OF OPERATIONS

The following summarizes the results of our operations for the 2017, 2016, and 2015 fiscal years, in millions except per share data:

	2017	2016	2015
Total revenue	**$ 10.7**	$ 1.5	$ 23.3
Operating expenses	**121.6**	493.1	127.2
Loss from operations	**(110.9)**	(491.6)	(103.9)
Net loss	**(84.4)**	(384.2)	(62.7)
Net loss attributable to common shares	**(85.3)**	(384.2)	(62.7)
Basic loss per common share	**(1.56)**	(7.24)	(1.38)
Diluted loss per common share	**(1.56)**	(7.24)	(1.38)
Total assets	**237.2**	275.9	712.3
Total liabilities	**54.7**	72.9	164.6
Total non-current liabilities	**40.1**	62.3	154.0
Deficit	**(738.1)**	(652.7)	(267.0)
Accumulated other comprehensive loss	**(48.2)**	(48.2)	(49.8)
Total stockholders' equity	**$ 182.5**	$ 203.0	$ 547.7

Year ended December 31, 2017 compared to the year ended December 31, 2016

For the fiscal year ended December 31, 2017, our net loss was $84.4 million ($1.56 basic and diluted loss per common share) as compared to a net loss of $384.2 million ($7.24 basic and diluted loss per common share) for 2016.

Revenue / Revenue is summarized in the following table, in millions:

	2017	% of Total	2016	% of Total
Collaborations and contracts				
Alexion	**$ 8.0**	**75%**	$ —	—%
Gritstone	**2.5**	**23%**	—	—%
Dicerna	**—**	**—%**	1.3	87%
Other milestone and royalty payments	**0.2**	**2%**	0.2	13%
Total revenue	**$ 10.7**		$ 1.5	

Revenue contracts are described in more detail in "Item 1. Business".

Alexion revenue

In March 2017, we signed a License Agreement with Alexion that granted them exclusive use of our proprietary lipid nanoparticle (LNP) technology in one of Alexion's rare disease programs. In July 2017, we received notice of termination from Alexion for our LNP license agreement. The termination was driven by a strategic review of Alexion's business and research and development portfolio, which included a decision to discontinue development of mRNA therapeutics. Revenue recorded for the year-ended December 31, 2017 included the upfront license payment, as well as services provided to Alexion related to technology development, manufacturing and regulatory support for the advancement of Alexion's mRNA product candidate.

Gritstone revenue

On October 16, 2017, we entered into a license agreement with Gritstone that entitles Gritstone to research, develop, manufacture and commercialize products with the Company's LNP technology. In October 2017, we received the upfront license payment, and are eligible to receive further potential payments for development and commercial milestone payments and royalty payments on future product sales. Revenue recognized for the year-ended December 31, 2017 relates to the earned portion of the upfront license fee, as well as services provided to Gritstone.

Dicerna revenue

In November 2014, we signed a License Agreement and a Development and Supply Agreement with Dicerna for the use of our proprietary delivery technology and related technology intended to develop, manufacture, and commercialize products related to the treatment of PH1. In September 2016, Dicerna announced the discontinuation of their DCR-PH1 program using the Company's technology. As such, we revised the estimated completion date of performance period to September 30, 2016, at which time we had no further remaining performance obligations, and recognized the remaining deferred upfront license payment.

Other milestone and royalty payments

Under our licensing and collaboration arrangements with Alnylam and Acuitas, we earn licensing fee revenue from Acuitas as well as further potential development and commercial milestones from Alnylam for the use of our LNP technology.

In September 2013, Spectrum announced that they had shipped the first commercial orders of Marqibo. We continue to earn royalties on the sales of Marqibo, which uses a license to our technology.

Expenses / Expenses are summarized in the following table, in millions:

		2017	**% of Total**		2016	% of Total
Research, development, collaborations and contracts	**$**	**62.7**	**52%**	$	61.3	12%
General and administrative		**16.1**	**13%**		39.4	8%
Depreciation		**2.0**	**2%**		1.1	—%
Impairment of intangible assets		**40.8**	**33%**	$	253.2	51%
Impairment of goodwill		**—**	**—%**	$	138.2	29%
Total operating expenses	**$**	**121.6**		$	493.1	

Research, development, collaborations and contracts

Research, development, collaborations and contracts expenses consist primarily of clinical and pre-clinical trial expenses, personnel expenses, consulting and third party expenses, consumables and materials, as well as a portion of stock-based compensation and general overhead costs.

R&D expenses remained consistent during 2017 and 2016. In all periods presented, our R&D expense relates primarily to our HBV programs. During 2017, we initiated a Phase 1 clinical trial for AB-423 and incurred clinical costs as we continued our trials for ARB-1467, as well as costs for IND enabling studies for our recent candidate nominations, a second capsid inhibitor (AB-506) and a HBV RNA destabilizer (AB-452, formerly known as our oral surface antigen (HBsAg) inhibitor program). We also continued a number of research programs aimed at discovery and development of novel HBV candidates with different and complementary mechanisms of action, as well as incurred R&D expense related to our services provided to Alexion and Gritstone.

A significant portion of our research, development, collaborations and contracts expenses are not tracked by project as they benefit multiple projects or our technology platform and because our most-advanced programs are not yet in late-stage clinical development. However, our collaboration agreements contain cost-sharing arrangements pursuant to which certain costs incurred under the project are reimbursed. Costs reimbursed under collaborations typically include certain direct external costs and hourly or full-time equivalent labor rates for the actual time worked on the project. As a result, although a significant portion of our research, development, collaborations and contracts expenses are not tracked on a project-by-project basis, we do, however, track direct external costs attributable to, and the actual time our employees worked on our collaborations.

General and administrative

General and administrative expenses decreased in 2017 compared to 2016 due to a decrease in non-cash compensation expense related to the expiry of repurchase rights effective Q2 2016 related to the departure of two of the four former Arbutus Inc. founders in June 2016. As a result of this change, our quarterly non-cash compensation general and administrative expense decreased to $1.5 million per quarter. The repurchase right provisions for the other two Arbutus Inc. founders expired in Q3 2017, and no further compensation expense was incurred thereafter. We recorded a total of $4.0 million in non-cash G&A compensation expense for the year-ended December 31, 2017, as compared to a total of $26.0 million for the year-ended December 31, 2016. See the 2016 compared to 2015 discussion for further details.

Impairment of intangible assets and goodwill

During the year-ended December 31, 2017, the Company recorded a total impairment charge of $40.8 million and a corresponding income tax benefit of $16.9 million against its identified intangible assets, for the discontinuance of our STING agonist program, which represented the entire remaining acquired Immune Modulators drug class.

For the year ended December 31, 2016, we recorded a net impairment charge of $148.2 million on intangible assets ($253.2 million less deferred taxes of $105.0 million). $156.3 million was recorded in the second quarter for the discontinuance of the ARB-1598 program in the Immune Modulator drug class after extensive research and analysis, as well as a delay for additional exploration of the biology of the cccDNA Sterilizer drug class. A further $96.4 million was recorded in the fourth quarter as a result of a change in the estimated cost of capital and resulting discount rate used in our annual impairment assessment. This change in discount rate was made to address the sustained discrepancy between our market capitalization and the carrying value of our intangible assets.

On December 31, we performed our annual impairment analysis for goodwill. No impairment was recorded for goodwill for the year ended December 31, 2017. We recorded an impairment of $138.1 million for the year ended December 31, 2016 resulting from our reassessment of the discount rate used in our valuation models used to assess the carrying value of goodwill and intangible assets for impairment as a result of the sustained discrepancy between market capitalization, carrying values and fair values.

Other income (losses) / Other income (losses) are summarized in the following table, in millions:

		2017		2016
Interest income	**$**	**1.5**	$	1.4
Interest expense		**(0.3)**		—
Foreign exchange gains		**2.3**		1.1
Gain on disposition of financial instrument		**—**		1.0
Decrease in fair value of warrant liability		**—**		0.5
Increase in fair value of contingent consideration		**(1.4)**		(1.6)
Total other income (losses)	**$**	**2.2**	$	2.4

Foreign exchange gains

We continue to incur substantial expenses and hold cash and investment balances in Canadian dollars, and as such, will remain subject to risks associated with foreign currency fluctuations. For the year ended December 31, 2017, we recorded a foreign exchange gain of $2.3 million, which is primarily an unrealized gain related to an appreciation in the value of our Canadian dollar funds, from the previous period, when converted to our functional currency of U.S. dollars.

Gain on disposition of financial instrument

On March 4, 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of our wholly-owned subsidiary, PADCo, as described below and paid us an exercise fee of $1.0 million.

Decrease in fair value of warrant liability

On March 1, 2017, any remaining outstanding warrants expired.

Increase in fair value of contingent consideration

Contingent consideration is a liability assumed from our acquisition of Arbutus Inc. in March 2015. In general, increases in the fair value of the contingent consideration are related to the progress of our programs as they get closer to triggering contingent payments that are based on development milestones and commercial sales. The first milestone is payable upon the commencement of first HBV patient dosing in our AB-423 program.

Income tax benefit

For the year ended December 31, 2017, we recorded an income tax benefit of $24.3 million due to the decrease in deferred tax liability resulting from the impairment charge to intangible assets of $16.9 million, and the reduction in federal tax rates from the U.S. tax reform of $7.4 million on our remaining intangible assets.

Year ended December 31, 2016 compared to the year ended December 31, 2015

For the fiscal year ended December 31, 2016, our net loss was $384.2 million ($7.24 basic and diluted loss per common share) as compared to a net loss of $62.7 million ($1.38 basic and diluted loss per common share) for 2015.

Revenue / Revenue is summarized in the following table, in millions:

		2016	**% of Total**		2015	% of Total
Monsanto		**—**	**—%**		13.4	58%
Dicerna		**1.3**	**87%**		2.9	12%
DoD	**$**	**—**	**—%**	$	6.8	29%
Other milestone and royalty payments		**0.2**	**13%**		0.3	1%
Total revenue	**$**	**1.5**		$	23.3	

DoD revenue

In July 2015, we announced that Ebola related activities were being suspended and, in Q4 2015, we received formal notification from the DoD terminating the contract, subject to the completion of certain post-termination obligations. We do not expect to record significant revenue from the DoD contract after December 31, 2015 and did not receive any revenue from the DoD contract in 2016.

Monsanto revenue

In January 2014, we signed an Option Agreement and a Services Agreement (together, the “Agreements”) with Monsanto. Under the Agreements, Monsanto had an option to obtain a license to use our proprietary delivery technology and related intellectual property for use in agriculture.

Under the Agreements, we established a wholly-owned subsidiary, PADCo. We determined that PADCo was a variable interest entity (“VIE”); however, Monsanto was the primary beneficiary of the arrangement. PADCo was established to perform research and development activities, which were funded by Monsanto in return for a call option to acquire the equity or all of the assets of PADCo. On March 4, 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of PADCo and paid us an option exercise fee of $1.0 million. From the acquisition of PADCo, Monsanto received a worldwide, exclusive right to use our proprietary delivery technology in the field of agriculture. We recorded the exercise fee received as gain on disposition of financial instrument on our consolidated statement of operations and comprehensive loss for the year ended December 31, 2016.

Dicerna revenue

In November 2014, we signed a License Agreement and a Development and Supply Agreement with Dicerna for the use of our proprietary delivery technology and related technology intended to develop, manufacture, and commercialize products related to the treatment of PH1. Licensing fee revenue recognized for the year ended December 31, 2015 relates to the earned portion of the upfront payment of $2.5 million for the use our of technology, which was being recognized over the period over which we provided services to Dicerna. In September 2016, Dicerna announced the discontinuation of their DCR-PH1 program using the Company's technology. As such, we revised the estimated completion date of performance period from March 2017 to September 30, 2016, at which time we had no further remaining performance obligations. This resulted in the recognition of $1.1 million in Dicerna license fee revenue for the year ended December 31, 2016.

Other milestone and royalty payments

Under our licensing arrangements with Alnylam and Alexion we have the potential to earn further development and commercial milestones and royalties for the use of our LNP technology.

In September 2013, Spectrum announced that they had shipped the first commercial orders of Marqibo. We continue to earn royalties on the sales of Marqibo, which uses a license to our technology.

Expenses / Expenses are summarized in the following table, in millions:

		2016	**% of Total**		2015	% of Total
Research, development, collaborations and contracts	**$**	**61.3**	**12%**	$	51.5	40%
General and administrative		**39.4**	**8%**		26.4	21%
Depreciation		**1.1**	**—%**		0.6	—%
Acquisition costs		**—**	**—%**		9.7	8%
Impairment of intangible assets	**$**	**253.2**	**51%**	$	39.0	31%
Impairment of goodwill		**138.2**	**28%**		—	—%
Total operating expenses	**$**	**493.1**		$	127.2	

Research, development, collaborations and contracts

Research, development, collaborations and contracts expenses consist primarily of clinical and pre-clinical trial expenses, personnel expenses, consulting and third party expenses, consumables and materials, as well as a portion of stock-based compensation and general overhead costs.

R&D expenses increased during 2016 as compared to 2015 as we increased our spending on our HBV programs as we continue to advance them through the clinic in 2016 when we initiated Phase 2 clinical trials for ARB-1467 and ARB-1740, and prepared to advance AB-423 to Phase 1 clinical trial. We also continue to incur incremental costs related to an increase in activities for research and preclinical HBV programs, focusing on advancing the development of our candidates to support future clinical combination studies.

R&D compensation expense increased in 2016 as compared to 2015 due to an increase in the number of employees in support of our expanded portfolio of product candidates, as well as from our merger with Arbutus Inc. In addition, in the year ended December 31, 2016, we incurred a total of $32.0 million of non-cash compensation expense related to the expiry of repurchase rights on shares issued as part of the consideration paid for the merger with Arbutus Inc. (see table of quarterly charges below and refer to notes to the financial statements for further details), of which $6.0 million has been included as part of research, development, collaborations and contracts expense, and $26.0 million included as part of general and administrative expense.

A significant portion of our research, development, collaborations and contracts expenses are not tracked by project as they benefit multiple projects or our technology platform and because our most-advanced programs are not yet in late-stage clinical development. However, our collaboration agreements contain cost-sharing arrangements pursuant to which certain costs incurred under the project are reimbursed. Costs reimbursed under collaborations typically include certain direct external costs and hourly or full-time equivalent labor rates for the actual time worked on the project. In addition, we have been reimbursed under government contracts for certain allowable costs including direct internal and external costs. As a result, although a significant portion of our research, development, collaborations and contracts expenses are not tracked on a project-by-project basis, we do track direct external costs attributable to, and the actual time our employees worked on, our collaborations and government contracts.

General and administrative

General and administrative expenses increased in 2016 compared to 2015 due largely to an increase in compensation expense linked to our increase in employee base and incremental corporate expenses to support the growth of the Company following the completion of our merger with Arbutus Inc. This includes a non-cash compensation expense of $26.0 million we incurred related to the expiry of repurchase rights on shares issued as part of consideration paid for the merger with Arbutus Inc. (see above). In Q2 2016, we incurred an acceleration of incremental non-cash compensation expense due to the expiration of repurchase rights triggered by the departure of two of the four Arbutus Inc. founders. The following table summarizes the non-cash compensation expense recorded related to the expiry of repurchase rights, in millions:

	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
Research and development	$ 1.5	$ 1.5	$ 1.5	$ 1.5	$ 1.5	$ 1.4	$ 1.0	$ 0.3
General and administrative	1.5	1.5	18.5	4.5	4.5	4.3	3.1	0.9
Total non-cash compensation for repurchase rights expiration	$ 3.0	$ 3.0	$ 20.0	$ 6.0	$ 6.0	$ 5.7	$ 4.1	$ 1.2

Acquisition costs

In 2015, we incurred $9.7 million in costs for professional fees related to completing the merger with Arbutus Inc. - see "Item 1. Business". This cost is specific to the merger with Arbutus Inc., and such costs are only incurred when a business combination occurs.

Impairment of intangible assets and goodwill

For the year ended December 31, 2016, we recorded a net impairment charge of $148.2 million on intangible assets ($253.2 million less deferred taxes of $105.0 million). $156.3 million was recorded in the second quarter for the discontinuance of the ARB-1598 program in the Immune Modulator drug class after extensive research and analysis, as well as a delay for additional exploration of the biology of the cccDNA Sterilizer drug class. A further $96.9 million was recorded in the fourth quarter as a result of a change in the estimated cost of capital and resulting discount rate used in our annual impairment assessment. This change in discount rate was made to address the sustained discrepancy between our market capitalization and the carrying value of our intangible assets. For the year-ended December 31, 2015, we recorded an impairment charge of $39.0 million, with an offsetting income tax benefit of $16.2 million based on our decision to discontinue our cyclophilin inhibitors program, OCB-030.

On December 31, we performed our annual impairment analysis for goodwill and recorded an impairment of $138.1 million for the year ended December 31, 2016. As discussed above, we re-assessed the discount rate used in our valuation models used to assess the carrying value of goodwill and intangible assets for impairment as a result of the sustained discrepancy between market capitalization, carrying values and fair values.

Other income (losses) / Other income (losses) are summarized in the following table, in millions:

		2016		2015
Interest income	**$**	**1.4**	$	0.7
Foreign exchange gains		**1.1**		21.8
Gain on disposition of financial instrument		**1.0**		—
Decrease in fair value of warrant liability		**0.5**		3.3
Increase in fair value of contingent consideration	**$**	**(1.6)**	$	(0.8)
Total other losses	**$**	**2.4**	$	25.0

Foreign exchange gains

On January 1, 2016, our functional currency changed from the Canadian dollar to the U.S. dollar based on our analysis of changes in the primary economic environment in which we operate. We will continue to incur substantial expenses and hold cash and investment balances in Canadian dollars, and as such, will remain subject to risks associated with foreign currency fluctuations. For the year ended December 31, 2016, we recorded a foreign exchange gain of $1.1 million which is primarily an unrealized gain related to an appreciation in the value of our Canadian dollar funds from the previous period, when translated to our functional currency of U.S. dollars. For the year ended December 31, 2015, the foreign exchange gain of $21.8 million was related to the appreciation in value of our U.S. dollar funds from the previous period, when translated to our functional currency of Canadian dollars in that year.

Gain on disposition of financial instrument

On March 4, 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of our wholly-owned subsidiary, PADCo, as described above and paid us an exercise fee of $1.0 million.

Decrease in fair value of warrant liability

In conjunction with equity and debt financing transactions in 2011 and 2012, we issued warrants to purchase our common share. We are accounting for the warrants under the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. At each balance sheet date, the warrants are revalued using the Black-Scholes model and the change in value is recorded in the consolidated statement of operations and comprehensive income (loss). In June 2016, the warrants from our 2011 debt financing expired and the fair value of unexercised warrants were recorded in decrease in fair value of warrant liability for the year ended December 31, 2016.

Generally, a decrease in our share price from the previous reporting date results in a decrease in the fair value of our warrant liability and vice versa.

Increase in fair value of contingent consideration

The contingent consideration represents the estimated regulatory, development and sales milestone payments payable to the previous Enantigen shareholders. Enantigen was acquired by Arbutus Inc. in 2014. As at the acquisition date of Arbutus Inc., the contingent consideration had an estimated fair value of approximately $6.7 million. Contingent consideration is a financial liability, and we determine its fair value at each reporting period with any changes in fair value from the previous reporting period recorded in the statement of operations and comprehensive loss. For the period ended December 31, 2016, we performed an evaluation of the fair value of the contingent consideration using the probability weighted assessment of likelihood of milestone payments as described above and determined the fair value of the contingent consideration has increased by $1.6 million to $9.1 million from $7.5 million as at December 31, 2015. The increase in fair value has been recorded in other losses in the statement of operations and comprehensive loss for the year ended December 31, 2016.

Income tax benefit

For the year ended December 31, 2016, we recorded an income tax benefit of $105.0 million due to the decrease in deferred tax liability resulting from the impairment charge to intangible assets.

LIQUIDITY AND CAPITAL RESOURCES

The following table summarizes our cash flow activities for the periods indicated, in millions:

	Year ended December 31		
	2017	2016	2015
Net loss for the year	**$ (84.4)**	$ (384.2)	$ (62.7)
Adjustments to reconcile net loss to net cash used in operating activities	**32.6**	326.7	21.0
Changes in operating assets and liabilities	**3.1**	(0.5)	(14.6)
Net cash used in operating activities	**(48.6)**	(57.9)	(56.4)
Net cash provided by (used in) investing activities	**27.8**	(99.1)	7.7
Net cash provided by financing activities	**49.3**	12.6	143.9
Effect of foreign exchange rate changes on cash & cash equivalents	**2.4**	1.0	(0.6)
Net increase (decrease) in cash and cash equivalents	**30.9**	(143.4)	94.6
Cash and cash equivalents, beginning of year	**23.4**	166.8	72.2
Cash and cash equivalents, end of year	**$ 54.3**	$ 23.4	$ 166.8

At December 31, 2017, we had cash and cash equivalents of $54.3 million, short-term investments of $72.1 million, and restricted investments of $12.6 million, totaling $139.0 million as compared to cash, cash equivalents, short-term investments and restricted cash of $143.2 million at December 31, 2016.

Since our incorporation, we have financed our operations through the sales of shares, units, debt, revenues from research and development collaborations and licenses with corporate partners, interest income on funds available for investment, and government contracts, grants and tax credits.

Operating activities used $48.6 million in cash in 2017 as compared to $57.9 million used in 2016 and $56.4 million used in 2015. The decrease in cash used from operating activities was primarily due to the upfront license payments we received from Alexion and Gritstone during 2017. Significant non-cash items to reconcile net loss used by operating activities include impairment of intangible assets of $40.8 million, deferred income tax benefit of $24.3 million (comprised of $16.9 million corresponding to the impairment charge, and a $7.4 million recovery in deferred tax liability on remaining intangible asset balance sheet value related to reduced US federal taxes), and stock-based compensation.

Investing activities provided cash of $27.8 million in 2017 compared to cash used of $99.1 million in 2016 and cash provided of $7.7 million in 2015. Cash provided increased in 2017 due to short-term investments that matured during the year.

On March 25, 2015, we completed an underwritten public offering of 7,500,000 common shares, at a price of $20.25 per share, representing gross proceeds of $151.9 million, and net proceeds of $142.2 million. On December 27, 2016, we obtained a $12.0 million loan from Wells Fargo, secured by $12.6 million in restricted cash. The loan is due on December 27, 2019, and we are able to partially or wholly repay the borrowings at any time. We used these proceeds primarily to renovate leased laboratory and office space in Warminster, Pennsylvania where we have expanded our U.S. research and development activities.

On October 16, 2017, we closed the sale of 500,000 Series A participating convertible preferred shares ("Preferred Shares") to Roivant for gross proceeds of $50.0 million. A second tranche of $66.4 million for 664,000 Preferred Shares closed on January 12, 2018, following receipt of the approval of Arbutus' shareholders on January 11, 2018. We are using these proceeds to develop and advance product candidates through clinical trials, as well as for working capital and general corporate purposes.

Cash requirements / At December 31, 2017 we held an aggregate of $139.0 million in cash, comprised of $54.3 million in cash and cash equivalents, $72.1 million in short-term investments, and $12.6 million in restricted cash (investments) and subsequent to December 31, 2017 we received an additional $66.4 million in cash from the close of the second tranche of Preferred Shares. On a proforma basis, including the second tranche proceeds, our 2017 ending cash balance was $205.4 million. We believe we have sufficient cash resources for at least the next 12 months. In the future, substantial additional funds will be required to continue with the active development of our pipeline products and technologies. In particular, our funding needs may vary depending on a number of factors including:

- the need for additional capital to fund future business development programs;

- closure costs associated with our organizational restructuring and expected savings from gains in efficiency:
- revenues earned from our existing licensing agreements, including milestone and royalty payments from Gritstone, Alnylam and Spectrum;
- the extent to which we continue the development of our product candidates, add new product candidates to our pipeline, or form collaborative relationships to advance our products;
- our decisions to in-license or acquire additional products or technology for development, in particular for our HBV programs;
- our ability to attract and retain corporate partners, and their effectiveness in carrying out the development and ultimate commercialization of our product candidates;
- extent of cash inflow from licensing our LNP technology and royalty entitlements;
- whether batches of drugs that we manufacture fail to meet specifications resulting in delays and investigational and remanufacturing costs;
- the decisions, and the timing of decisions, made by health regulatory agencies regarding our technology and products;
- competing technological and market developments; and
- costs associated with prosecuting and enforcing our patent claims and other intellectual property rights, including litigation and arbitration arising in the course of our business activities.

We will seek to obtain funding to maintain and advance our business from a variety of sources, including public or private equity or debt financing, collaborative arrangements with pharmaceutical companies and government grants and contracts. There can be no assurance that funding will be available at all or on acceptable terms to permit further development of our products, especially in light of the current difficult climate for investment in early stage biotechnology companies.

If adequate funding is not available, we may be required to delay, reduce or eliminate one or more of our research or development programs or reduce expenses associated with non-core activities. We may need to obtain funds through arrangements with collaborators or others that may require us to relinquish most or all of our rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise seek if we were better funded. Insufficient financing may also mean failing to prosecute our patents or relinquishing rights to some of our technologies that we would otherwise develop or commercialize.

Material commitments for capital expenditures / As at the date of this discussion we do not have any material commitments for capital expenditures.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

CONTRACTUAL OBLIGATIONS

Facility lease

On June 23, 2014, we signed an agreement to renew the lease for our Burnaby office and lab facility. The lease term is for five years, commencing August 1, 2014 with three additional renewal terms of five years each.

On August 9, 2016, we signed a new lease agreement effective November 1, 2016, subsequently amended to October 7, 2016, to enable moving our U.S. operations to 701 Veterans Circle, Warminster, Pennsylvania. The new location has approximately 35,000 square feet of laboratory facilities and office space. The lease expires on April 30, 2027. We also have the option of extending the lease for two further five-year terms.

Product development partnership with the Canadian Government

We entered into a Technology Partnerships Canada (TPC) agreement with the Canadian Federal Government on November 12, 1999. Under this agreement, TPC agreed to fund 27% of our costs incurred prior to March 31, 2004, in the development of certain oligonucleotide product candidates up to a maximum contribution from TPC of $7.2 million (C$9.3 million). As at December 31, 2017, a cumulative contribution of $3.0 million (C$3.7 million) had been received and we do not expect any further funding under this agreement. In return for the funding provided by TPC, we agreed to pay royalties on the share of future licensing and product revenue, if any that is received by us on certain non-siRNA oligonucleotide product candidates covered by the funding under the agreement. These royalties are payable until a certain cumulative payment amount is achieved or until a pre-specified date. In addition, until a cumulative amount equal to the funding actually received under the agreement has been paid to TPC, we agreed to pay a 2.5% royalty on any royalties we receive for Marqibo.

In September 2013, we began to earn royalties on Marqibo and the cumulative amount paid or accrued up to December 31, 2017 was $0.02 million resulting in the contingent amount due to TPC being $2.9 million (C$3.7 million).

Contingent consideration from Arbutus Inc. acquisition of Enantigen and License Agreements between Enantigen and Blumberg and Drexel

In October 2014, Arbutus Inc. acquired all of the outstanding shares of Enantigen pursuant to a stock purchase agreement. Through this transaction, Arbutus Inc. acquired a HBV surface antigen secretion inhibitor program and a capsid assembly inhibitor program, each of which are now assets of Arbutus, following the Company’s merger with Arbutus Inc. in March 2015.

Under the stock purchase agreement, Arbutus Inc. agreed to pay up to a total of $21.0 million to Enantigen’s selling stockholders upon the achievement of certain triggering events related to HBV therapies. The first triggering event is enrollment of the first patient in a Phase 1b clinical trial in HBV patients, which we expect may occur in the next twelve month period.

The regulatory, development and sales milestone payments have an estimated fair value of approximately $6.7 million as at the date of acquisition of Arbutus Inc. in March 2015, and have been treated as contingent consideration payable in the purchase price allocation. Contingent consideration is a financial liability, and measured at its fair value at each reporting period with any changes in fair value from the previous reporting period recorded in the statement of operations and comprehensive loss. For the period ended December 31, 2017, we performed an evaluation of the fair value of the contingent consideration using the probability weighted assessment of likelihood of milestone payments as described above. We determined the fair value of the contingent consideration has increased to $10.4 million. An increase in fair value of $1.4 million has been recorded in other losses in the statement of operations and comprehensive loss for the year ended December 31, 2017.

Drexel and Blumberg

In February 2014, Arbutus Inc. entered into a license agreement with Blumberg and Drexel that granted an exclusive, worldwide, sub-licensable license to three different compound series: cccDNA inhibitors, capsid assembly inhibitors and HCC inhibitors.

In partial consideration for this license, Arbutus Inc. paid a license initiation fee of $0.2 million and issued warrants to Blumberg and Drexel. Under this license agreement, Arbutus Inc. also agreed to pay up to $3.5 million in development and regulatory milestones per licensed compound series, up to $92.5 million in sales performance milestones per licensed product, and royalties in the mid-single digits based upon the proportionate net sales of licensed products in any commercialized combination. We are obligated to pay Blumberg and Drexel a double digit percentage of all amounts received from the sub-licensees, subject to customary exclusions.

In November 2014, Arbutus Inc. entered into an additional license agreement with Blumberg and Drexel pursuant to which it received an exclusive, worldwide, sub-licensable license under specified patents and know-how controlled by Blumberg and Drexel covering epigenetic modifiers of cccDNA and STING agonists. In consideration for these exclusive licenses, Arbutus Inc. made an upfront payment of $0.1 million. Under this agreement, we will be required to pay up to $1.0 million for each licensed product upon the achievement of a specified regulatory milestone and a low single digit royalty, based upon the proportionate net sales of compounds covered by this intellectual property in any commercialized combination. We are also obligated to pay Blumberg and Drexel a double digit percentage of all amounts received from its sub-licensees, subject to exclusions.

Research Collaboration and Funding Agreement with Blumberg

In October 2014, Arbutus Inc. entered into a research collaboration and funding agreement with Blumberg under which we will provide $1.0 million per year of research funding for three years, renewable at our option for an additional three years, for Blumberg to conduct research projects in HBV and liver cancer pursuant to a research plan to be agreed upon by the parties. Blumberg has exclusivity obligations to Arbutus with respect to HBV research funded under the agreement. In addition, Arbutus has the right to match any third party offer to fund HBV research that falls outside the scope of the research being funded under the agreement. Blumberg has granted Arbutus the right to obtain an exclusive, royalty bearing, worldwide license to any intellectual property generated by any funded research project. If we elect to exercise its right to obtain such a license, we will have a specified period of time to negotiate and enter into a mutually agreeable license agreement with Blumberg. This license agreement will include the following pre negotiated upfront, milestone and royalty payments: an upfront payment in the amount of $0.1 million; up to $8.1 million upon the achievement of specified development and regulatory milestones; up to $92.5 million upon the achievement of specified commercialization milestones; and royalties at a low single to mid-single digit rates based upon the proportionate net sales of licensed products from any commercialized combination.

On June 5, 2016, we entered into an amended and restated research collaboration and funding agreement with Blumberg, primarily to: (1) increase the annual funding amount to Blumberg from $1.0 to $1.1 million; (ii) extend the initial term through to October 29, 2018; (iii) provide an option for us to extend the term past October 29, 2018 for two additional one year terms; and (iv) expand our exclusive license under the Agreement to include the sole and exclusive right to obtain an exclusive, royalty-bearing, worldwide and all-fields license under Blumberg's rights in certain other inventions described in the agreement.

The following table summarizes our contractual obligations as at December 31, 2017:

(in millions)	Payments Due by Period				
	Total	**Less than 1 year**	**1 – 3 years**	**3 – 5 years**	**More than 5 years**
Contractual Obligations					
Facility lease	$ 8.0	$ 1.6	$ 1.9	$ 1.4	$ 3.1
Loan payable	12.0	$ —	$ 12.0	$ —	$ —
Total	**$ 20.0**	**1.6**	**13.9**	**1.4**	**3.1**

We in-license technology from a number of sources. Pursuant to these in-license agreements, we will be required to make additional payments if and when we achieve specified development, regulatory, financial and commercialization milestones. To the extent we are unable to reasonably predict the likelihood, timing or amount of such payments; we have excluded them from the table above. Our technology in-licenses are further described in "Item 1. Business".

We also have contracts and collaborative arrangements that require us to undertake certain research and development work as further explained elsewhere in this discussion. It is not practicable to estimate the amount of these obligations.

IMPACT OF INFLATION

Inflation has not had a material impact on our operations.

RELATED PARTY TRANSACTIONS

On October 16, 2017, we closed the sale of 500,000 Series A participating convertible preferred shares ("Preferred Shares") to Roivant for gross proceeds of $50.0 million. A second financing of $66.4 million for 664,000 Preferred Shares closed on January 12, 2018, following receipt of the approval by Arbutus' shareholders on January 11, 2018. The Preferred Shares are non-voting and are convertible into common shares at a conversion price of $7.13 per share (which represents a 15% premium to the closing price of $6.20 per share on October 16, 2017). The purchase price for the Preferred Shares plus an amount equal to 8.75% per annum, compounded annually, will be subject to mandatory conversion into common shares on October 18, 2021 (subject to limited exceptions in the event of certain fundamental corporate transactions relating to Arbutus' capital structure or assets, which would permit earlier conversion at Roivant's option).

After conversion of the Preferred Shares into common shares, based on the number of common shares outstanding on October 2, 2017, Roivant would hold 49.90% of the Company's common shares. Roivant has agreed to a four year lock-up period for this investment and its existing holdings in Arbutus. Roivant has also agreed to a four year standstill whereby Roivant will not acquire greater than 49.99% of the Company's common shares or securities convertible into common shares.

We are currently negotiating a structure to jointly develop our LNP and GalNAc technologies with Roivant.

OUTSTANDING SHARE DATA

At March 6, 2018, we had 55,070,037 common shares issued and outstanding. In addition, we had outstanding 1,164,000 Series A participating convertible preferred shares outstanding, which will be mandatorily convertible into 22,589,601 common shares on October 18, 2021. Assuming the convertible preferred shares were converted as of March 6, 2018, we would have had 77,659,638 common shares outstanding at March 6, 2018.

RECENT ACCOUNTING PRONOUNCEMENTS

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB) or other standard setting bodies that we adopt as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

Please refer to Note 2 to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data," of this annual report on Form 10-K for a description of recent accounting pronouncements applicable to our business.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest rate risk

We are exposed to market risk related to changes in interest rates, which could adversely affect the value of our interest rate sensitive assets and liabilities. We do not hold any instruments for trading purposes and investment decisions are governed by a Board approved Investment Policy. As at December 31, 2017, we had cash and cash equivalents of $54.3 million and short-term and restricted investments of $84.7 million, as compared to $23.4 million of cash and cash equivalents and $119.7 million of short- and long-term investments as at December 31, 2016. We invest our cash reserves in high interest saving accounts and guaranteed investment certificates and term deposits with varying terms to maturity (not exceeding two years) issued by major banks, selected with regard to the expected timing of expenditures for continuing operations and prevailing interest rates.

The fair value of our cash investments as at December 31, 2017 is equal to the face value of those investments and the value reported in our balance sheet. Due to the relatively short-term nature of the investments that we hold, 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. Our debt instrument sensitive to changes in interest rate is our liability-classified stock options, with its fair value determined using the Black-Scholes model, which uses interest rate as an input. We have estimated the effects on our liability-classified stock options based on a one percentage point hypothetical adverse change in interest rates as of December 31, 2017 and 2016. We determined the hypothetical fair value using the same Black-Scholes model, and determined that an increase in the interest rates of one percentage point would have had an immaterial change to our liability-classified stock option awards as at December 31, 2017 and 2016.

Foreign currency exchange risk

In addition, we are exposed to market risk related to changes in foreign currency exchange rates. We have not entered into any agreements or purchased any instruments to hedge possible currency risks at this time. We manage our exchange rate risk by using cash received in a currency to pay for expenses in that same currency, whenever possible. Our policy is to maintain US and Canadian dollar cash and investment balances based on long term forecasts of currency needs thereby creating a natural currency hedge. As of December 31, 2017 and 2016, an adverse change of one percentage point in the foreign currency exchange rates of Canadian to US dollars would have resulted in an incremental loss of $0.3 million and $0.4 million, respectively. We recorded foreign exchange gains of $2.3 million and $1.1 million for the fiscal years ended December 31, 2017 and 2016, respectively.

On January 1, 2016, our functional currency changed from the Canadian dollar to the U.S. dollar based on our analysis of changes in the primary economic environment in which we operate. We will continue to incur substantial expenses and hold cash and investment balances in Canadian dollars, and as such, will remain subject to risks associated with foreign currency fluctuations.

Item 8. Financial Statements and Supplementary Data

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Report Of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Arbutus Biopharma Corporation

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Arbutus Biopharma Corporation (the Company) as of December 31, 2017 and 2016, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 15, 2018 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB and in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG
Chartered Professional Accountants

We have served as the Company's auditor since 2002.

Vancouver, Canada

March 15, 2018

Report Of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Arbutus Biopharma Corporation

Opinion on Internal Control Over Financial Reporting

We have audited Arbutus Biopharma Corporation's (the Company) internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2017 and 2016, the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the consolidated financial statements), and our report dated March 15, 2018, expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB and in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG
Chartered Professional Accountants

Vancouver, Canada
March 15, 2018

ARBUTUS BIOPHARMA CORPORATION

Consolidated Balance Sheets

(Expressed in thousands of US Dollars, except share and per share amounts)

(Prepared in accordance with US GAAP)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	**$ 54,292**	$ 23,413
Short-term investments (note 2)	**72,060**	107,146
Accounts receivable	**402**	273
Accrued revenue	**128**	128
Investment tax credits receivable	**340**	293
Prepaid expenses and other assets	**2,144**	1,311
Total current assets	**129,366**	132,564
Restricted investment (note 2)	**12,601**	12,601
Long-term investments	**—**	—
Property and equipment (note 5)	**24,854**	17,683
Less accumulated depreciation (note 5)	**(12,671)**	(10,738)
Property and equipment, net of accumulated depreciation (note 5)	**12,183**	6,945
Intangible assets (note 3)	**58,647**	99,445
Goodwill (note 3)	**24,364**	24,364
Total assets	**$ 237,161**	$ 275,919
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities (note 12)	**$ 10,646**	$ 9,910
Deferred revenue (note 4)	**2,742**	15
Liability-classified options (notes 2 and 6)	**1,239**	553
Warrants (notes 2 and 6)	**—**	107
Total current liabilities	**14,627**	10,585
Deferred revenue, net of current portion (note 4)	**—**	—
Deferred rent and inducements, long term	**693**	—
Loan payable (notes 2 and 9)	**12,001**	12,001
Contingent consideration (note 10)	**10,424**	9,065
Deferred tax liability (notes 3 and 8)	**16,943**	41,263
Total liabilities	**54,688**	72,914
Stockholders' equity:		
Preferred shares (note 6)		
Authorized - 1,164,000 with no par value		
Issued and outstanding: 500,000 (December 31, 2016 - nil)	**49,780**	—
Common shares (note 6)		
Authorized - unlimited number with no par value		
Issued and outstanding: 55,060,662 (December 31, 2016 - 54,841,494)	**876,108**	867,393
Additional paid-in capital	**42,840**	36,543
Deficit	**(738,070)**	(652,746)
Accumulated other comprehensive loss	**(48,185)**	(48,185)
Total stockholders' equity	**182,473**	203,005
Total liabilities and stockholders' equity	**$ 237,161**	$ 275,919

Nature of business and future operations (note 1)

Contingencies and commitments (note 10)

Subsequent events (note 14)

See accompanying notes to the consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Consolidated Statements of Operations and Comprehensive Loss
(Expressed in thousands of US Dollars, except share and per share amounts)
(Prepared in accordance with US GAAP)

	Year ended December 31,		
	2017	2016	2015
Revenue (note 4)			
Collaborations and contracts	**$ 682**	$ 229	$ 11,712
Licensing fees, milestone and royalty payments	**10,018**	1,262	11,564
Total revenue	**10,700**	1,491	23,276
Expenses			
Research, development, collaborations and contracts	**62,676**	61,253	51,505
General and administrative	**16,129**	39,438	26,438
Depreciation of property and equipment	**2,027**	1,092	589
Acquisition costs (note 2)	**—**	—	9,656
Impairment of intangible assets (note 3)	**40,798**	253,197	39,007
Impairment of goodwill (note 3)	**—**	138,150	—
Total expenses	**121,630**	493,130	127,195
Loss from operations	**(110,930)**	(491,639)	(103,919)
Other income (losses)			
Interest income	**1,538**	1,391	674
Interest expense	**(261)**	—	—
Foreign exchange gains	**2,301**	1,120	21,771
Gain on disposition of financial instrument (note 4)	**—**	1,000	—
Decrease (increase) in fair value of warrant liability (note 2)	**(22)**	530	3,341
Increase in fair value of contingent consideration (note 2)	**(1,359)**	(1,568)	(770)
Total other income (losses)	**$ 2,197**	$ 2,473	$ 25,016
Loss before income taxes	**(108,733)**	(489,166)	(78,903)
Deferred income tax recovery (notes 3 and 8)	**24,320**	105,002	16,185
Net loss	**$ (84,413)**	$ (384,164)	$ (62,718)
Items applicable to preferred shares			
Accrual of coupon on convertible preferred shares (note 6)	**(911)**	—	—
Net loss attributable to common shares	**$ (85,324)**	$ (384,164)	$ (62,718)
Net loss attributable to common shareholders, per share			
Basic	**$ (1.56)**	$ (7.24)	$ (1.38)
Diluted	**$ (1.56)**	$ (7.24)	$ (1.38)
Weighted average number of common shares			
Basic	**54,723,272**	53,074,401	45,462,324
Diluted	**54,723,272**	53,074,401	45,462,324
Other Comprehensive loss			
Cumulative translation adjustment	**—**	—	(25,872)
Comprehensive loss	**$ (84,413)**	$ (384,164)	$ (88,590)

See accompanying notes to the consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Consolidated Statement of Stockholders' Equity

(Expressed in thousands of US Dollars, except share and per share amounts)

(Prepared in accordance with US GAAP)

	Convertible Preferred Shares		Common Shares					
	Number of Shares	Amount	Number of shares	Amount	Additional paid-in capital	Deficit	Accumulated other comprehensive loss	Total stockholders' equity
Balance, December 31, 2014	—	$ —	22,438,169	$ 290,004	$ 26,208	$ (205,864)	$ (22,313)	$ 88,035
Stock-based compensation	—		—	16,687	5,406	—	—	22,093
Issuance of common shares pursuant to exercise of options	—		640,457	4,186	(2,535)	—	—	1,651
Issuance of common shares pursuant to exercise of warrants	—		18,750	371	—	—	—	371
Issuance of common shares in conjunction with the private offering, net of issuance costs of $4,085,000	—		7,500,000	142,177	—	—	—	142,177
Increase of equity instruments in conjunction with the acquisition of Arbutus Inc. (note 3)	—		23,973,315	380,815	1,127	—	—	381,942
Currency translation adjustment	—		—	—	—	—	(25,872)	(25,872)
Net loss	—		—	—	—	(62,718)	—	(62,718)
Balance at December 31, 2015	—	—	54,570,691	834,240	30,206	(268,582)	(48,185)	547,679
Stock-based compensation	—		—	31,986	6,176	—	—	38,162
Reclassification of equity to liability stock option awards	—		—	—	(3,243)	—	—	(3,243)
Certain fair value adjustments to liability stock option awards	—		—	—	3,621	—	—	3,621
Issuance of common shares pursuant to exercise of options	—		100,303	475	(217)	—	—	258
Issuance of common shares pursuant to exercise of warrants	—		170,500	692		—	—	692
Net loss	—		—	—	—	(384,164)	—	(384,164)
Balance at December 31, 2016	—		54,841,494	867,393	36,543	(652,746)	(48,185)	203,005
Issuance of Preferred Shares, net of issuance cost of $1,131,000	500,000	48,869						48,869
Accrual of coupon on Preferred Shares (note 6c)		911				(911)		—
Stock-based compensation			—	7,972	6,886	—	—	14,858
Certain fair value adjustments to liability stock option awards (notes 2 and 6)			—	—	(540)	—	—	(540)
Issuance of common shares pursuant to exercise of options			40,156	262	(49)	—	—	213
Issuance of common shares pursuant to exercise of warrants			179,000	481	—	—	—	481
Net loss			—	—	—	(84,413)	—	(84,413)
Balance at December 31, 2017	**500,000**	**$ 49,780**	**55,060,650**	**$ 876,108**	**$ 42,840**	**$ (738,070)**	**$ (48,185)**	**$ 182,473**

See accompanying notes to the consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Consolidated Statements of Cash Flows

(Expressed in thousands of US Dollars, except share and per share amounts)

(Prepared in accordance with US GAAP)

	Year ended December 31,		
	2017	2016	2015
OPERATING ACTIVITIES			
Net loss for the period	**$ (84,413)**	$ (384,164)	$ (62,718)
Items not involving cash:			
Deferred income taxes (notes 3 and 8)	**(24,320)**	(105,061)	(16,185)
Depreciation of property and equipment	**2,027**	1,092	589
Loss (gain) on sale of property and equipment	**(3)**	174	—
Stock-based compensation - research, development, collaborations and contract expenses	**9,236**	11,155	7,869
Stock-based compensation - general and administrative expenses	**5,881**	28,004	14,224
Unrealized foreign exchange gains	**(2,374)**	(1,003)	(21,966)
Change in fair value of warrant liability	**22**	(530)	(3,341)
Change in fair value of contingent consideration	**1,359**	1,568	770
Impairment of intangible assets (note 3)	**40,798**	253,197	39,007
Impairment of goodwill (note 3)	**—**	138,150	—
Net change in non-cash operating items:			
Accounts receivable	**(129)**	735	628
Accrued revenue	**—**	—	349
Investment tax credits receivable	**(47)**	(47)	(188)
Prepaid expenses and other assets	**(833)**	(115)	159
Accounts payable and accrued liabilities	**736**	26	(2,489)
Deferred revenue	**2,727**	(1,066)	(13,090)
Deferred rent and inducements	**693**	—	—
Net cash used in operating activities	**(48,640)**	(57,885)	(56,382)
INVESTING ACTIVITIES			
Disposition (acquisition) of investments	**35,086**	(82,551)	9,645
Acquisition of restricted investment (note 2)	**—**	(12,601)	—
Cash acquired through acquisition	**—**	—	324
Proceeds from sale of property and equipment	**3**	25	—
Acquisition of property and equipment	**(7,264)**	(3,996)	(2,287)
Net cash provided by (used in) investing activities	**27,825**	(99,123)	7,682
FINANCING ACTIVITIES			
Proceeds from loan payable (notes 2 and 8)	**—**	12,001	—
Proceeds from issuance of common shares, net of issuance costs	**—**	—	142,177
Proceeds from sale of Preferred Shares, net of issuance costs	**48,869**	—	—
Issuance of common shares pursuant to exercise of options	**100**	192	1,651
Issuance of common shares pursuant to exercise of warrants	**353**	445	42
Net cash provided by financing activities	**49,322**	12,638	143,870
Effect of foreign currency rate changes on cash and cash equivalents	**2,372**	1,004	(578)
Increase in cash and cash equivalents	**30,879**	(143,366)	94,592
Cash and cash equivalents, beginning of period	**23,413**	166,779	72,187
Cash and cash equivalents, end of period	**$ 54,292**	$ 23,413	$ 166,779
Supplemental cash flow information			
Acquisition of property and equipment not yet paid	**—**	1,057	—
Investment tax credits received	**$ 108**	$ —	$ 24
Acquisition of Arbutus Inc. net of cash acquired	**$ —**	$ —	$ 381,618

See accompanying notes to the consolidated financial statements.

Notes to Consolidated Financial Statements

(Tabular amounts in thousands of US Dollars, except share and per share amounts)

1. Nature of business and future operations

Arbutus Biopharma Corporation (the “Company” or “Arbutus”) is a biopharmaceutical business dedicated to discovering, developing, and commercializing a cure for patients suffering from chronic hepatitis B infection, a disease of the liver caused by the hepatitis B virus (“HBV”). To pursue our strategy of developing a curative combination regimen, we have assembled an HBV pipeline consisting of multiple drug candidates with differing and complementary mechanisms of action (MOA).

The success of the Company is dependent on obtaining the necessary regulatory approvals to bring its products to market and achieve profitable operations. The continuation of the research and development activities and the commercialization of its products are dependent on the Company’s ability to successfully complete these activities and to obtain adequate financing through a combination of financing activities and operations. It is not possible to predict either the outcome of future research and development programs or the Company’s ability to continue to fund these programs in the future.

2. Significant accounting policies

Basis of presentation

Arbutus Biopharma Corporation was incorporated in Canada on October 6, 2005 as an inactive wholly owned subsidiary of Inex Pharmaceuticals Corporation (Inex). Pursuant to a “Plan of Arrangement” effective April 30, 2007, the business and substantially all of the assets and liabilities of Inex were transferred to the Company. The consolidated financial statements for all periods presented herein include the consolidated operations of Inex until April 30, 2007 and the operations of the Company thereafter.

The Company has two wholly-owned subsidiaries as at December 31, 2017: Arbutus Biopharma, Inc. (Arbutus Inc. formerly OnCore Biopharma, Inc.) and Protiva Biotherapeutics Inc. ("Protiva"). Protiva was acquired on May 30, 2008. Arbutus Inc. was acquired by way of a Merger Agreement on March 4, 2015. On January 1, 2018, Protiva was amalgamated with Arbutus Biopharma Corporation.

In addition to Arbutus Inc. and Protiva, the Company's former wholly-owned subsidiary, Protiva Agricultural Development Company Inc. ("PADCo"), was previously recorded by the Company using the equity method. On March 4, 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of PADCo, as described in note 4(d).

These consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Arbutus Inc. and Protiva. All intercompany transactions and balances have been eliminated on consolidation.

Recast of Comparative Financial Statements

Certain comparative figures in the Statements of Operations and Comprehensive Loss, Stockholders' Equity, and Cash Flows have been recast to decrease revenues and decrease cumulative translation loss adjustment by $1,597,000, due to translation adjustments from the Company's Canadian dollar functional currency to the U.S. dollar reporting currency for the year-ended December 31, 2015. The cumulative effect of the adjustment has been reflected in the Consolidated Balance Sheets for the year-ended December 31, 2016 as an increase in Deficit and decrease in Accumulated Other Comprehensive Income of $1,597,000. The recast had no effect on operating cash flows for fiscal 2015, 2016, and 2017. As of January 1, 2016, the Company's functional and reporting currency is the U.S. dollar, as described below.

Foreign currency translation and functional currency conversion

Prior to January 1, 2016, the Company's functional currency was the Canadian dollar. Translation gains and losses from the application of the U.S. dollar as the reporting currency during the period that the Canadian dollar was the functional currency are included as part of cumulative currency translation adjustment, which is reported as a component of shareholders' equity under accumulated other comprehensive loss.

The Company re-assessed its functional currency and determined as at January 1, 2016, its functional currency changed from the Canadian dollar to the U.S. dollar based on management's analysis of changes in the primary economic environment in which the Company operates. The change in functional currency is accounted for prospectively from January 1, 2016 and financial statements prior to and including the period ended December 31, 2015 have not been restated for the change in functional currency.

For periods commencing January 1, 2016, monetary assets and liabilities denominated in foreign currencies are translated into U.S. dollars using exchange rates in effect at the balance sheet date. Opening balances related to non-monetary assets and liabilities are based on prior period translated amounts, and non-monetary assets and non-monetary liabilities incurred after January 1, 2016 are translated at the approximate exchange rate prevailing at the date of the transaction. Revenue and expense transactions are translated at the approximate exchange rate in effect at the time of the transaction. Foreign exchange gains and losses are included in the statement of operations and comprehensive loss as foreign exchange gains.

Use of estimates

The preparation of the consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions about future events that affect the reported amounts of assets, liabilities, revenue, expenses, contingent assets and contingent liabilities as at the end or during the reporting period. Actual results could significantly differ from those estimates. Significant areas requiring the use of management estimates relate valuation of intangible assets and goodwill, recognition of revenue, stock-based compensation, and financial instruments, and the amounts recorded as accrued liabilities, contingent consideration, and income tax recovery.

Cash and cash equivalents

Cash and cash equivalents are all highly liquid instruments with an original maturity of three months or less when purchased. Cash equivalents are recorded at cost plus accrued interest. The carrying value of these cash equivalents approximates their fair value.

Short-term investments

Short-term investments have original maturities exceeding three months, and have remaining maturities less than one year. Short-term investments accrue interest daily based on a fixed interest rate for the term. The carrying value of these investments are recorded at cost plus accrued interest, which approximates their fair value. All investments are governed by the Board approved Investment Policy for the Company.

Loan payable and restricted investment

The Company obtained a loan from Wells Fargo for the purpose of financing its operations, including the expansion of laboratory facilities for its U.S. operations. The loan accrues interest daily based on an interest rate with a variable and fixed component. The variable component is the one-month London Interbank Offered Rate (LIBOR), and the fixed component is a margin based on the amount of collateral cash the Company maintains with the lender - see note 9. The loan is due December 2019. The loan is recorded at amortized cost.

The Company must maintain a cash or investment balance as collateral for the loan payable to Wells Fargo. The cash or investment is restricted from the Company's use until the loan is repaid. The Company does not expect to repay the loan within twelve months of the balance sheet date so has classified the restricted investment as a long-term asset. The restricted cash balance has been used to purchase a two year investment maturing on December 23, 2018 and accruing interest at a fixed interest rate of 1.25%. The carrying value of the restricted investment is recorded at cost plus any accrued interest not yet received, which approximates its fair value.

Fair value of financial instruments

We measure certain financial instruments and other items at fair value.

To determine the fair value, we use the fair value hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 inputs are quoted market prices for identical instruments available in active markets.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets.
- Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

The Company's financial instruments consist of cash and cash equivalents, short-term, and restricted investments, accounts receivable, accounts payable and accrued liabilities, warrants, and loan payable . Restricted investments approximate fair value due to the interest rates being at prevailing market rates.

The carrying values of cash and cash equivalents, short-term investments, accounts receivable and accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.

As quoted prices for the warrants are not readily available, the Company has used a Black-Scholes pricing model, as described in note 6, to estimate fair value. These are level 3 inputs as defined above.

To determine the fair value of the contingent consideration, the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments were discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, time to complete the program development, and overall biotech indices, as detailed in note 10. The Company determined the fair value of the contingent consideration was $10,424,000 and the increase of $1,359,000 has been recorded in other losses in the statement of operations and comprehensive loss for the year ended December 31, 2017. The assumptions used in the discounted cash flow model are level 3 inputs as defined above.

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:

	Level 1	Level 2	Level 3	December 31, 2017
Assets				
Cash and cash equivalents	$ 54,292	—	—	$ 54,292
Short-term investments	72,060	—	—	72,060
Restricted investment	12,601	—	—	12,601
Total	$ 138,953	—	—	$ 138,953
Liabilities				
Liability-classified stock option awards	—	—	1,239	1,239
Contingent consideration	—	—	10,424	10,424
Total	—	—	11,663	$ 11,663

	Level 1	Level 2	Level 3	December 31, 2016
Assets				
Cash and cash equivalents	$ 23,413	—	—	$ 23,413
Guaranteed investment certificates	107,146	—	—	107,146
Term deposit	12,601	—	—	12,601
Total	$ 143,160	—	—	$ 143,160
Liabilities				
Warrants	—	—	$ 107	$ 107
Liability-classified stock option awards			553	553
Contingent consideration	—	—	9,065	9,065
Total	—	—	$ 9,725	$ 9,725

The following table presents the changes in fair value of the Company's warrants:

	Liability at beginning of the period	Fair value of warrants exercised in the period	Increase (decrease) in fair value of warrants	Foreign exchange loss	Liability at end of the period
Year ended December 31, 2015	$ 5,099	$ (334)	$ (3,341)	$ (541)	$ 883
Year ended December 31, 2016	$ 883	$ (247)	$ (529)	$ —	$ 107
Year ended December 31, 2017	$ 107	$ (129)	$ 22	$ —	$ —

The following table presents the changes in fair value of the Company's liability-classified stock option awards:

	Liability at beginning of the period	Reclassification of equity to liability [1]	Fair value of liability-classified stock option awards exercised in the period	Increase (decrease) in fair value of liability	Liability at end of the period
Year ended December 31, 2016	$ —	$ 1,909	$ (54)	$ (1,302)	$ 553
Year ended December 31, 2017	$ 553	$ —	$ (103)	$ 789	$ 1,239

(1) Upon functional currency conversion on January 1, 2016 - see functional currency conversion above.

The following table presents the changes in fair value of the Company's contingent consideration:

	Contingent consideration at beginning of the period	Increase in fair value of contingent consideration	Contingent consideration at end of the period
Year ended December 31, 2015[1]	$ 6,727	$ 770	$ 7,497
Year ended December 31, 2016	$ 7,497	$ 1,568	$ 9,065
Year ended December 31, 2017	$ 9,065	$ 1,359	$ 10,424

(1) As at acquisition date of March 4, 2015.

Property and equipment

Property and equipment is recorded at cost less impairment losses, accumulated depreciation, related government grants and investment tax credits. The Company records depreciation using the straight-line method over the estimated useful lives of the capital assets as follows:

	Useful life (years)
Laboratory equipment	5
Computer and office equipment	2 — 5
Furniture and fixtures	5

Leasehold improvements are depreciated over their estimated useful lives but in no case longer than the lease term, except where lease renewal is reasonably assured.

If there is a major event indicating that the carrying value of property and equipment may be impaired then management will perform an impairment test and if the carrying value exceeds the recoverable value, based on undiscounted future cash flows, then such assets are written down to their fair values.

Goodwill and intangible assets

The costs incurred in establishing and maintaining patents for intellectual property developed internally are expensed in the period incurred.

Intangible assets consist of in-process research and development arising from the Company’s acquisition of Arbutus Inc. in 2015. In-process research and development (IPR&D) intangible assets are classified as indefinite-lived and are not amortized. IPR&D becomes definite-lived upon the completion or abandonment of the associated research and development efforts. Intangible assets with finite useful lives are amortized on a straight-line basis over their estimated useful lives, which are the respective patent terms. Amortization begins when intangible assets with finite lives are put into use. If there is a major event indicating that the carrying value of intangible assets may be impaired, then management will perform an impairment test in an interim period and if the carrying value exceeds the recoverable value, based on discounted future cash flows, then such assets are written down to their fair values.

The Company reviews the recoverable amount of intangible assets and goodwill on an annual basis, and the annual evaluation is performed as of December 31 each year. In addition, the Company evaluates for events or changes in the business that could indicate impairment and earlier testing. Such indicators include, but are not limited to, on an ongoing basis: (a) industry and market considerations such as increased competitive environment or adverse change in legal factors including an adverse assessment by regulators; (b) an accumulation of costs significantly in excess of the amount originally expected for the development of the asset; (c) current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of the asset; (d) adverse research and development program results; and (e) if applicable, a sustained decrease in share price.

Goodwill represents the excess of purchase price over the value assigned to the net tangible and identifiable intangible assets of Arbutus Inc. - see note 3. Goodwill has an indefinite accounting life and is therefore not amortized. Instead, goodwill is assessed for impairment on an annual basis, unless the Company identifies impairment indicators that would require earlier testing. For the period ended December 31, 2017, the Company has elected to early adopt ASU 2017-04, which simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test, which required a hypothetical purchase price allocation. A 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. All other goodwill impairment guidance remains substantially unchanged, and management continues to have the ability to perform a qualitative assessment to determine if a quantitative impairment test is necessary. The Company performs its qualitative analysis using factors including but not limited to: (a) macroeconomic conditions; (b) industry and market considerations; (c) cost factors; (d) overall financial performance; (e) other relevant entity-specific events; (f) events affecting a reporting unit; and (g) if applicable, a sustained decrease in share price in absolute terms and relative to peers. The qualitative assessment for the period ended December 31, 2017 did not indicate an impairment of goodwill and no further quantitative assessment was necessary.

Revenue recognition

The Company earns revenue from research and development collaboration and contract services, licensing fees, milestone and royalty payments. In arrangements with multiple deliverables, the delivered item or items is considered a separate unit of accounting if: (1) the delivered item has value to the customer on a standalone basis; and (2) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item is considered probably and substantially in the Company's control. If the elements of the arrangement do not meet both of the criteria above, they are recognized as a single unit of accounting. If the elements do meet the criteria above, arrangement consideration is allocated to the separate units of accounting based on their relative selling price. Non-refundable payments received under collaborative research and development agreements are recorded as revenue as services are performed and related expenditures are incurred. Non-refundable upfront license fees from collaborative licensing and development arrangements are recognized as the Company fulfills its obligations related to the various elements within the agreements, in accordance with the contractual arrangements with third parties and the term over which the underlying benefit is being conferred. If non-refundable license fees have values to the customer on a standalone basis, separate from the undelivered performance obligations, they are recognized upon delivery. To date, the Company has not recognized any non-refundable license fees upon delivery.

The Company evaluates new arrangements for any substantive milestones by considering: whether substantive uncertainty exists upon execution of the arrangement; if the event can only be achieved based in whole or in part on the Company’s performance, or occurrence of a specific outcome resulting from the Company’s performance; any future performance required, and payment is reasonable relative to all deliverables; and, the payment terms in the arrangement. Payments received upon the achievement of substantive milestones are recognized as revenue in their entirety. Payments received upon the occurrence of milestones that are non-substantive are deferred and recognized as revenue over the estimated period of performance applicable to the associated collaborative agreement.

Revenue earned under research and development manufacturing collaborations where the Company bears some or all of the risk of a product manufacturing failure is recognized when the purchaser accepts the product and there are no remaining rights of return.

Revenue earned under research and development collaborations where the Company does not bear any risk of product manufacturing failure is recognized in the period the work is performed. For contracts where the manufacturing amount is specified, revenue is recognized as product is manufactured in proportion to the total amount specified under the contract.

Cash or other compensation received in advance of meeting the revenue recognition criteria is recorded on the balance sheet as deferred revenue. Revenue meeting recognition criteria but not yet received or receivable is recorded on the balance sheet as accrued revenue.

Leases and lease inducements

Leases entered into are classified as either capital or operating leases. Leases which substantially transfer all benefits and risks of ownership of property to the Company are accounted for as capital leases. At the time a capital lease is entered into, an asset is recorded together with its related long-term obligation to reflect the purchase and financing.

All other leases are accounted for as operating leases wherein rental payments are expensed as incurred.

Lease inducements represent leasehold improvement allowances and reduced or free rent periods and are amortized on a straight-line basis over the term of the lease and are recorded as a reduction of rent expense.

Research and development costs

Research and development costs, including acquired in-process research and development expenses for which there is no alternative future use, are charged as an expense in the period in which they are incurred.

Net loss attributable to common shareholders per share

The Company follows the two-class method when computing net loss attributable to common shareholders per share as the Company has issued Preferred Shares (note 6) that meet the definition of participating securities. The Preferred Shares entitle the holders to participate in dividends but do not require the holders to participate in losses of the Company. Accordingly, if the Company reports a net loss attributable to common shareholders net losses are not allocated to Preferred Shareholders.

Net loss attributable to common shareholders per share is calculated based on the weighted average number of common shares outstanding. Diluted net loss attributable to common shareholders per share does not differ from basic net loss attributable to common shareholders per share for the years ended December 31, 2017, 2016 and 2015, since the effect of the Company's stock options and warrants is anti-dilutive.

The following table sets out the computation of basic and diluted net loss attributable to common shareholders per share:

	For the year ended December 31			
	2017		2016	2015
Numerator:	**Common Shares**	**Preferred Shares**	Common Shares	Common Shares
Allocation of distributable earnings	$ —	$ 911	$ —	$ —
Allocation of undistributed earnings (loss)	(85,324)	—	(384,164)	(62,718)
Allocation of earnings (loss) attributed to shareholders	**$ (85,324)**	**$ 911**	$ (384,164)	$ (62,718)
Denominator:				
Weighted average number of shares - basic and diluted	**54,723,272**	**104,110**	53,074,401	45,462,324
Basic and diluted net loss attributable to shareholders per share	**$ (1.56)**	**$ 8.75**	$ (7.24)	$ (1.38)

For the year ended December 31, 2017, potential common shares of 12,521,550 were excluded from the calculation of income per common share because their inclusion would be anti-dilutive (December 31, 2016 – 4,645,864; December 31, 2015 – 2,899,331). On January 12, 2018 a further 664,000 preferred shares were issued (see note 6), which increased the total potential common shares excluded from the calculation of income per common share to 21,878,002 as at that date.

Government grants and refundable investment tax credits

Government grants and tax credits provided for current expenses are included in the determination of income or loss for the year, as a reduction of the expenses to which they relate.

Deferred income taxes

Income taxes are accounted for using the asset and liability method of accounting. Deferred income taxes are recognized for the future income tax consequences attributable to differences between the carrying values of assets and liabilities and their respective income tax bases and for loss carry-forwards. Deferred income tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the periods in which temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax laws or rates is included in earnings in the period that includes the enactment date. When realization of deferred income tax assets does not meet the more-likely-than-not criterion for recognition, a valuation allowance is provided.

Equity classified stock option awards

The Company grants stock options to employees, directors and consultants pursuant to share incentive plans described in note 6. Compensation expense is recorded for issued stock options using the fair value method with a corresponding increase in additional paid-in capital. Any consideration received on the exercise of stock options is credited to share capital.

The fair value of equity classified stock options is measured at the grant date and amortized on a straight-line basis over the vesting period.

Liability-classified stock option awards

The Company accounts for liability-classified stock option awards ("liability options") under ASC 718 - Compensation - Stock Compensation ("ASC 718"), under which awards of options that provide for an exercise price that is not denominated in: (a) the currency of a market in which a substantial portion of the Company's equity securities trades, (b) the currency in which the employee's pay is denominated, or (c) the Company's functional currency, are required to be classified as liabilities. Due to the change in functional currency as of January 1, 2016, certain stock option awards with exercise prices denominated in Canadian dollars changed from equity classification to liability classification. As such, the historic equity classification of these stock option awards changed to liability classification effective January 1, 2016. The change in classification resulted in reclassification of these awards from additional paid-in capital to liability-classified options.

Liability options are re-measured to their fair values at each reporting date with changes in the fair value recognized in share-based compensation expense or additional paid-in capital until settlement or cancellation. Under ASC 718, when an award is reclassified from equity to liability, if at the reclassification date the original vesting conditions are expected to be satisfied, then the minimum amount of compensation cost to be recognized is based on the grant date fair value of the original award. Fair value changes below this minimum amount are recorded in additional paid-in capital.

Replacement awards

Replacement awards are share-based payment awards exchanged for awards held by employees of Arbutus Inc. As part of the Company’s acquisition of Arbutus Inc., Arbutus shares were exchanged for Arbutus Inc.’s shares subject to repurchase rights held by Arbutus Inc.’s employees.

As at the date of acquisition of Arbutus Inc., the Company determined the total fair value of replacement awards and attributed a portion of the replacement awards to pre-combination service as part of the total acquisition consideration, and a portion to post-combination service, which is recognized as compensation expense over the expiry period of repurchase provision rights subsequent to the acquisition date.

The replacement awards consist of common shares that were issued at acquisition. Accordingly, as stock compensation expense related to these awards is recognized, share capital is increased by a corresponding amount. Replacement awards are excluded in the calculation of basic net income (loss) per common share until the repurchase rights have expired.

Warrants

The Company accounts for the warrants under the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company’s own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. The Company classifies warrants in its consolidated balance sheet as a liability which is revalued at each balance sheet date subsequent to the initial issuance. The Company uses the Black-Scholes pricing model to value the warrants. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment. A small change in the estimates used may cause a relatively large change in the estimated valuation. The estimated volatility of the Company’s common stock at the date of issuance, and at each subsequent reporting period, is based on historic fluctuations in the Company’s stock price. The risk-free interest rate is based on the Government of Canada rate for bonds with a maturity similar to the expected remaining life of the warrants at the valuation date. The expected life of the warrants is based on the historical pattern of exercises of warrants.

Preferred Shares

The Company accounts for Preferred Shares under ASC 480, which provides guidance for equity instruments with conversion features. The Company classifies Preferred Shares in its consolidated balance sheet wholly as equity, with no bifurcation of conversion feature from the host contract, given that the Preferred Shares cannot be cash settled and the redemption features, which include a fixed conversion ratio with predetermined timing and proceeds, are within the Company's control. The Company accrues for the 8.75% per annum compounding accrual at each reporting period end date as an increase to share capital, and an increase to deficit (see note 6).

Segment information

The Company operates in a single reporting segment. Substantially all of the Company's revenues to date were earned from customers or collaborators based in the United States. Substantially all of the Company's premises, property and equipment are located in Canada and the United States.

Recent accounting pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB) or other standard setting bodies that are adopted by the Company as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (ASC 606). The standard, as subsequently amended (ASU 2015-14, ASU 2016-08, ASU 2016-10, ASU 2016-12, ASU 2016-20), is intended to clarify the principles for recognizing revenue and to develop a common revenue standard for U.S. GAAP and IFRS by creating a new Topic 606, Revenue from Contracts with Customers. This guidance supersedes the revenue recognition requirements in ASC 605, Revenue Recognition, and supersedes some cost guidance included in Subtopic 605-35, Revenue Recognition – Construction-Type and Production-Type Contracts. The core principle of the accounting standard is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those good or services. The amendments should be applied by either (1) retrospectively to each prior reporting period presented; or (2) retrospectively with the cumulative effect of initially applying this ASU recognized at the date of initial application. The new guidance is effective for fiscal years beginning after December 15, 2017, which for the Company means January 1, 2018. The Company will be applying the modified retrospective method for its implementation. Based on its evaluation, the Company believes that there will be no quantitative impact on its consolidated financial statements, but there will be disclosure changes mostly related to the timing and recognition of licensing and collaboration contracts that are described in note 4.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842): Recognition and Measurement of Financial Assets and Financial Liabilities. The update supersedes Topic 840, Leases and requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous GAAP. Topic 842 retains a distinction between finance leases and operating leases, with cash payments from operating leases classified within operating activities in the statement of cash flows. The amendments in this update are effective for fiscal years beginning after December 15, 2018 for public business entities, which for the Company means January 1, 2019. The Company does not plan to early adopt this update. The extent of the impact of this adoption has not yet been determined.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The update addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. Under this update, the classification of cash receipts and payments that have aspects of more than one class of cash flows should be determined first by applying specific guidance in GAAP. In the absence of specific guidance, an entity should determine each separately identifiable source or use within the cash receipts and cash payments on the basis of the nature of the underlying cash flows. An entity should then classify each separately identifiable source or use within the cash receipts and payments on the basis of their nature in financing, investing, or operating activities. In situations in which cash receipts and payments have aspects of more than one class of cash flows and cannot be separated by source or use, the appropriate classification should depend on the activity that is likely to be the predominant source or use of cash flows for the item. The amendments in this update are effective for public business entities for fiscal years beginning after December 31, 2017, which for the Company means January 1, 2018, and interim periods within those fiscal years. Early adoption is permitted. The amendments in this update should be applied using a retrospective transition method to each period presented. If it is impracticable to apply the amendments retrospectively for some of the issues, the amendments for those issues would be applied prospectively as of the earliest date practicable. The Company is currently evaluating the extent of the impact of this adoption.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Statement of Cash Flows: Restricted Cash. The update requires the statement of cash flows to explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this update are effective for public business entities for fiscal years beginning after December 15, 2017, which for the Company means January 1, 2018. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that included that interim period. The amendments in this update should be applied using a retrospective transition method to each period presented. The Company does not expect the extent of the impact of this adoption to be significant.

In May 2017, the FASB issued ASU 2017-09, Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting. The amendments in this Update provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting under Topic 718. An entity should account for effects of a modification unless all of the following are met: (1) the fair value of the modified award is the same as the fair value of the original award immediately before the original award is modified; (2) the vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified; (3) the classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified. The amendments in this Update are effective for all entities for annual periods and interim periods within those annual periods, beginning after December 15, 2017, which for the Company means January 1, 2018. Early adoption is permitted, including adoption in any interim period for public business entities for reporting periods for which financial statements have not yet been issued. The amendments in this Update should be applied prospectively to an award modified on or after the adoption date. The Company early adopted the amendments in this Update effective April 1, 2017. This adoption did not have a material effect on the Company's statement of operations and comprehensive loss for the period beginning on the adoption date, to the period ended December 31, 2017, as no significant award modifications occurred.

3. Impairment evaluations for intangible assets and goodwill

All in-process research and development (IPR&D) acquired is currently classified as indefinite-lived and is not currently being amortized. IPR&D becomes definite-lived upon the completion or abandonment of the associated research and development efforts, and will be amortized from that time over an estimated useful life based on respective patent terms. The Company evaluates the recoverable amount of intangible assets on an annual basis and performs an annual evaluation of goodwill as of December 31 each year, unless there is an event or change in the business that could indicate a requirement to test at an interim period.

Impairment of intangible assets

During the year-ended December 31, 2017, the Company recorded a total impairment charge of $40,798,000 for the discontinuance of the STING agonists. This charge represents the remaining value of the acquired Immune Modulator drug class. In addition, the Company recorded an income tax benefit of $16,926,000 corresponding to the impairment charge - see note 8.

At December 31, 2016, the Company re-assessed the discount rate used in its valuation models used to assess the carrying value of goodwill and intangible assets for impairment as a result of the sustained discrepancy between the Company's market capitalization compared to carrying values and management's assessment of fair values. The change in discount rate resulted in an impairment charge of $96,873,000 to the Company's intangible assets at December 31, 2016.

The following table summarizes the carrying values, net of impairment of the intangible assets as at December 31, 2017:

Year ended December 31		**2017**		**2016**
IPR&D – Immune Modulators		**—**		40,798
IPR&D – Antigen Inhibitors		**14,811**		14,811
IPR&D – cccDNA Sterilizers		**43,836**		43,836
Total IPR&D	**$**	**58,647**	$	99,445

Annual impairment evaluation of goodwill

Goodwill was recorded as a result of the acquisition of Arbutus Inc. as described in note 2. As part of the evaluation of the recoverability of goodwill, the Company has identified only one reporting unit to which the total carrying amount of goodwill has been assigned. The Company performs its annual impairment evaluation of goodwill on December 31.

The Company determines the fair value of the reporting unit using accepted valuation methods, including the use of discounted cash flows supplemented by market-based assessments of fair value. The income approach is used for the quantitative assessment to estimate the fair value of the reporting unit, which requires estimating future cash flows and risk-adjusted discount rates in the Company's discounted cash flow model. The overall market outlook and cash flow projections of the reporting unit involves the use of key assumptions, including cash flows, discount rates and probability of success. Due to uncertainties in the estimates that are inherent to the Company's industry, actual results could differ significantly from the estimates made. Many key assumptions in the cash flow projections are interdependent on each other. A change in any one or combination of these assumptions could impact the estimated fair value of the reporting unit. See note 2 for additional discussion of the Company's policy for accounting for goodwill.

As at December 31, 2016, the Company re-assessed the discount rate used in the calculation of fair value, consistent with the change to the discount rate used in the intangible assets impairment assessment (described above). As a result of the increased discount rate, the carrying value of the reporting unit determined in step one of the impairment assessment exceeded the fair value of the reporting unit, and as such the Company proceeded to the second step of the impairment test, which measures the amount of an impairment charge. In the second step, the carrying value of goodwill is compared to the fair value of goodwill that is implied by performing a hypothetical purchase price allocation based on identifiable assets at the date of the assessment. The remaining implied goodwill of $24,364,000 is the result of deferred taxes in the hypothetical purchase price allocation. As a result, the Company recorded an impairment for $138,150,000 against goodwill for the year ended December 31, 2016.

For the period ended December 31, 2017, the Company has elected to early adopt ASU 2017-04 (as described in note 2 above). On December 31, 2017, the Company conducted its annual impairment evaluation of goodwill and performed a comprehensive qualitative analysis using factors including but not limited to: (a) macroeconomic conditions; (b) industry and market considerations; (c) cost factors; (d) overall financial performance; (e) other relevant entity-specific events; (f) events affecting a reporting unit; and (g) if applicable, a sustained decrease in share price in absolute terms and relative to peers. The qualitative assessment did not indicate an impairment of goodwill and no further quantitative assessment was necessary.

The Company determines the fair value of the reporting unit each reporting period using accepted valuation methods, including the use of discounted cash flows supplemented by market-based assessments of fair value.

4. Collaborations, contracts and licensing agreements

The following tables set forth revenue recognized under collaborations, contracts and licensing agreements:

	Year ended December 31		
	2017	2016	2015
Alexion (a)	**$ 7,956**	$ —	$ —
Gritstone (b)	**2,499**	—	—
Dicerna (c)	**—**	1,295	2,873
Monsanto (d)	**—**	—	13,384
DoD (e)	**—**	—	6,764
Other milestone and royalty payments (f)	**245**	196	255
Total revenue	**$ 10,700**	$ 1,491	$ 23,276

The following table sets forth deferred collaborations and contracts revenue:

	December 31, 2017	December 31, 2016
Gritstone (b)	**$ 2,727**	$ —
DoD (e)	**15**	15
Deferred revenue, current portion	**2,742**	15
Total deferred revenue	**$ 2,742**	$ 15

(a) License Agreement with Alexion

On March 16, 2017, the Company signed a license agreement with Alexion that entitles Alexion to research, develop, manufacture, and commercialize products with the Company's LNP technology in their single orphan disease target. In consideration for the rights granted under the agreement, the Company received a $7,500,000 non-refundable upfront cash payment, as well as payments for services provided. This upfront payment was amortized over the period of expected benefit.

On July 27, 2017, the Company received notice of termination from Alexion for the Company's LNP license agreement. The termination was driven by a strategic review of Alexion's business and research and development portfolio, which included a decision to discontinue development of mRNA therapeutics. The $7,500,000 upfront payment received in March 2017 is non-refundable, and the Company has recorded the upfront payment as well as any revenue and costs related to closeout procedures in the statement of operations and comprehensive loss for the period ended December 31, 2017.

(b) License agreement with Gritstone

On October 16, 2017, the Company entered into a license agreement with Gritstone that entitles Gritstone to research, develop, manufacture and commercialize products with the Company’s LNP technology. The Company received an upfront payment in November 2017, and is eligible to receive future potential payments including research services, development and commercial milestone payments and royalty payments on future product sales.

The Company determined the deliverables under the Agreements included the rights and license granted, involvement in the joint steering committee, and other services provided, as determined under the research plan. The license and involvement in the joint steering committee have been determined by the Company to not have standalone value. Therefore, these deliverables are treated as one unit of accounting and recognized as revenue over the performance period as the Company transfers the technical "know-how" for the customized formulations.

The Company has determined that other materials and services provided have standalone value. The relative fair values are estimated upon the execution of each activity and charged at rates comparable to market with embedded margins on each service activity.

The Company has not recorded any development and commercial milestone payments, as achievements of these were not probable as at December 31, 2017. As such, the accounting treatment for development and commercial milestone payments, as well as royalty payments on future product sales will be accounted for under the Company's application of the new revenue standard, ASC 606 - Revenue from Contracts with Customers, effective January 1, 2018 (see note 2).

(c) License and Development and Supply Agreement with Dicerna

On November 16, 2014, the Company signed a License Agreement and a Development and Supply Agreement (together, the “Agreements”) with Dicerna related to development, manufacture, and commercialization of products directed to the treatment of PH1. In consideration for the rights granted under the Agreements, Dicerna paid the Company an upfront cash payment of $2,500,000, as well as payments for manufacturing and services provided.

In September 2016, Dicerna announced the discontinuation of their DCR-PH1 program using the Company's technology. As such, the Company revised the completion date of performance period from March 2017 to September 30, 2016, at which time the Company had no further remaining performance obligations. This resulted in the recognition of $1,066,000 in Dicerna license fee revenue for the year ended December 31, 2016 and no revenue thereafter.

(d) Option and Services Agreements with Monsanto

On January 13, 2014, the Company and Monsanto signed an Option Agreement and a Services Agreement, which granted Monsanto an option to obtain a license to use the Company’s LNP delivery technology and related intellectual property for use in agriculture. Following the completion of the Phase A extension period in October 2015, no further research activities were conducted under the arrangement, as Monsanto did not elect to proceed to Phase B of the research plan. This resulted in the full release of Monsanto deferred revenue and a recognition of $13,384,000 in Monsanto revenue for the year ended December 31, 2015.

Under the Agreements, the Company has established a wholly-owned subsidiary, PADCo. The Company has determined that PADCo is a variable interest entity (“VIE”); however, Monsanto is the primary beneficiary of the arrangement. PADCo was established to perform research and development activities, which have been funded by Monsanto in return for a call option to acquire the equity or all of the assets of PADCo. On March 4, 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of PADCo and paid the Company an option exercise fee of $1,000,000. From the acquisition of PADCo, Monsanto received a worldwide, exclusive right to use the Company’s proprietary delivery technology in the field of agriculture. The Company recorded the exercise fee received as a gain on disposition of a financial instrument in its consolidated statement of operations and comprehensive loss for the year ended December 31, 2016.

(e) Contract with United States Government’s Department of Defense (“DoD”) to develop TKM-Ebola

On July 14, 2010, the Company signed a contract with the DoD to advance TKM-Ebola, an RNAi therapeutic utilizing the Company’s lipid nanoparticle technology to treat Ebola virus infection.

Under the contract, the Company is reimbursed for costs incurred, including an allocation of overhead costs, and is paid an incentive fee. At the beginning of the fiscal year, the Company estimates its labor and overhead rates for the year ahead. At the end of the year the actual labor and overhead rates are calculated and revenue is adjusted accordingly. The Company's actual labor and overhead rates will differ from its estimated rates based on actual costs incurred and the proportion of the Company's efforts on contracts and internal products versus indirect activities. Within minimum and maximum collars, the amount of incentive fee the Company can earn under the contract varies based on costs incurred versus budgeted costs. During the contractual period, incentive fee revenue and total costs are impacted by management's estimate and judgments which are continuously reviewed and adjusted as necessary using the cumulative catch-up method. For the years ended December 31, 2015 and 2016, the Company believes it can reliably estimate the final contract costs so has recognized the portion of expected incentive fee which has been earned to date.

On October 1, 2015, the Company received formal notification from the DoD that, due to the unclear development path for TKM-Ebola and TKM-Ebola-Guinea, the Ebola-Guinea Manufacturing and the Ebola-Guinea IND submission statements of work had been terminated, subject to the completion of certain post-termination obligations. The TKM-Ebola portion of the contract was completed in November 2015. The Company is currently conducting contract close out procedures with the DoD.

(f) Agreements with Spectrum Pharmaceuticals, Inc. ("Spectrum")

On May 6, 2006, the Company signed a number of agreements with Talon Therapeutics, Inc. ("Talon", formerly Hana Biosciences, Inc.) including the grant of worldwide licenses (the "Talon License Agreement") for three of the Company's chemotherapy products, Marqibo®, Alocrest ™ (Optisomal Vinorelbine) and Brakiva ™ (Optisomal Topotecan).

On August 9, 2012, the Company announced that Talon had received accelerated approval for Marqibo from the FDA for the treatment of adult patients with Philadelphia chromosome negative acute lymphoblastic leukemia in second or greater relapse or whose disease has progressed following two or more anti-leukemia therapies. Marqibo is a liposomal formulation of the chemotherapy drug vincristine. In the year ended December 31, 2012, the Company received a milestone of $1,000,000 based on the FDA's approval of Marqibo and will receive royalty payments based on Marqibo's commercial sales. There are no further milestones related to Marqibo but the Company is eligible to receive total milestone payments of up to $18,000,000 on Alocrest and Brakiva.

Talon was acquired by Spectrum in July 2013. The acquisition did not affect the terms of the license between Talon and the Company. On September 3, 2013, Spectrum announced that they had shipped the first commercial orders of Marqibo. In the year ended December 31, 2017, the Company recorded $191,000 in Marqibo royalty revenue (2016 - $212,000, 2015 -$240,000). In the year ended December 31, 2017, the Company accrued $5,000 in royalties due to TPC in respect of the Marqibo royalty earned by the Company (see note 10, contingencies and commitments).

5. Property and equipment

December 31, 2017	Cost	Accumulated depreciation	Net book value
Lab equipment	$ 9,567	$ (5,325)	$ 4,242
Leasehold improvements	12,578	(5,139)	7,439
Computer hardware and software	2,318	(1,878)	440
Furniture and fixtures	391	(329)	62
Assets under construction	$ —		$ —
	$ 24,854	$ (12,671)	$ 12,183

December 31, 2016	Cost	Accumulated depreciation	Net book value
Lab equipment	$ 7,894	$ (4,305)	$ 3,589
Leasehold improvements	4,928	(4,454)	474
Computer hardware and software	2,103	(1,665)	438
Furniture and fixtures	374	(314)	60
Assets under construction	$ 2,384	$ —	$ 2,384
	$ 17,683	$ (10,738)	$ 6,945

As at December 31, 2017, all of the Company's property and equipment is currently in use and no impairment has been recorded.

6. Share capital

(a) Financing

On March 25, 2015, the Company announced that it had completed an underwritten public offering of 7,500,000 common shares, at a price of $20.25 per share, representing gross proceeds of $151,875,000. The Company also granted the underwriters a 30-day option to purchase an additional 1,125,000 shares for an additional $22,781,000 to cover any over-allotments. The underwriters did not exercise the option. The cost of financing, including commissions and professional fees, was $9,700,000, resulting in net proceeds of $142,177,000.

(b) Authorized share capital

The Company's authorized share capital consists of an unlimited number of common and 1,164,000 preferred shares without par value.

(c) Series A participating convertible preferred shares ("Preferred Shares")

On October 2, 2017, the Company announced that it entered into a subscription agreement with Roivant for the sale of Preferred Shares to Roivant for gross proceeds of $116,400,000. The Preferred Shares are non-voting and are convertible into common shares at a conversion price of $7.13 per share (which represents a 15% premium to the closing price of $6.20 per share). The purchase price for the Preferred Shares plus an amount equal to 8.75% per annum, compounded annually, will be subject to mandatory conversion into common shares on October 18, 2021 (subject to limited exceptions in the event of certain fundamental corporate transactions relating to Arbutus' capital structure or assets, which would permit earlier conversion at Roivant's option). After conversion of the Preferred Shares into common shares, based on the number of common shares outstanding on October 2, 2017, Roivant would hold 49.90% of the Company's common shares. Roivant has agreed to a four year lock-up period for this investment and its existing holdings in Arbutus. Roivant has also agreed to a four year standstill whereby Roivant will not acquire greater than 49.99% of the Company's common shares or securities convertible into common shares.

The initial investment of $50,000,000 closed on October 16, 2017, and the remaining amount of $66,400,000 closed on January 12, 2018 following regulatory and shareholder approvals, as applicable, under Canadian securities law.

The Company records the Preferred Shares wholly as equity under ASC 480, with no bifurcation of conversion feature from the host contract, given that the Preferred Shares cannot be cash settled and the redemption features are within the Company's control, which include a fixed conversion ratio with predetermined timing and proceeds. The Company accrues for the 8.75% per annum compounding coupon at each reporting period end date as an increase to share capital, and an increase to deficit (see statement of stockholder's equity).

(d) Warrants to purchase common shares

During the year ended December 31, 2017, there were 179,000 warrants exercised for $353,000 in cash (December 31, 2016 – 170,500 warrants for $445,000) and no warrants were exercised using the cashless exercise provision (December 31, 2016 – 0 warrants for 0 common shares). In March 2017, the remaining balance of 22,000 of the Company's warrants expired. The decrease in fair value from the previous balance sheet date relating to the expired warrants has been included in the total decrease in fair value of warrant liability in the Company's statement of comprehensive loss for the year ended December 31, 2017.

The following table summarizes the Company's warrant activity for the years ended December 31, 2017 and 2016:

	Common shares purchasable upon exercise of warrants	Weighted average exercise price	Range of exercise prices			Weighted average remaining contractual life (years)	Aggregate intrinsic value
Balance, December 31, 2015	379,500	$ 2.13	$2.03	—	$ 2.62	0.8	$ 879
Exercised	(170,500)	2.53	2.53	—	2.53		
Expired	(8,000)	2.53	2.53	—	2.53		
Balance, December 31, 2016	201,000	$ 1.94	$ 1.94	—	$ 1.94	0.2	$ 104
Exercised	(179,000)	2.00	$ 2.00	—	$ 2.00		
Expired	(22,000)	2.00	$ 2.00	—	$ 2.00		
Balance, December 31, 2017	—	—	—	—	—	—	$ —

The aggregate intrinsic value in the table above is calculated based on the difference between the exercise price of the warrants and the quoted price of the Company's common stock as of the reporting date.

(e) Stock-based compensation

The Company has seven share-based compensation plans; the "2007 Plan", the "2011 Plan", the "2016 Plan", two "Designated Plans" (together, the "Arbutus Plans"), the "Protiva Option Plan", and the "OnCore Option Plan".

On June 22, 2011, the shareholders of the Company approved an omnibus stock-based compensation plan (the "2011 Plan"). The Company's pre-existing 2007 Plan was limited to the granting of stock options as equity incentive awards whereas the 2011 Plan also allows for the issuance of tandem stock appreciation rights, restricted stock units and deferred stock units (collectively, and including options, referred to as "Awards"). The 2011 Plan replaced the 2007 Plan. The 2007 Plan continued to govern the options granted thereunder. No further options were granted under the Company's 2007 Plan.

Under the Company's 2007 Plan the Board of Directors granted options to employees, directors and consultants of the Company. The exercise price of the options was determined by the Company's Board of Directors but was always at least equal to the closing market price of the common shares on the day preceding the date of grant and the term of options granted did not exceed 10 years. The options granted generally vested over three years for employees and immediately for directors.

Under the Company's 2011 Plan the Board of Directors may grant options, and other types of Awards, to employees, directors and consultants of the Company. The exercise price of the options is determined by the Company's Board of Directors but will be at least equal to the closing market price of the common shares on the day preceding the date of grant and the term may not exceed 10 years. Options granted generally vest over three years for employees and immediately for directors.

At the Company's annual general and special meeting of shareholders on May 8, 2014 and July 9, 2015, the shareholders of the Company approved respectively, a 800,000 and a 3,500,000 increase in the number of stock-based compensation awards that the Company is permitted to issue under the 2011 Plan.

At the Company's annual general and special meeting of shareholders on May 19, 2016, the shareholders of the Company approved the adoption of the Company's 2016 Omnibus Share and Incentive Plan (the "2016 Plan") and the reserve of 5,000,000 shares of the Company issuable pursuant to awards under the 2016 Plan. These include both equity-classified and liability-classified stock options. The Company's 2011 Omnibus Share Compensation Plan, as amended, also remains in effect.

Additionally, the Company granted a total of 200,000 options in 2013 to two executive officers in conjunction with their new appointments as executive officers. These options were granted in accordance with the policies of the Toronto Stock Exchange and pursuant to newly designated share compensation plans (the “Designated Plans”). During 2016, one of the two executive officers departed from the Company, and the unexercised options under his Designated Plan expired. No new options can be granted under the Designated Plans, resulting in one Designated Plan remaining at the end of 2017. The Designated Plan is governed by substantially the same terms as the 2011 Plan. Hereafter, information on options governed by the 2007 Plan, the 2011 Plan, the 2016 Plan and the Designated Plan (the "Arbutus Plans") is presented on a consolidated basis as the terms of the five plans are similar. Information on the Protiva Option Plan and the OnCore Option Plan are presented separately.

Stock option activity for the Arbutus Plans

Equity-classified stock option activity:

	Number of optioned common shares	Weighted average exercise price	Aggregate intrinsic value
Balance, December 31, 2014	1,530,138	6.29	15,004
Options granted	1,309,625	16.57	
Options exercised	(398,293)	3.93	5,386
Options forfeited, canceled or expired	(151,207)	15.09	
Balance, December 31, 2015	2,290,263	11.22	994
Options reclassified to liability[1]	(718,333)	5.23	604
Options granted	1,789,599	3.89	
Options exercised	(56,125)	2.18	121
Options forfeited, canceled or expired	(394,200)	10.18	
Balance, December 31, 2016	2,911,204	$ 8.53	$ 56
Options granted	2,026,500	$ 3.20	
Options exercised	(11,105)	$ 3.45	$ 13
Options forfeited, canceled or expired	(208,272)	$ 11.41	
Balance, December 31, 2017	4,718,327	$ 6.06	$ 5,842

1. Due to the change in the Company's functional currency as of January 1, 2016, certain stock option awards with exercise prices denominated in Canadian dollars changed from equity classification to liability classification - see note 2.

Options under the Arbutus Plans expire at various dates from March 31, 2018 to November 7, 2027.

The following table summarizes information pertaining to stock options outstanding at December 31, 2017 under the Arbutus Plans:

			Options outstanding December 31, 2017			Options exercisable December 31, 2017	
Range of Exercise prices (US$)			Number of options outstanding	Weighted average remaining contractual life (years)	Weighted average exercise price (US$)	Number of options exercisable	Weighted average exercise price (US$)
$1.19	to	$3.11	114,887	5.5	2.33	83,887	2.10
$3.12	to	$3.22	1,807,000	9.2	3.15	—	N/A
$3.23	to	$3.92	368,763	8.8	3.58	186,096	3.57
$3.93	to	$3.95	1,313,682	8.2	3.94	432,365	3.94
$3.96	to	$14.32	479,537	7.0	10.48	382,701	9.97
$14.33	to	$16.16	5,500	6.6	14.74	5,500	14.74
$16.17	to	$17.57	628,958	7.2	17.57	429,582	17.57
$1.19	to	$17.57	4,718,327	8.3	$ 6.06	1,520,131	$ 9.20

At December 31, 2017, there were 1,520,131 options exercisable (December 31, 2016 - 699,241; December 31, 2015 – 938,730). The weighted average remaining contractual life of exercisable options as at December 31, 2017 was 7.4 years.
The aggregate intrinsic value of in-the-money options exercisable at December 31, 2017 was $1,098,000.

A summary of the Company’s non-vested stock option activity and related information for the year ended December 31, 2017 is as follows:

	Number of optioned common shares	Weighted average fair value
Non-vested at December 31, 2016	2,211,963	$ 5.34
Options granted	2,026,500	2.15
Options vested	(972,723)	5.82
Non-vested options forfeited	(67,544)	4.73
Non-vested at December 31, 2017	3,198,196	$ 3.23

The weighted average remaining contractual life for options expected to vest at December 31, 2017 was 8.3 years and the weighted average exercise price for these options was $6.06 per share.

The aggregate intrinsic value of options expected to vest as at December 31, 2017 was $5,842,000 (December 31, 2016 - $0; December 31, 2015 -$10,000).

The total fair value of options that vested during the year ended December 31, 2017 was $5,657,000 (December 31, 2016 - $5,058,000; December 31, 2015 -$1,718,000).

Valuation assumptions for the Arbutus Plans

On March 3, 2015, the Company voluntarily de-listed from the Toronto Stock Exchange. All stock options granted after March 3, 2015 were denominated in US dollars based on the Company's stock price on the NASDAQ. The methodology and assumptions used to estimate the fair value of stock options at date of grant under the Black-Scholes option-pricing model remain unchanged. Assumptions on the dividend yield are based on the fact that the Company has never paid cash dividends and has no present intention to pay cash dividends. Assumptions about the Company’s expected stock-price volatility are based on the historical volatility of the Company’s publicly traded stock. The risk-free interest rate used for each grant is equal to the zero coupon rate for instruments with a similar expected life. Expected life assumptions are based on the Company’s historical data. The Company recognizes forfeitures as they occur, and the effects of forfeitures are reflected in stock-based compensation expense recorded in the statement of operations and comprehensive loss for the year ended December 31, 2017. The weighted average option pricing assumptions for options granted during the year are as follows:

	Year ended December 31		
	2017	2016	2015
Dividend yield	**—%**	—%	—%
Expected volatility	**73.05%**	77.99%	76.88%
Risk-free interest rate	**1.28%**	0.90%	1.10%
Expected average option term	**6.9 years**	7.3 years	7.5 years

Liability-classified stock option activity:

Valuation assumptions

Liability options are re-measured to their fair values at each reporting date, using the Black-Scholes valuation model. The methodology and assumptions prevailing at the re-measurement date used to estimate the fair values of liability options remain unchanged from the date of grant of equity classified stock option awards. Assumptions about the Company's expected stock-price volatility are based on the historical volatility of the Company's publicly traded stock. The risk-free interest rate used for each grant is equal to the zero coupon rate for instruments with a similar expected life. Expected life assumptions are based on the Company's historical data. The weighted average Black-Scholes option-pricing assumptions and the resultant fair values as at December 31, 2016 and December 31, 2017, are presented in the following table:

	December 31, 2017	**December 31, 2016**
Dividend yield	**—%**	—%
Expected volatility	**70.31%**	66.18%
Risk-free interest rate	**2.10%**	0.88%
Expected average term (years)	**4.3**	3.6
Fair value of options outstanding	**$ 2.75**	$ 0.87
Fair value of vested liability-classified options (in thousands)	**$ 1,239**	$ 553

Stock option activity for liability options

	Number of optioned common shares	Weighted average exercise price	Aggregate intrinsic value
Balance, December 31, 2016	638,500	$ 5.48	$ 116
Options exercised	(25,000)	2.37	103
Options forfeited, canceled, or expired	(162,000)	6.54	—
Balance, December 31, 2017	451,500	$ 5.78	$ 525

Liability options expire at various dates from March 31, 2018 to May 7, 2024.

The following table summarizes information pertaining to liability options outstanding at December 31, 2017:

			Options outstanding December 31, 2017			Options exercisable December 31, 2017	
Range of Exercise prices (US$)			Number of options outstanding	Weighted average remaining contractual life (years)	Weighted average exercise price	Number of options exercisable	Weighted average exercise price
$1.35	to	$1.67	65,000	2.8	$ 1.38	65,000	$ 1.38
$1.68	to	$3.38	75,000	2.9	2.45	75,000	2.45
$3.39	to	$4.27	75,000	3.2	3.94	75,000	3.94
$4.28	to	$5.85	14,000	0.3	4.45	14,000	4.45
$5.86	to	$8.61	150,000	5.8	7.25	150,000	7.25
$8.62	to	$13.04	72,500	6.2	12.30	72,500	12.30
$1.35	to	$13.04	451,500	4.3	$ 5.78	451,500	$ 5.78

During the year-ended December 31, 2017, 14,750 options vested with a weighted average exercise price of $12.83 and a total fair value of $36,100. As at December 31, 2017, all liability options were vested.

Protiva Option Plan

On May 30, 2008, as a condition of the acquisition of Protiva Biotherapeutics Inc., a total of 350,457 common shares of the Company were reserved for the exercise of 519,073 Protiva share options (“Protiva Options”). The Protiva Options have an exercise price of C$0.30, were fully vested and exercisable as of May 30, 2008. As at December 31, 2017, the outstanding options expire on March 1, 2018 and upon exercise each option will be converted into approximately 0.6752 shares of the Company (the same ratio at which Protiva common shares were exchanged for Company common shares at completion of the acquisition of Protiva). The Protiva Options are not part of the Arbutus Plans and the Company is not permitted to grant any further Protiva Options.

The following table sets forth outstanding options under the Protiva Option Plan:

	Number of Protiva Options	Equivalent number of Company common shares	Weighted average exercise price (C$)	Weighted average exercise price (US$)
Balance, December 31, 2014	433,740	292,845	$ 0.30	0.27
Options exercised	(358,675)	(242,164)	0.30	0.23
Options forfeited, canceled or expired	(8,065)	(5,445)	0.30	0.23
Balance, December 31, 2015	67,000	45,236	0.30	0.22
Options exercised	(21,000)	(14,178)	0.30	0.23
Options forfeited, canceled or expired	—	—	—	N/A
Balance, December 31, 2016	46,000	31,058	0.30	0.22
Options exercised	(6,000)	(4,051)	0.30	0.23
Options forfeited, canceled or expired	—	—	—	N/A
Balance, December 31, 2017	40,000	27,007	$ 0.30	$ 0.24

The weighted average remaining contractual life of exercisable Protiva Options as at December 31, 2017 was 0.2 years.

The aggregate intrinsic value of Protiva Options outstanding at December 31, 2017 was $127,000. The intrinsic value of Protiva Options exercised in the year ended December 31, 2017 was $10,000 (2016 - $49,000; 2015 -$1,249,000).

OnCore Option Plan

As at the acquisition date in March 2015, the Company reserved 184,332 shares for the future exercise of OnCore (Arbutus Inc.) stock options. The total fair value of OnCore stock options at the date of acquisition has been determined to be $3,287,000, using the Black-Scholes pricing model with an assumed risk-free interest rate of 0.97%, volatility of 78%, a zero dividend yield and an expected life of 8 years, which are consistent with the assumption inputs used by the Company to determine the fair value of its options. Of the total fair value, $1,127,000 has been attributed as pre-combination service and included as part of the total acquisition consideration. The post-combination attribution of $2,160,000 will be recognized as compensation expense over the vesting period of the stock options through to December 2018.

Following the merger, the Company is not permitted to grant any further options under the OnCore Option Plan. The Company has included $576,000 of compensation expense related to the vesting of Arbutus Inc. stock options for the year ended December 31, 2017.

The following table sets forth outstanding options under the OnCore Option Plan:

	Number of OnCore Options	Equivalent number of Company common shares	Weighted average exercise price (US$)
Balance, December 31, 2016	183,040	184,332	$ 0.57
Options exercised	—	—	N/A
Options forfeited, canceled or expired	—	—	N/A
Balance, December 31, 2017	183,040	184,332	$ 0.57

At December 31, 2017, there were 150,913 OnCore options (151,978 Arbutus equivalent) exercisable with a weighted average exercise price of $0.56. The weighted average remaining contractual life of exercisable options as at December 31, 2017 was 6.9 years. The aggregate intrinsic value of in-the-money options exercisable at December 31, 2017 was $682,000.

A summary of the OnCore Option Plan's non-vested stock option activity and related information for the year ended December 31, 2017 is as follows:

	Number of OnCore Options	Equivalent number of Company common shares	Weighted average fair value (US$)
Non-vested at December 31, 2016	63,051	63,497	$ 16.80
Options vested	(30,923)	(31,143)	16.17
Non-vested options forfeited	—	—	N/A
Non-vested at December 31, 2017	32,128	32,354	$ 16.18

The weighted average remaining contractual life for options expected to vest at December 31, 2017 was 6.9 years and the weighted average exercise price for these options was $0.57 per share.

The aggregate intrinsic value of options expected to vest as at December 31, 2017 was $144,000.

The total fair value of options that vested during the year ended December 31, 2017 was $611,000.

Stock-based compensation expense

Total stock-based compensation expense is comprised of: (1) the vesting options awarded to employees under the Arbutus and OnCore option plans calculated in accordance with the fair value method as described above; and (2) the expiration of repurchase rights related to the post-combination service portion of the total fair value of shares issued to Arbutus Inc.'s employees.

The total stock-based compensation has been recorded in the consolidated statement of operations and comprehensive income (loss) as follows:

	Year ended December 31		
	2017	2016	2015
Research, development, collaborations and contracts expenses	**$ 9,236**	$ 11,155	$ 7,868
General and administrative expenses	**5,881**	28,004	14,225
Total	**$ 15,117**	$ 39,159	$ 22,093

At December 31, 2017, there remains $5,747,000 of unearned compensation expense related to unvested equity employee stock options to be recognized as expense over a weighted-average period of approximately 20 months.

Awards outstanding and available for issuance

Combining all of the Company's share-based compensation plans, at December 31, 2017, the Company has 5,381,163 options outstanding and a further 5,084,189 Awards available for issuance.

(f) Replacement awards

Included in the total consideration transferred for the acquisition of Arbutus Inc. in March 2015 are common shares issued as replacement awards, which are subject to repurchase provisions. The total fair value of these common shares attributed to the post acquisition period was approximately $56,934,000 and is being recognized as compensation expense over the expiry period of repurchase provision rights subsequent to the acquisition date.

For the year-ended December 31, 2017, all remaining repurchase provision rights expired and the Company recorded compensation expense $7,972,000 (2016 - $31,986,000; 2015 - $16,687,000) in stock-based compensation.

7. Refundable investment tax credits

Refundable investment tax credits have been recorded as a reduction in research and development expenses.

The Company's estimated claim for refundable Scientific Research and Experimental Development investment tax credits for the year ended December 31, 2017 is $183,000 (2016 - $145,000).

8. Income taxes

Income tax (recovery) expense varies from the amounts that would be computed by applying the combined Canadian federal and provincial income tax rate of 26% (2015 - 26%; 2014 – 26%) to the loss before income taxes as shown in the following tables:

	Year ended December 31,		
	2017	2016	2015
Computed taxes (recoveries) at Canadian federal and provincial tax rates	$ (28,270)	$ (127,183)	$ (20,100)
Difference due to change in tax rate on opening deferred taxes	(6,633)	—	—
Permanent and other differences	1,476	(3,598)	769
Change in valuation allowance - other	6,945	17,043	3,675
Difference due to income taxed at foreign rates	(966)	(47,962)	(7,874)
Stock-based compensation	3,128	9,727	7,345
Impairment of goodwill	—	46,971	—
Deferred income tax recovery	**$ (24,320)**	$ (105,002)	$ (16,185)

Effective November 2, 2017, the British Columbia provincial corporate tax rate increased from 11% to 12%, starting January 1, 2018. The overall increase in tax rates in 2018 will result in an increase in the Company's statutory tax rate from 26% in 2017 to 27% in 2018 and onward.

On December 22, 2017, the Tax Cuts and Jobs Act (the “2017 Tax Act”) was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017. Certain income tax effects of the 2017 Tax Act, principally due to the write-down of our net deferred tax assets, are reflected in our financial results in accordance with Staff Accounting Bulletin No. 118 (SAB 118), which provides SEC staff guidance regarding the application of Accounting Standards Codification (ASC) Topic 740, Income Taxes, in the reporting period in which the 2017 Tax Act became law. At December 31, 2017, we have not completed our accounting for the tax effects of enactment of the Act; however, we have made a reasonable estimate of the effects on our existing deferred tax balances. We have remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, which is generally 21%. However, we are still analyzing certain aspects of the Act and refining our calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. The provisional amount recorded related to the re-measurement of our deferred tax assets was a reduction of $13.4 million to deferred tax liabilities and a reduction of $3.5 million to our deferred tax assets, which have a full valuation allowance provided against them.

On November 23, 2011, the Company was registered as a corporation under the Business Activity Act in the province of British Columbia. Under this program, provincial corporation tax charged on foreign income earned from the Company’s patents will be eligible for a 75% tax refund up to a maximum of C$8,000,000. This program was eliminated on October 23, 2017.

As at December 31, 2017, the Company has investment tax credits available to reduce Canadian federal income taxes of $9,546,000 (December 31, 2016 - $10,245,000) and provincial income taxes of $4,866,000 (December 31, 2016 - $5,337,000), expiring between 2027 and 2037. In addition, the Company has research and development credits of $3,639,000 (December 31, 2016 - $1,454,000) available for indefinite carry-forward, which can be used to reduce future taxable income in the U.S.

At December 31, 2017, the Company has scientific research and experimental development expenditures of $61,493,000 (December 31, 2016 - $65,332,000) available for indefinite carry-forward and $124,451,000 (December 31, 2016 - $71,460,000) of net operating losses due to expire between 2027 and 2037 and which can be used to offset future taxable income in Canada.

As at December 31, 2017, the Company has $13,723,000 (December 31, 2016 - $14,621,000) of net operating losses due to expire between 2030 and 2037, which can be used to offset future taxable income in the U.S. Future use of a portion of the U.S. loss carry-forwards is subject to limitations under the Internal Revenue Code Section 382.

As a result of ownership changes occurring on October 1, 2014 and March 4, 2015, the Company's ability to use these losses may be limited. Losses incurred to date may be further limited if a subsequent change in control occurs.

Significant components of the Company’s deferred tax assets and liabilities are shown below:

	As at December 31,	
	2017	**2016**
Deferred tax assets (liabilities):		
Non-capital loss carryforwards	**$ 36,652**	**$ 24,275**
Research and development deductions	**16,603**	**16,986**
Book amortization in excess of tax	**(650)**	**451**
Share issue costs	**456**	**486**
Revenue recognized for tax purposes in excess of revenue recognized for accounting purposes	**1,162**	**410**
Tax value in excess of accounting value in lease inducements	**173**	**58**
Federal investment tax credits	**9,079**	**8,630**
Provincial investment tax credits	**4,819**	**5,270**
In-process research and development	**(16,943)**	**(41,263)**
Upfront license fees	**311**	**536**
Other	**2,017**	**1,435**
Total deferred tax assets (liabilities)	**53,679**	**17,274**
Valuation allowance	**(70,622)**	**(58,537)**
Net deferred tax assets (liabilities)	**$ (16,943)**	**$ (41,263)**

9. Loan payable

On December 27, 2016, the Company obtained a loan of $12,001,000 from Wells Fargo in the form of a promissory note for the purpose of financing its operations, including the expansion of laboratory facilities for its U.S. operations. The loan accrues interest daily based on an interest rate with a variable and fixed component. The variable component is the one-month London Interbank Offered Rate (LIBOR), and the fixed component is a margin of 1.25% per annum. The carrying value of the loan is recorded at the principal plus any accrued interest not yet paid. The loan is due on December 27, 2019.

The loan is secured by the Company's cash of $12,601,000, and is restricted from use until the loan has been settled in full. The Company invested the restricted cash in a two-year fixed certificate of deposit with Wells Fargo (see note 2) and is presented as restricted investment in the Company's balance sheet for the period ended December 31, 2017.

10. Contingencies and commitments

Property lease

The total minimum rent and estimated operating cost commitment, net of lease inducements, for both our head office in Burnaby and Warminster facility is as follows:

Year ended December 31, 2018	$ 1,607
Year ended December 31, 2019	1,243
Year ended December 31, 2020	656
Year ended December 31, 2021	673
Year ended December 31, 2022 and after	3,813
	$ 7,992

The Company’s lease expense, for the year ended December 31, 2017 of $1,653,000 has been recorded in the consolidated statements of operations and comprehensive loss (2016 of $1,341,000; 2015 of $1,158,000).

Product development partnership with the Canadian Government

The Company entered into a Technology Partnerships Canada (TPC) agreement with the Canadian Federal Government on November 12, 1999. Under this agreement, TPC agreed to fund 27% of the costs incurred by the Company, prior to March 31, 2004, in the development of certain oligonucleotide product candidates up to a maximum contribution from TPC of $7,179,000 (C$9,330,000). As at December 31, 2017, a cumulative contribution of $2,951,000 (C$3,702,000) had been received and the Company does not expect any further funding under this agreement. In return for the funding provided by TPC, the Company agreed to pay royalties on the share of future licensing and product revenue, if any, that is received by the Company on certain non-siRNA oligonucleotide product candidates covered by the funding under the agreement. These royalties are payable until a certain cumulative payment amount is achieved or until a pre-specified date. In addition, until a cumulative amount equal to the funding actually received under the agreement has been paid to TPC, the Company agreed to pay 2.5% royalties on any royalties the Company receives for Marqibo. For the year ended December 31, 2017, the Company earned royalties on Marqibo sales in the amount of $191,000 (see note 4(f)), resulting in $5,000 recorded by the Company as royalty payable to TPC (2016 - $5,000; 2015 -$6,000). The cumulative amount paid or accrued up to December 31, 2017 was $22,000, resulting in the contingent amount due to TPC being $2,929,000 (C$3,674,000).

Arbitration with the University of British Columbia (“UBC”)

Certain early work on lipid nanoparticle delivery systems and related inventions was undertaken at UBC. These inventions are licensed to the Company by UBC under a license agreement, initially entered in 1998 as amended in 2001, 2006 and 2007. The Company has granted sublicenses under the UBC license to Alnylam. Alnylam has in turn sublicensed back to the Company under the licensed UBC patents for discovery, development and commercialization of siRNA products. Certain sublicenses to other parties were also granted.

On November 10, 2014, UBC filed a demand for arbitration against the Company and on January 16, 2015, filed a Statement of Claim, which alleges entitlement to $3,500,000 in allegedly unpaid royalties based on publicly available information, and an unspecified amount based on non-public information. UBC also seeks interest and costs, including legal fees. The Company filed its Statement of Defense to UBC's Statement of Claims, as well as filed a Counterclaim involving a patent application that the Company alleges UBC wrongly licensed to a third party rather than to the Company. The Company seeks license payments for said application, and an exclusive worldwide license to said application. The proceeding has been divided into three phases, with a first hearing that took place in June 2017. The arbitrator determined in the first phase which agreements are sublicense agreements within UBC's claim, and which are not. No finding was made as to whether any licensing fees are due to UBC under these agreements; this will be the subject of the second phase of arbitration. The arbitrator also held that the patent application that is the subject of the Counterclaim was not required to be licensed to Arbutus. A schedule for the remaining phases has not yet been set. Arbitration and related matters are costly and may divert the attention of the Company's management and other resources that would otherwise be engaged in other activities. However, the Company notes that arbitration is subject to inherent uncertainty and an arbitrator could rule against the Company. The Company has not recorded an estimate of the possible loss associated with this arbitration, due to the uncertainties related to both the likelihood and amount of any possible loss or range of loss. Costs related to the arbitration have been recorded in the statement of operations and comprehensive loss by the Company as incurred.

Litigation with Acuitas Therapeutics (“Acuitas”)

In August 2017, the Company provided Acuitas with notice that it considered Acuitas to be in material breach of the cross-license agreement. The cross-license agreement provides that it may be terminated upon any material breach by the other party 60 days after receipt of written notice of termination describing the material breach in reasonable detail. In October 2016, Acuitas filed a Notice of Civil Claim in the Supreme Court of British Columbia seeking an order that the Company perform its obligations under the Cross License Agreement, for damages ancillary to specific performance, injunctive relief, interest and costs. The Company disputed Acuitas’ position, and filed a Counterclaim seeking a declaration that Acuitas is in breach of the Cross License Agreement, and claiming injunctive relief, damages, interest and costs.

In January 2017, the Company filed an application seeking an order to enjoin Acuitas from, among other things, entering into any further agreements purporting to sublicense Arbutus’ technology from the date of the order to the date of trial or further order from the Court. In February 2017, the Company announced that the Supreme Court of British Columbia granted its request for a pre-trial injunction against Acuitas, preventing Acuitas from further sublicensing of the Company's lipid nanoparticle (LNP) technology until the end of October, or further order of the Court. Under the terms of the pre-trial injunction, Acuitas is prevented from entering into any new agreements which include sublicensing of the Company's LNP. In March 2017, Acuitas sought leave to appeal from the injunction decision and in April 2017, the appeal was denied. In

September 2017, the injunction order was extended by consent to March 2, 2018. In February 2018, the contractual issues concerning the cross-license agreement (excluding the claims for damages) were settled out of court, resulting in the termination of Acuitas' rights to further use or sublicense our LNP technology, making permanent the effect of the Court's prior injunction.

Arbitration and related matters are costly and may divert the attention of the Company's management and other resources that would otherwise be engaged in other activities. Costs related to the arbitration are recorded by the Company as incurred. No contingent asset was recorded by the Company for the period ended December 31, 2017, as the settlement occurred in February 2018, and the terms were determined after December 31.

Contingent consideration from Arbutus Inc. acquisition of Enantigen and License Agreements between Enantigen and Baruch S. Blumberg Institute (Blumberg) and Drexel

In October 2014, Arbutus Inc. acquired all of the outstanding shares of Enantigen pursuant to a stock purchase agreement. Through this transaction, Arbutus Inc. acquired a HBV surface antigen secretion inhibitor program and a capsid assembly inhibitor program, each of which are now assets of Arbutus, following the Company's merger with Arbutus Inc.

Under the stock purchase agreement, Arbutus Inc. agreed to pay up to a total of $21,000,000 to Enantigen's selling stockholders upon the achievement of certain triggering events related to HBV therapies. The first triggering event is enrollment of the first patient in a Phase 1b clinical trial in HBV patients, which the Company believes is likely to occur in the next twelve-month period.

The regulatory, development and sales milestone payments had an estimated fair value of approximately $6,727,000 as at the date of acquisition of Arbutus Inc., and were treated as contingent consideration payable in the purchase price allocation. The contingent consideration was calculated based on information available at the date of acquisition, using a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments were discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, time to complete the program development, and market comparatives.

Contingent consideration is a financial liability and measured at its fair value at each reporting period, with any changes in fair value from the previous reporting period recorded in the statement of operations and comprehensive loss (see note 2).

Drexel and Blumberg

In February 2014, Arbutus Inc. entered into a license agreement with Blumberg and Drexel that granted an exclusive, worldwide, sub-licensable license to three different compound series: cccDNA inhibitors, capsid assembly inhibitors and HCC inhibitors.

In partial consideration for this license, Arbutus Inc. paid a license initiation fee of $150,000 and issued warrants to Blumberg and Drexel. The warrants were exercised in 2014. Under this license agreement, Arbutus Inc. also agreed to pay up to $3,500,000 in development and regulatory milestones per licensed compound series, up to $92,500,000 in sales performance milestones per licensed product, and royalties in the mid-single digits based upon the proportionate net sales of licensed products in any commercialized combination. The Company is obligated to pay Blumberg and Drexel a double digit percentage of all amounts received from the sub-licensees, subject to customary exclusions.

In November 2014, Arbutus Inc. entered into an additional license agreement with Blumberg and Drexel pursuant to which it received an exclusive, worldwide, sub-licensable license under specified patents and know-how controlled by Blumberg and Drexel covering epigenetic modifiers of cccDNA and STING agonists. In consideration for these exclusive licenses, Arbutus Inc. made an upfront payment of $50,000. Under this agreement, the Company will be required to pay up to $1,000,000 for each licensed product upon the achievement of a specified regulatory milestone and a low single digit royalty, based upon the proportionate net sales of compounds covered by this intellectual property in any commercialized combination. The Company is also obligated to pay Blumberg and Drexel a double digit percentage of all amounts received from its sub-licensees, subject to exclusions.

Research Collaboration and Funding Agreement with Blumberg

In October 2014, Arbutus Inc. entered into a research collaboration and funding agreement with Blumberg under which the Company will provide $1,000,000 per year of research funding for three years, renewable at the Company's option for an additional three years, for Blumberg to conduct research projects in HBV and liver cancer pursuant to a research plan to be agreed upon by the parties. Blumberg has exclusivity obligations to Arbutus with respect to HBV research funded under the agreement. In addition, the Company has the right to match any third party offer to fund HBV research that falls outside the scope of the research being funded under the agreement. Blumberg has granted the Company the right to obtain an exclusive, royalty bearing, worldwide license to any intellectual property generated by any funded research project. If the Company elects to exercise its right to obtain such a license, the Company will have a specified period of time to negotiate and enter into a mutually agreeable license agreement with Blumberg. This license agreement will include the following pre negotiated upfront, milestone and royalty payments: an upfront payment in the amount of $100,000; up to $8,100,000 upon the achievement of specified development and regulatory milestones; up to $92,500,000 upon the achievement of specified commercialization milestones; and royalties at a low single to mid-single digit rates based upon the proportionate net sales of licensed products from any commercialized combination.

On June 5, 2016, the Company and Blumberg entered into an amended and restated research collaboration and funding agreement, primarily to: (i) increase the annual funding amount to Blumberg from $1,000,000 to $1,100,000; (ii) extend the initial term through to October 29, 2018; (iii) provide an option for the Company to extend the term past October 29, 2018 for two additional one year terms; and (iv) expand the Company's exclusive license under the Agreement to include the sole and exclusive right to obtain an exclusive, royalty-bearing, worldwide and all-fields license under Blumberg's rights in certain other inventions described in the agreement.

11. Concentrations of business risk

Credit risk

Credit risk is defined by the Company as an unexpected loss in cash and earnings if a collaborative partner is unable to pay its obligations in due time. The Company's main source of credit risk is related to its accounts receivable balance which principally represents temporary financing provided to collaborative partners in the normal course of operations.

The Company does not currently maintain a provision for bad debts as the majority of accounts receivable are from collaborative partners or government agencies and are considered low risk.

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at December 31, 2017 was the accounts receivable balance of $402,000 (2016 - $273,000).

All accounts receivable balances were current as at December 31, 2017 and December 31, 2016.

Significant collaborators and customers risk

We depend on a small number of collaborators and customers for a significant portion of our revenues (see note 4).

Liquidity Risk

Liquidity risk results from the Company's potential inability to meet its financial liabilities, for example payments to suppliers. The Company ensures sufficient liquidity through the management of net working capital and cash balances.

The Company's liquidity risk is primarily attributable to its cash and cash equivalents, and short-term investments. The Company limits exposure to liquidity risk on its liquid assets through maintaining its cash and cash equivalent, and short-term investments with high-credit quality financial institutions. Due to the nature of these investments, the funds are available on demand to provide optimal financial flexibility.

The Company believes that its current sources of liquidity are sufficient to cover its likely applicable short term cash obligations. The Company's financial obligations include accounts payable and accrued liabilities which generally fall due within 45 days. The net liquidity of the Company is considered to be the cash and cash equivalents and short-term investments less accounts payable and accrued liabilities.

	December 31, 2017	December 31, 2016
Cash, cash equivalents and short-term investments	**$ 126,352**	$ 130,559
Less: Accounts payable and accrued liabilities	**$ (10,646)**	$ (9,910)
	$ 115,706	$ 120,649

Foreign currency risk

The results of the Company's operations are subject to foreign currency transaction and translation risk as the Company's revenues and expenses are denominated in both Canadian and US dollars. The fluctuation of the Canadian dollar in relation to the US dollar will consequently have an impact upon the Company's reported income or loss and may also affect the value of the Company's assets, liabilities, and the amount of shareholders' equity both as recorded in the Company's financial statements, in the US functional currency, and as reported, for presentation purposes, in the US dollar.

The Company manages its foreign currency risk by using cash received in a currency to pay for expenses in that same currency, whenever possible. The Company's policy to maintain US and Canadian dollar cash and investment and short-term investment balances based on long term forecasts of currency needs thereby creating a natural currency hedge.

The Company has not entered into any agreements or purchased any instruments to hedge possible currency risks. The Company's exposure to Canadian dollar currency expressed in US dollars was as follows:

(in US$)	December 31, 2017	December 31, 2016
Cash and cash equivalents and short-term investments	**$ 25,921**	$ 43,094
Accounts receivable	**375**	289
Accrued revenue	**—**	128
Accounts payable and accrued liabilities	**(1,273)**	(3,238)
	$ 25,023	$ 40,273

An analysis of the Company's sensitivity to foreign currency exchange rate movements is not provided in these financial statements as the Company's Canadian dollar cash holdings and expected Canadian dollar revenues are sufficient to cover Canadian dollar expenses for the foreseeable future.

12. Supplementary information

Accounts payable and accrued liabilities is comprised of the following:

	December 31, 2017	December 31, 2016
Trade accounts payable	**$ 1,987**	$ 3,215
Research and development accruals	**4,937**	3,131
Professional fee accruals	**429**	498
Deferred lease inducements	**42**	350
Payroll accruals	**2,893**	2,178
Other accrued liabilities	**358**	538
	$ 10,646	$ 9,910

13. Interim financial data (unaudited)

	2017				
	Q1	Q2	Q3	Q4	**Total**
Revenue	$ 235	$ 1,039	$ 6,892	$ 2,534	**$ 10,700**
Loss from operations	(18,299)	(19,485)	(12,897)	(60,249)	**(110,930)**
Net loss	$ (18,627)	$ (18,255)	$ (11,600)	$ (35,931)	**$ (84,413)**
Basic and diluted net loss per common share	$ (0.34)	$ (0.33)	$ (0.21)	$ (0.67)	**$ (1.56)**

	2016				
	Q1	Q2	Q3	Q4	**Total**
Revenue	$ 603	$ 309	$ 774	$ (195)	**$ 1,491**
Loss from operations	(19,977)	(195,248)	(18,975)	(257,439)	**(491,639)**
Net loss	$ (15,874)	$ (130,000)	$ (19,595)	$ (218,695)	**$ (384,164)**
Basic and diluted net loss per common share	$ (0.31)	$ (2.47)	$ (0.37)	$ (4.05)	**$ (7.24)**

14. Subsequent events

(a) Closing of Second Tier of a $116.4 million Strategic Investment from Roivant Sciences

On January 12, 2018, the Company closed the Tier 2 issue and sale of 664,000 Series A participating convertible preferred shares to Roivant for gross proceeds of $66,400,000, following receipt of the approval of the Company's shareholders on January 11, 2018. The Tier 2 closing represents the second of two tiers of Preferred Shares issued to Roivant and, together with the previously announced Tier 1 closing in October 2017 (see note 6), comprise the previously announced $116,400,000 strategic investment by Roivant in the Company.

(b) Consolidation of HBV business in Warminster, PA site

On February 2, 2018, the Company announced a site consolidation and organizational structuring to better align its HBV business in Warminster, PA. To achieve this alignment, the Company will reduce its global workforce by approximately 31% and plans to close its Burnaby facility. The Company will incur restructuring costs related to one-time employee termination benefits, employee relocation costs, and site closure costs estimated to be $5,000,000, which will be primarily paid in cash in the second quarter of 2018.

The Company and Roivant are currently negotiating a structure to jointly develop the Company's LNP and GalNAc technologies.

(c) Settlement of Litigation, Terminating Acuitas' Rights to LNP Technology

In February 2018, the contractual issues concerning the cross-license agreement (excluding the claims for damages) were settled out of court, resulting in the termination of Acuitas' rights to further use or sublicense our LNP technology, making permanent the effect of the Court's prior injunction. Refer to note 10 - contingencies and commitments, and Item 3, "Legal Proceedings" in Part I of this annual report on Form 10-K for more information.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

As of the end of our fiscal year ended December 31, 2017, an evaluation of the effectiveness of our “disclosure controls and procedures” (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) was carried out by our management, with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO). Based upon that evaluation, the CEO and CFO have concluded that as of the end of that fiscal year, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in Securities Exchange Commission (the "Commission") rules and forms and (ii) accumulated and communicated to the management of the registrant, including the CEO and CFO, to allow timely decisions regarding required disclosure.

It should also be noted that the CEO and CFO believe that our disclosure controls and procedures provide a reasonable assurance that they are effective, they do not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management’s Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over our financial reporting, as such term is defined in Rule 13a-15(f) of the Securities Exchange Act of 1934. Internal control over financial reporting is defined as process designed by, or under the supervision of, the CEO and CFO, and effected by the issuer's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail accurately reflect the transactions and dispositions of the assets of the issuer, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the issuer are being made only in accordance with authorizations of management and directors of the issuer, and (3) provide reasonable assurance regarding preventions or timely detection of unauthorized acquisition, use or disposition of the issuer's assets that could have a material effect on the financial statements.

Management has assessed the effectiveness of our internal control over financial reporting as at December 31, 2017. In making its assessment, management used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework in Internal Control – Integrated Framework (2013) to evaluate the effectiveness of our internal control over financial reporting. Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2017.

Attestation Report of the Registered Public Accounting Firm

The independent registered public accounting firm’s report on the effectiveness of our internal control over financial reporting, is included in Item 8 of this annual report on Form 10-K and is incorporated herein by reference.

Changes in Internal Control over Financial Reporting

During the fiscal quarter ended December 31, 2017, we have implemented an independent third party stock option administration system, which we rely on for various financial reporting calculations including fair value and disclosure information. There have not been any other changes in our internal control over financial reporting that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated herein by reference to the information contained under the sections captioned “Proposal One — Election of Directors,” “Section 16(a) Beneficial Ownership Reporting Compliance,” Code of Business Conduct for Directors Officers and Employees," and “Corporate Governance” of the Proxy Statement. The information required by this item relating to executive officers is included in Part I, Item 1, “— Business-Executive Officers of the Registrant,” of this annual report on Form 10-K.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to the information contained under the sections captioned “Executive Compensation,” "Director Compensation," and “Compensation Committee Report” of the Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated herein by reference to the information contained under the sections captioned “Security Ownership of Certain Beneficial Owners and Management,” and “Securities Authorized for Issuance Under Equity Compensation Plans” of the Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated herein by reference to the information contained under the sections captioned “Corporate Governance,” and “Certain Relationships and Related Transactions” of the Proxy Statement.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated herein by reference to the information contained under the section captioned "Independent Auditor" of the Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules

Financial Statements

See Index to Consolidated Financial Statements under Item 8 of Part II.

Financial Statement Schedules

None

Item 16.Form 10-K Summary

None

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on March 15, 2018.

ARBUTUS BIOPHARMA CORPORATION

By: /s/ Mark Murray
Mark Murray
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on March 15, 2018.

Signatures	Capacity in Which Signed
/s/ Vivek Ramaswamy Vivek Ramaswamy	Director (Chairman)
/s/ Mark Murray Mark Murray	President and Chief Executive Officer and Director (Principal Executive Officer)
/s/ Koert VandenEnden Koert VandenEnden	Interim Chief Financial Officer (Principal Financial Officer and Accounting Officer)
/s/ Daniel Burgess Daniel Burgess	Director
/s/ Herbert J. Conrad Herbert J. Conrad	Director
/s/ Richard C. Henriques Richard C. Henriques	Director
/s/ Frank Karbe Frank Karbe	Director
/s/ Keith Manchester Keith Manchester	Director
/s/ William T. Symonds William T. Symonds	Chief Development Officer and Director

Exhibit Number	Description
2.1*	Agreement and Plan of Merger and Reorganization, dated January 11, 2015, by and among Tekmira Pharmaceuticals Corporation, TKM Acquisition Corporation and OnCore Biopharma, Inc. (incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed with the SEC on January 26, 2015).
3.1**	Notice of Articles and Articles of the Company, as amended.
4.1*	Governance Agreement between the Company and Roivant Sciences Ltd., a Bermuda exempted company, dated January 11, 2015 (incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed with the SEC on January 26, 2015).
10.1†*	Amendment No. 1 to the Amended and Restated Agreement, between the Company (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc., effective as of May 27, 2009 (incorporated herein by reference to Exhibit 4.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.2†*	Amended and Restated License Agreement, between Inex Pharmaceuticals Corporation and Hana Biosciences, Inc., dated April 30, 2007 (incorporated herein by reference to Exhibit 4.2 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
10.3†*	Sublicense Agreement, between Inex Pharmaceuticals Corporation and Alnylam Pharmaceuticals, Inc., dated January 8, 2007 (incorporated herein by reference to Exhibit 4.3 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
10.4†*	Settlement Agreement, between Sirna Therapeutics, Inc. and Merck & Co., Inc. and Protiva Biotherapeutics Inc. and Protiva Biotherapeutics (USA), Inc., effective as of October 9, 2007 (incorporated herein by reference to Exhibit 4.7 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
10.5*#	Executive Employment Agreement with Mark Murray, dated May 30, 2008 (incorporated herein by reference to Exhibit 4.11 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.6*#	Executive Employment Agreement with Peter Lutwyche, dated January 1, 2009 (incorporated herein by reference to Exhibit 4.12 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.7*#	Share Option Plan amended through May 12, 2009 (including form stock option agreements) (incorporated herein by reference to Exhibit 4.13 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.8*	Lease Agreement with Canada Lands Company CLC Limited dated December 15, 1997, as amended (incorporated herein by reference to Exhibit 4.14 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.9*#	Form of Indemnity Agreement (incorporated herein by reference to Exhibit 4.15 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.10†*	License Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation executed on July 30, 2001 (incorporated herein by reference to Exhibit 4.17 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.11†*	Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated July 11, 2006 (incorporated herein by reference to Exhibit 4.18 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.12†*	Second Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated January 8, 2007 (incorporated herein by reference to Exhibit 4.19 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.13†*	Consent Agreement of the University of British Columbia to Inex/Alnylam Sublicense Agreement dated January 8, 2007 (incorporated herein by reference to Exhibit 4.20 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
10.14†*	Amendment No. 2 to the Amended and Restated Agreement, between the Company (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc., effective as of September 20, 2010 (incorporated herein by reference to Exhibit 4.21 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).

10.15*#	Tekmira 2011 Omnibus Share Compensation Plan approved by shareholders on June 22, 2011 (incorporated herein by reference to Exhibit 4.25 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
10.16†*	Settlement Agreement and General Release, by and among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Alnylam Pharmaceuticals, Inc., and AlCana Technologies, Inc., dated November 12, 2012 (incorporated herein by reference to Exhibit 4.26 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2012 filed with the SEC on March 27, 2013).
10.17†*	Cross-License Agreement by and among Alnylam Pharmaceuticals, Inc., Tekmira Pharmaceuticals Corporation and Protiva Biotherapeutics Inc., dated November 12, 2012 (incorporated herein by reference to Exhibit 4.27 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2012 filed with the SEC on March 27, 2013).
10.18†*	License Agreement by and among Protiva Biotherapeutics Inc. and Marina Biotech, Inc. dated November 28, 2012 (incorporated herein by reference to Exhibit 4.28 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2012 filed with the SEC on March 27, 2013).
10.19*#	Employment Agreement with Bruce Cousins dated October 7, 2013 (incorporated herein by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 28, 2014).
10.20†*	Services Agreement by and among Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Monsanto Company dated January 12, 2014 (incorporated herein by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 28, 2014).
10.21†*	Option Agreement by and among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Monsanto Canada Inc. dated January 12, 2014 (incorporated herein by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 28, 2014).
10.22†*	License and Services Agreement by and among Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Tekmira Pharmaceuticals Corporation dated January 12, 2014 (incorporated herein by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 28, 2014).
10.23*	Forms of Lock-Up Agreement (incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed with the SEC on January 26, 2015).
10.24*	Form of Registration Rights Agreement (incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed with the SEC on January 26, 2015).
10.25*	Form of Standstill Agreement (incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed with the SEC on January 26, 2015).
10.26*	Form of Representation Letter (incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed with the SEC on January 26, 2015).
10.27*#	Executive Employment Agreement, dated as of August 4, 2015, between Arbutus Biopharma Corporation and Michael Abrams. (incorporated herein by reference to Exhibit 10.12 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.28*#	Executive Employment Agreement, dated as of August 4, 2015, between Arbutus Biopharma Corporation and Mark Kowalski. (incorporated herein by reference to Exhibit 10.13 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.29*†	License Agreement, between Tekmira Pharmaceuticals and Protiva Biotherapeutics and Dicerna Pharmaceuticals dated November 16, 2014 (incorporated herein by reference to Exhibit 10.41 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 13, 2015).
10.30*†	Manufacturing and Clinical Trial Agreement between Tekmira Pharmaceuticals and Protiva Biotherapeutics and the Chancellor Masters and Scholars of the University of Oxford, dated December 18, 2014 (incorporated herein by reference to Exhibit 10.42 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 13, 2015).
10.31*	Underwriting Agreement for 3,750,000 Common Shares with Stifel, Nicolaus & Company, dated October 17, 2013 (incorporated herein by reference to Exhibit 10.76 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 13, 2015).

10.32*	Underwriting Agreement for 2,125,000 Common Shares with Leerink Partners LLC, dated March 14, 2014 (incorporated herein by reference to Exhibit 10.77 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 13, 2015).
10.33*#	Executive Employment Agreement Elizabeth Howard, dated March 7, 2016 (incorporated herein by reference to Exhibit 10.78 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 9, 2016).
10.34*†	Amended and Restated Option Agreement by and among Arbutus Biopharma Corporation, Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Monsanto Canada Inc., dated March 4, 2016 (incorporated herein by reference to Exhibit 10.79 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 9, 2016)
10.35*†	Amended and Restated License and Services Agreement by and among Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Arbutus Biopharma Corporation, dated March 4, 2016 (incorporated herein by reference to Exhibit 10.80 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 9, 2016).
10.36*	First Amendment to the Protiva-Monsanto Services Agreement by and among Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Monsanto Company, dated March 4, 2016 (incorporated herein by reference to Exhibit 10.81 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 9, 2016).
10.37*†	Letter Agreement between OnCore Biopharma, Inc. and Cytos Biotechnology AG, effective July 16, 2015 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed with the SEC on November 5, 2015).
10.38*†	License Agreement between OnCore Biopharma, Inc. and Cytos Biotechnology Ltd. dated December 30, 2014 (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed with the SEC on November 5, 2015).
10.39*#	Amending Agreement, dated as of November 2, 2015, among Arbutus Biopharma Corporation, Roivant Sciences Ltd., Patrick T. Higgins, Michael J. McElhaugh, Michael J. Sofia and Bryce A. Roberts (incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed with the SEC on November 5, 2015).
10.40*†	Amendment No. 1 to the Option Agreement by and among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Monsanto Canada Inc. dated January 12, 2014 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, filed with the SEC on August 14, 2014).
10.41*	Renewal and Modification of Lease Agreement with Canada Lands Company CLC Limited dated December 15, 1997, as amended (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, filed with the SEC on August 14, 2014).
10.42*†	Amendment No. 2 to the Option Agreement by and among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Protiva Agricultural Development Company Inc. and Monsanto Canada Inc. dated January 12, 2014 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, filed with the SEC on November 7, 2014).
10.43*†	License Agreement by and between NeuroVive Pharmaceutical AB and OnCore Biopharma, Inc., dated as of September 8, 2014 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 6, 2015).
10.44*†	Research Collaboration and Funding Agreement by and between Baruch S. Blumberg Institute and OnCore Biopharma, Inc., dated as of October 29, 2014 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 6, 2015).
10.45*†	Stock Purchase Agreement by and among OnCore Biopharma, Inc. and each of the stockholders of Enantigen Therapeutics, Inc., dated as of October 1, 2014 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 6, 2015).
10.46*†	Third Amendment to Option Agreement by and among Monsanto Canada, Inc., Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics, Inc. and Protiva Agricultural Development Company Inc., dated as of May 22, 2105 (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).

10.47*#	Share Repurchase Agreement, dated effective as of July 11, 2015, between Tekmira Pharmaceuticals Corporation and Patrick T. Higgins (incorporated herein by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.48*#	Executive Employment Agreement, dated effective as of July 11, 2015, between OnCore Biopharma, Inc. and Michael J. Sofia (incorporated herein by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.49*	Share Repurchase Agreement, dated effective as of July 11, 2015, between Tekmira Pharmaceuticals Corporation and Michael J. Sofia (incorporated herein by reference to Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.50*#	Agreement to Serve as Chief Development Officer, dated as of May 29, 2015, between Tekmira Pharmaceuticals Corporation and William T. Symonds (incorporated herein by reference to Exhibit 10.10 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.51*#	Executive Employment Agreement, dated as of August 4, 2015, between Arbutus Biopharma Corporation and Bruce Cousins (incorporated herein by reference to Exhibit 10.11 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.52*#	Executive Employment Agreement, dated as of August 4, 2015, between Arbutus Biopharma Corporation and Peter Lutwyche (incorporated herein by reference to Exhibit 10.14 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015).
10.53*#	Separation of Executive Employment Agreement and Share Repurchase Agreement between Arbutus Biopharma, Inc., Arbutus Biopharma Corporation and Patrick T. Higgins, dated April 20, 2016 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed with the SEC on May 4, 2016).
10.54*	Amended 2011 Omnibus Share Compensation Plan (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, filed with the SEC on August 4, 2016).
10.55*	2016 Omnibus Share and Incentive Plan (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, filed with the SEC on August 4, 2016).
10.56*	Amended and Restated Research Collaboration and Funding Agreement, between Arbutus Biopharma Inc. and the Baruch S. Blumberg Institute, dated June 6, 2016 (incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, filed with the SEC on August 4, 2016).
10.57*†	Lease Agreement between Arbutus Biopharma, Inc. and ARE-PA Region No. 7, LLC dated August 9, 2016 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 3, 2016).
10.58*†	First Amendment to Lease Agreement between Arbutus Biopharma, Inc. and ARE-PA Region No. 7, LLC dated October 7, 2016 (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 3, 2016).
10.59*	Acknowledgment of Commencement Date in connection with Lease Agreement between Arbutus Biopharma, Inc. and ARE-PA Region No. 7, LLC dated August 9, 2016 and as amended on October, 7, 2016 (incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 3, 2016).
10.60*#	Termination and Severance Agreement between Arbutus Biopharma Corporation and Mark Kowalski, dated September 30, 2016 (incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 3, 2016).
10.61*#	Termination and Severance Agreement between Arbutus Biopharma Corporation and Michael Abrams, dated September 30, 2016 (incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 3, 2016).
10.62*	Notice of Contract Termination from the U.S. Department of Defense for the TKM-Ebola Contract, dated October 1, 2015 (incorporated herein by reference to Exhibit 10.62 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with SEC on March 22, 2017).
10.63*	Settlement Agreement and Release between Arbutus Biopharma Corporation and NeuroVive Pharmaceutical AB., dated October 19, 2016 (incorporated herein by reference to Exhibit 10.63 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with SEC on March 22, 2017).

10.64*	Notice of Termination of License Agreement between Arbutus Biopharma Corporation and Dicerna Pharmaceuticals Inc., dated November 20, 2016 (incorporated herein by reference to Exhibit 10.64 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with SEC on March 22, 2017).
10.65*	Notice of Termination of License Agreement between Arbutus Biopharma Corporation and Cytos Biotechnology Ltd. dated August 25, 2016 (incorporated herein by reference to Exhibit 10.65 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with SEC on March 22, 2017).
10.66*#	Executive Employment Agreement Transfer, dated as of November 17, 2016, between Arbutus Biopharma Inc. and William T. Symonds (incorporated herein by reference to Exhibit 10.66 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with SEC on March 22, 2017).
10.67*†#	License Agreement between Arbutus Biopharma Corporation and Alexion Pharma Holding dated March 15, 2017 (incorporated herein by reference to Exhibit 10.67 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with SEC on March 22, 2017).
10.68*	Subscription Agreement and Related Documents between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit A to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.69*	Governance Amendments between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit B to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.70*	Amended and Restated Governance Agreement between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit C to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.71*	Amended and Restated Lockup Agreement between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit D to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.72*	Amendment to Registration Rights Agreement between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit E to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.73*	Amended and Restated Standstill Agreement between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit F to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.74*	Preferred Share Article Amendment between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit G to the Registrant's Preliminary Proxy Soliciting Materials on Schedule Pre 14A for the Special Meeting, filed with the SEC on November 21, 2017).
10.75**#	Termination and Severance Agreement between Arbutus Biopharma Corporation and Bruce Cousins, dated February 8, 2018.
10.76**#	Executive Employment Agreement Transfer between Arbutus Biopharma Corporation and Koert VandenEnden., dated February 16, 2018.
10.77**#	Indemnity Agreement between Arbutus Biophrama Corporation and Koert VandenEnden, dated February 16, 2018.
10.78**	Exclusivity Agreement, dated February 13, 2018, by and between the Company and Roivant Sciences Ltd. (incorporated herein by reference to Exhibit 7.09 of the Schedule 13D filed with the SEC by Roivant Sciences Ltd. on February 14, 2018).
21.1**	List of Subsidiaries.
23.1**	Consent of KPMG LLP, an Independent Registered Public Accounting Firm.
31.1**	Certification of Chief Executive Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Chief Financial Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document

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*	Previously filed
**	Filed herewith
†	Confidential treatment granted as to portions of this exhibit.
††	Confidential treatment has been requested as to portions of this exhibit.
#	Management Contract

BUSINESS CORPORATIONS ACT

ARTICLES OF
ARBUTUS BIOPHARMA CORPORATION

(the "Company")

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Articles adopted by special resolution deposited at the records office on April 25, 2007 and Notice of Alteration attaching the share rights to the Preferred shares was filed with the BC Registrar of Companies on April 25, 2007.
Section 13.9 added to the Articles by ordinary resolution deposited at the records office on May 14, 2013.
Part 18.2, Part 27 and Part 28 added to Articles by ordinary resolution deposited at the records office on March 4, 2015.
Section 11.3 of the Articles was deleted and replaced with section 11.3 by ordinary resolution deposited at the records office on July 10, 2015.
Change of name of the Company effective at 12:00 a.m. on July 31, 2015 by Notice of Alteration filed with the BC Registrar of Companies.
Part 26A added to Articles by directors' resolution deposited at the records office on October 16, 2017 and Notice of Alteration attaching the share rights to the Preferred shares was filed with the BC Registrar of Companies on October 16, 2017.

BUSINESS CORPORATIONS ACT

ARTICLES OF
ARBUTUS BIOPHARMA CORPORATION

(THE "COMPANY")

Number: BC0736983

PART 1 INTERPRETATION

Definitions

1.1 In these Articles, unless the context otherwise requires:

(a) "**board of directors**", "**directors**" and "**board**" mean the directors or sole director of the Company for the time being;

(b) "**Act**" means the *Business Corporations Act* (British Columbia) from time to time in force and all amendments thereto and includes all regulations and amendments thereto made pursuant to that Act;

(c) "**Interpretation Act**" means the *Interpretation Act* (British Columbia) from time to time in force and all amendments thereto and includes all regulations and amendments thereto made pursuant to that Act;

(d) "**legal personal representative**" means the personal or other legal representative of the shareholder;

(e) "**registered address**" of a shareholder means the shareholder's address as recorded in the central securities register;

(f) "**seal**" means the seal of the Company, if any;

(g) "**share**" means a share in the share structure of the Company; and

(h) "**special majority**" means the majority of votes described in §11.2 which is required to pass a special resolution.

Act and Interpretation Act Definitions Applicable

The definitions in the Act and the definitions and rules of construction in the Interpretation Act, with the necessary changes, so far as applicable, and except as the context requires otherwise, apply to these Articles as if they were an enactment. If there is a conflict between a definition in the Act and a definition or rule in the Interpretation Act relating to a term used in these Articles, the definition in the Act will prevail. If there is a conflict or inconsistency between these Articles and the Act, the Act will prevail.

Section References

1.3 The symbol § followed by a number or some combination of numbers and letters refers to the section, paragraph, subparagraph, clause or subclause of these Articles so designated.

PART 2

SHARES AND SHARE CERTIFICATES

Authorized Share Structure

2.1 The authorized share structure of the Company consists of shares of the class or classes and series, if any, described in the Notice of Articles of the Company.

Form of Share Certificate

2.2 Each share certificate issued by the Company must comply with, and be signed as required by, the Act.

Shareholder Entitled to Certificate or Acknowledgment

2.3 Each shareholder is entitled, without charge, to (a) one share certificate representing the shares of each class or series of shares registered in the shareholder's name or (b) a non-transferable written acknowledgment of the shareholder's right to obtain such a share certificate, provided that in respect of a share held jointly by several persons, the Company is not bound to issue more than one share certificate or acknowledgment and delivery of a share certificate or an acknowledgment to one of several joint shareholders or to a duly authorized agent of one of the joint shareholders will be sufficient delivery to all.

Delivery by Mail

2.4 Any share certificate or non-transferable written acknowledgment of a shareholder's right to obtain a share certificate may be sent to the shareholder by mail at the shareholder's registered address and neither the Company nor any director, officer or agent of the Company is liable for any loss to the shareholder because the share certificate or acknowledgement is lost in the mail or stolen.

Replacement of Worn Out or Defaced Certificate or Acknowledgement

2.5 If a share certificate or a non-transferable written acknowledgment of the shareholder's right to obtain a share certificate is worn out or defaced, the Company must, on production of the share certificate or acknowledgment, as the case may be, and on such other terms, if any, as are deemed fit:

(a) cancel the share certificate or acknowledgment; and

(b) issue a replacement share certificate or acknowledgment. Replacement of Lost, Stolen or Destroyed Certificate or Acknowledgment

2.6 If a share certificate or a non-transferable written acknowledgment of a shareholder's right to obtain a share certificate is lost, stolen or destroyed, the Company must issue a replacement share certificate or acknowledgment, as the case may be, to the person entitled to that share certificate or acknowledgment, if it receives:

(c) proof satisfactory to it of the loss, theft or destruction; and

(d) any indemnity the directors consider adequate. Splitting Share Certificates

2.7 If a shareholder surrenders a share certificate to the Company with a written request that the Company issue in the shareholder's name two or more share certificates, each representing a specified number of shares and in the aggregate representing the same number of shares as the share certificate so surrendered, the Company must cancel the surrendered share certificate and issue replacement share certificates in accordance with that request.

Certificate Fee

2.8 There must be paid to the Company, in relation to the issue of any share certificate under §2.5, §2.6 or §2.7, the amount, if any, not exceeding the amount prescribed under the Act, determined by the directors.

Recognition of Trusts

2.9 Except as required by law or statute or these Articles, no person will be recognized by the Company as holding any share upon any trust, and the Company is not bound by or compelled in any way to recognize (even when having notice thereof) any equitable, contingent, future or partial interest in any share or fraction of a share or (except as required by law or statute or these Articles or as ordered by a court of competent jurisdiction) any other rights in respect of any share except an absolute right to the entirety thereof in the shareholder.

PART 3 ISSUE OFSHARES.

Directors Authorized

3.1 Subject to the Act and the rights, if any, of the holders of issued shares of the Company, the Company may allot, issue, sell or otherwise dispose of the unissued shares, and issued shares held by the Company, at the times, to the persons, including directors, in the manner, on the terms and conditions and for the consideration (including any premium at which shares with par value may be issued) that the directors may determine. The issue price for a share with par value must be equal to or greater than the par value of the share.

Commissions and Discounts

3.2 The Company may at any time pay a reasonable commission or allow a reasonable discount to any person in consideration of that person's purchase or agreement to purchase shares of the Company from the Company or any other person's procurement or agreement to procure purchasers for shares of the Company.

Brokerage

3.3 The Company may pay such brokerage fee or other consideration as may be lawful for or in connection with the sale or placement of its securities.

Share Purchase Warrants and Rights

3.4 Subject to the Act, the Company may issue share purchase warrants, options and rights upon such terms and conditions as the directors determine, which share purchase warrants, options and rights may be issued alone or in conjunction with debentures, debenture stock, bonds, shares or any other securities issued or created by the Company from time to time.

PART 4
SHARE REGISTERS

Central Securities Register

4.1 As required by and subject to the Act, the Company must maintain in British Columbia a central securities register and may appoint an agent to maintain such register. The directors may appoint one or more agents, including the agent appointed to keep the central securities register, as transfer agent for shares or any class or series of shares and the same or another agent as registrar for shares or such class or series of shares, as the case may be. The directors may terminate such appointment of any agent at any time and may appoint another agent in its place.

PART 5 SHARE TRANSFERS

Registering Transfers

5.1 A transfer of a share must not be registered unless the Company or the transfer agent or registrar for the class or series of shares to be transferred has received:

(a) except as exempted by the Act, a duly signed proper instrument of transfer in respect of the share;

(b) if a share certificate has been issued by the Company in respect of the share to be transferred, that share certificate;

(c) if a non-transferable written acknowledgment of the shareholder's right to obtain a share certificate has been issued by the Company in respect of the share to be transferred, that acknowledgment; and

(d) such other evidence, if any, as the Company or the transfer agent or registrar for the class or series of share to be transferred may require to prove the title of the transferor or the transferor's right to transfer the share, the due signing of the instrument of transfer and the right of the transferee to have the transfer registered.

Form of Instrument of Transfer

5.2 The instrument of transfer in respect of any share of the Company must be either in the form, if any, on the back of the Company's share certificates of that class or series or in some other form that may be approved by the directors.

Transferor Remains Shareholder

5.3 Except to the extent that the Act otherwise provides, the transferor of a share is deemed to remain the holder of it until the name of the transferee is entered in a securities register of the Company in respect of the transfer.

Signing of Instrument of Transfer

5.4 If a shareholder, or his or her duly authorized attorney, signs an instrument of transfer in respect of shares registered in the name of the shareholder, the signed instrument of transfer constitutes a complete and sufficient authority to the Company and its directors, officers and agents to register the number of shares specified in the instrument of transfer or specified in any other manner, or, if no number is specified, all the shares represented by the share certificates or set out in the written acknowledgments deposited with the instrument of transfer:

a. in the name of the person named as transferee in that instrument of transfer; or

b. if no person is named as transferee in that instrument of transfer, in the name of the person on whose behalf the instrument is deposited for the purpose of having the transfer registered.

Enquiry as to Title Not Required

5.5 Neither the Company nor any director, officer or agent of the Company is bound to inquire into the title of the person named in the instrument of transfer as transferee or, if no person is named as transferee in the instrument of transfer, of the person on whose behalf the instrument is deposited for the purpose of having the transfer registered or is liable for any claim related to registering the transfer by the shareholder or by any intermediate owner or holder of the shares transferred, of any interest in such shares, of any share certificate representing such shares or of any written acknowledgment of a right to obtain a share certificate for such shares.

Transfer Fee

5.6 There must be paid to the Company, in relation to the registration of a transfer, the amount, if any, determined by the directors.

PART 6 TRANSMISSION OF SHARES

Legal Personal Representative Recognized on Death

6.1 In case of the death of a shareholder, the legal personal representative of the shareholder, or in the case of shares registered in the shareholder’s name and the name of another person in joint tenancy, the surviving joint holder, will be the only person recognized by the Company as having any title to the shareholder’s interest in the shares. Before recognizing a person as a legal personal representative of a shareholder, the directors may require proof of appointment by a court of competent jurisdiction, a grant of letters probate, letters of administration or such other evidence or documents as the directors consider appropriate.

Rights of Legal Personal Representative

6.2 The legal personal representative of a shareholder has the same rights, privileges and obligations that attach to the shares held by the shareholder, including the right to transfer the shares in accordance with these Articles, provided the documents required by the Act and the directors have been deposited with the Company. This §6.2 does not apply in the case of the death of a shareholder with respect to shares registered in the name of the shareholder and the name of another person in joint tenancy.

PART 7 PURCHASE OF SHARES

Company Authorized to Purchase Shares

7.1 Subject to §7.2, to the special rights and restrictions attached to the shares of any class or series and to the Act, the Company may, if authorized by the directors, purchase or otherwise acquire any of its shares at the price and upon the terms determined by the directors.

Purchase When Insolvent

7.2 The Company must not make a payment or provide any other consideration to purchase or otherwise acquire any of its shares if there are reasonable grounds for believing that:

(a) the Company is insolvent; or

(b) making the payment or providing the consideration would render the Company insolvent.

Sale and Voting of Purchased Shares

7.3 If the Company retains a share redeemed, purchased or otherwise acquired by it, the Company may sell, gift or otherwise dispose of the share, but, while such share is held by the Company, it:

a. is not entitled to vote the share at a meeting of its shareholders;

b. must not pay a dividend in respect of the share; and

c. must not make any other distribution in respect of the share.

Company Entitled to Purchase or Redeem Share Fractions

7.4 The Company may, without prior notice to the holders, purchase or redeem for fair value any and all outstanding share fractions of any class or kind of shares in its authorized share structure as may exist at any time and from time to time. Upon the Company delivering the purchase funds and confirmation of purchase or redemption of the share fractions to the holders' registered or last known address, or if the Company has a transfer agent then to such agent for the benefit of and forwarding to such holders, the Company will thereupon amend its central securities register to reflect the purchase or redemption of such share fractions and if the Company has a transfer agent, will direct the transfer agent to amend the central securities register accordingly. Any holder of a share fraction, who upon receipt of the funds and confirmation of purchase or redemption of same, disputes the fair value paid for the

fraction, will have the right to apply to the court to request that it set the price and terms of payment and make consequential orders and give directions the court considers appropriate, as if the Company were the "acquiring person" as contemplated by Division 6, Compulsory Acquisitions, under the Act and the holder were an "offeree" subject to the provisions contained in such Division, *mutatis mutandis*.

PART 8 BORROWING POWERS

8.1 The Company, if authorized by the directors, may:

(a) borrow money in the manner and amount, on the security, from the sources and on the terms and conditions that they consider appropriate;

(b) issue bonds, debentures and other debt obligations either outright or as security for any liability or obligation of the Company or any other person and at such discounts or premiums and on such other terms as the directors consider appropriate;

(c) guarantee the repayment of money by any other person or the performance of any obligation of any other person; and

(d) mortgage, charge, whether by way of specific or floating charge, grant a security interest in, or give other security on, the whole or any part of the present and future assets and undertaking of the Company.

8.2 The powers conferred under this Part 8 will be deemed to include the powers conferred on a company by Division VII of the *Special Corporations Powers Act* being chapter P-16 of the Revised Statutes of Quebec, 1988, and every statutory provision that may be substituted therefor or for any provision therein.

PART 9 ALTERATIONS

Alteration of Authorized Share Structure

9.1 Subject to §9.2 and the Act, the Company may by ordinary resolution (or a resolution of the directors in the case of §9.1(c) or §9.1(f)):

(a) create one or more classes or series of shares or, if none of the shares of a class or series of shares are allotted or issued, eliminate that class or series of shares;

(b) increase, reduce or eliminate the maximum number of shares that the Company is authorized to issue out of any class or series of shares or establish a maximum number of shares that the Company is authorized to issue out of any class or series of shares for which no maximum is established;

(c) subdivide or consolidate all or any of its unissued, or fully paid issued, shares;

(d) if the Company is authorized to issue shares of a class of shares with par value:

(i) decrease the par value of those shares; or

(ii) if none of the shares of that class of shares are allotted or issued, increase the par value of those shares;

(e) change all or any of its unissued, or fully paid issued, shares with par value into shares without par value or any of its unissued shares without par value into shares with par value;

(f) alter the identifying name of any of its shares; or

(g) otherwise alter its shares or authorized share structure when required or permitted to do so by the Act where it does not specify by a special resolution;

and, if applicable, alter its Notice of Articles and, if applicable, its Articles accordingly.

Special Rights and Restrictions

9.2 Subject to the Act and in particular those provisions of the Act relating to the rights of holders of outstanding shares to vote if their rights are prejudiced or interfered with, the Company may by ordinary resolution:

a. create special rights or restrictions for, and attach those special rights or restrictions to, the shares of any class or series of shares, whether or not any or all of those shares have been issued; or

b. vary or delete any special rights or restrictions attached to the shares of any class or series of shares, whether or not any or all of those shares have been issued,

and alter its Notice of Articles and Articles accordingly.

Change of Name

9.3 The Company may by resolution of the directors authorize an alteration of its Notice of Articles in order to change its name or adopt or change any translation of that name.

Other Alterations

9.4 If the Act does not specify the type of resolution and these Articles do not specify another type of resolution, the Company may by ordinary resolution alter these Articles.

PART 10

MEETINGS OF SHAREHOLDERS

Annual General Meetings

10.1 Unless an annual general meeting is deferred or waived in accordance with the Act, the Company must hold an annual general meeting at least once in each calendar year and not more than 15 months after its last annual general meeting.

Calling of Meetings of Shareholders

10.2 The directors may, at any time, call a meeting of shareholders.

Notice for Meetings of Shareholders

10.3 The Company must send notice of the date, time and location of any meeting of shareholders (including, without limitation, any notice specifying the intention to propose a resolution as an exceptional resolution, a special resolution or a special separate resolution, and any notice to consider approving an amalgamation into a foreign jurisdiction, an arrangement or the adoption of an amalgamation agreement, and any notice of a general meeting, class meeting or series meeting), in the manner provided in these Articles, or in such other manner, if any, as may be prescribed by ordinary resolution (whether previous notice of the resolution has been given or not), to each shareholder entitled to attend the meeting, to each director and to the auditor of the Company, unless these Articles otherwise provide, at least 21 days before the meeting.

Record Date for Notice

10.4 The directors may set a date as the record date for the purpose of determining shareholders entitled to notice of any meeting of shareholders. The record date must not precede the date on which the meeting is to be held by more than two months or, in the case of a general meeting requisitioned by shareholders under the Act, by more than four months. The record date must not precede the date on which the meeting is held by fewer than 21 days. If no record date is set, the record date is 5:00 p.m. on the day immediately preceding the first date on which the notice is sent or, if no notice is sent, the beginning of the meeting.

Record Date for Voting

10.5 The directors may set a date as the record date for the purpose of determining shareholders entitled to vote at any meeting of shareholders. The record date must not precede the date on which the meeting is to be held by more than two months or, in the case of a general meeting requisitioned by shareholders under the Act, by more than four months. If no record date is set, the record date is 5:00p.m. on the day immediately preceding the first date on which the notice is sent or, if no notice is sent, the beginning of the meeting.

Failure to Give Notice and Waiver of Notice

10.6 The accidental omission to send notice of any meeting of shareholders to, or the non- receipt of any notice by, any of the persons entitled to notice does not invalidate any proceedings at that meeting. Any person entitled to notice of a meeting of shareholders may, in writing or otherwise, waive that entitlement or may agree to reduce the period of that notice. Attendance of a person at a meeting of shareholders is a waiver of entitlement to notice of the meeting unless that person attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

Notice of Special Business at Meetings of Shareholders

10.7 If a meeting of shareholders is to consider special business within the meaning of §11.1, the notice of meeting must:

(a) state the general nature of the special business; and

(b) if the special business includes considering, approving, ratifying, adopting or authorizing any document or the signing of or giving of effect to any document, have attached to it a copy of the document or state that a copy of the document will be available for inspection by shareholders:

(i) at the Company's records office, or at such other reasonably accessible location in British Columbia as is specified in the notice; and

(ii) during statutory business hours on any one or more specified days before the day set for the holding of the meeting.

Place of Meetings

10.8 In addition to any location in British Columbia, any general meeting may be held in any location outside British Columbia approved by a resolution of the directors.

PART 11

PROCEEDINGS AT MEETINGS OF SHAREHOLDERS

Special Business

11.1 At a meeting of shareholders, the following business is special business:

(a) at a meeting of shareholders that is not an annual general meeting, all business is special business except business relating to the conduct of or voting at the meeting; and

(b) at an annual general meeting, all business is special business except for the following:

(i) business relating to the conduct of or voting at the meeting;

(ii) consideration of any financial statements of the Company presented to the meeting;

(iii) consideration of any reports of the directors or auditor;

(iv) the setting or changing of the number of directors;

(v) the election or appointment of directors;

(vi) the appoin1ment of an auditor;

(vii) the setting of the remuneration of an auditor;

(viii) business arising out of a report of the directors not requiring the passing of a special resolution or an exceptional resolution; and

(ix) any other business which, under these Articles or the Act, may be transacted at a meeting of shareholders without prior notice of the business being given to the shareholders.

Special Majority

11.2 The majority of votes required to pass a special resolution at a general meeting of shareholders is two-thirds of the votes cast on the resolution.

Quorum

11.3 Subject to the special rights and restrictions attached to the shares of any class or series of shares, and to §11.4, the quorum for the transaction of business at a meeting of shareholders is at least two people who are, or who represent by proxy, one or more shareholders who, in the aggregate, hold at least five percent (5 %) of the issued shares entitled to be voted at the meeting.

One Shareholder May Constitute Quorum

11.4 If there is only one shareholder entitled to vote at a meeting of shareholders:

a. the quorwn is one person who is, or who represents by proxy, that shareholder; and

b. that shareholder, present in person or by proxy, may constitute the meeting. Persons Entitled to Attend Meeting

11.5 In addition to those persons who are entitled to vote at a meeting of shareholders, the only other persons entitled to be present at the meeting are the directors, the president (if any), the secretary (if any), the assistant secretary (if any), any lawyer for the Company, the auditor of the Company, any persons invited to be present at the meeting by the directors or by the chair of the meeting and any persons entitled or required under the Act or these Articles to be present at the meeting; but if any of those persons does attend the meeting, that person is not to be counted in the quorum and is not entitled to vote at the meeting unless that person is a shareholder or proxy holder entitled to vote at the meeting.

Requirement of Quorum

11.6 No business, other than the election of a chair of the meeting and the adjournm.ent of the meeting, may be transacted at any meeting of shareholders unless a quorum of shareholders entitled to vote is present at the commencement of the meeting, but such quorum need not be present throughout the meeting.

Lack of Quorum

11.7 If, within one-half hour from the time set for the holding of a meeting of shareholders, a quorum is not present;

a. in the case of a general meeting requisitioned by shareholders, the meeting is dissolved; and

b. in the case of any other meeting of shareholders, the meeting stands adjourned to the same day in the next week at the same time and place.

Lack of Quorum at Succeeding Meeting

11.8 If, at the meeting to which the meeting referred to in §11.7(b) was adjourned, a quorum is not present within one-half hour from the time set for the holding of the meeting, the person or persons

present and being, or representing by proxy, two or more shareholders entitled to attend and vote at the meeting will be deemed to constitute a quorum.

Chair

11.9 The following individual is entitled to preside as chair at a meeting of shareholders:

a. the chair of the board, if any; or

b. if the chair of the board is absent or unwilling to act as chair of the meeting, the president, if any.

Selection of Alternate Chair

11.10 If, at any meeting of shareholders, there is no chair of the board or president present within 15 minutes after the time set for holding the meeting, or if the chair of the board and the president are unwilling to act as chair of the meeting, or if the chair of the board and the president have advised the secretary, if any, or any director present at the meeting, that they will not be present at the meeting, the directors present may choose either one of their number or the solicitor of the Company to be chair of the meeting. If all of the directors present decline to take the chair or fail to so choose or if no director is present or the solicitor of the Company declines to take the chair, the shareholders entitled to vote at the meeting who are present in person or by proxy may choose any person present at the meeting to chair the meeting.

Adjournments

11.11 The chair of a meeting of shareholders may, and if so directed by the meeting must, adjourn the meeting from time to time and from place to place, but no business may be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

Notice of Adjourned Meeting

11.12 It is not necessary to give any notice of an adjourned meeting of shareholders or of the business to be transacted at an adjourned meeting of shareholders except that, when a meeting is adjourned for 30 days or more, notice of the adjourned meeting must be given as in the case of the original meeting.

Decisions by Show of Hands or Poll

11.13 Subject to the Act, every motion put to a vote at a meeting of shareholders will be decided on a show of hands unless a poll, before or on the declaration of the result of the vote by show of hands, is directed by the chair or demanded by any shareholder entitled to vote who is present in person or by proxy.

Declaration of Result

11.14 The chair of a meeting of shareholders must declare to the meeting the decision on every question in accordance with the result of the show of hands or the poll, as the case may be, and that decision must be entered in the minutes of the meeting. A declaration of the chair that a resolution is carried by the necessary majority or is defeated is, unless a poll is directed by the chair or demanded

under §11.13, conclusive evidence without proof of the number or proportion of the votes recorded in favour of or against the resolution.

Motion Need Not be Seconded

11.15 No motion proposed at a meeting of shareholders need be seconded unless the chair of the meeting rules otherwise, and the chair of any meeting of shareholders is entitled to propose or second a motion.

Casting Vote

11.16 In case of an equality of votes, the chair of a meeting of shareholders does not, either on a show of hands or on a poll, have a second or casting vote in addition to the vote or votes to which the chair may be entitled as a shareholder.

Manner of Taking Poll

11.17 Subject to §11.18, if a poll is duly demanded at a meeting of shareholders:

a. the poll must be taken:

i. at the meeting, or within seven days after the date of the meeting, as the chair of the meeting directs; and

ii. in the manner, at the time and at the place that the chair of the meeting directs;

b. the result of the poll is deemed to be the decision of the meeting at which the poll is demanded; and

c. the demand for the poll may be withdrawn by the person who demanded it.

Demand for Poll on Adjournment

11.18 A poll demanded at a meeting of shareholders on a question of adjournment must be taken immediately at the meeting.

Chair Must Resolve Dispute

11.19 In the case of any dispute as to the admission or rejection of a vote given on a poll, the chair of the meeting must determine the dispute, and his or her determination made in good faith is final and conclusive.

Casting of Votes

11.20 On a poll, a shareholder entitled to more than one vote need not cast all the votes in the same way.

No Demand for Poll on Election of Chair

11.21 No poll may be demanded in respect of the vote by which a chair of a meeting of shareholders is elected.

Demand for Poll Not to Prevent Continuance of Meeting

11.22 The demand for a poll at a meeting of shareholders does not, unless the chair of the meeting so rules, prevent the continuation of a meeting for the transaction of any business other than the question on which a poll has been demanded.

Retention of Ballots and Proxies

11.23 The Company must, for at least three months after a meeting of shareholders, keep each ballot cast on a poll and each proxy voted at the meeting, and, during that period, make them available for inspection during normal business hours by any shareholder or proxyholder entitled to vote at the meeting. At the end of such three month period, the Company may destroy such ballots and proxies.

PART 12 VOTESOFSHAREHOLDERS

Number of Votes by Shareholder or by Shares

12.1 Subject to any special rights or restrictions attached to any shares and to the restrictions imposed on joint shareholders under§12.3:

(a) on a vote by show of hands, every person present who is a shareholder or proxy holder and entitled to vote on the matter has one vote; and

(b) on a poll, every shareholder entitled to vote on the matter has one vote in respect of each share entitled to be voted on the matter and held by that shareholder and may exercise that vote either in person or by proxy.

Votes of Persons in Representative Capacity

12.2 A person who is not a shareholder may vote at a meeting of shareholders, whether on a show of hands or on a poll, and may appoint a proxy holder to act at the meeting, if, before doing so, the person satisfies the chair of the meeting, or the directors, that the person is a legal personal representative or a trustee in bankruptcy for a shareholder who is entitled to vote at the meeting.

Votes by Joint Holders

12.3 If there are joint shareholders registered in respect of any share:

a. any one of the joint shareholders may vote at any meeting of shareholders, personally or by proxy, in respect of the share as if that joint shareholder were solely entitled to it; or

b. if more than one of the joint shareholders is present at any meeting of shareholders, personally or by proxy, and more than one of them votes in respect of that share, then only the vote of the joint shareholder present whose name stands first on the central securities register in respect of the share will be counted.

Legal Personal Representatives as Joint Shareholders

12.4 Two or more legal personal representatives of a shareholder in whose sole name any share is registered are, for the purposes of§12.3, deemed to be joint shareholders registered in respect of that share.

Representative of a Corporate Shareholder

12.5 If a corporation, that is not a subsidiary of the Company, is a shareholder, that corporation may appoint a person to act as its representative at any meeting of shareholders of the Company, and:

a. for that purpose, the instrument appointing a representative must be received:

   i. at the registered office of the Company or at any other place specified, in the notice calling the meeting, for the receipt of proxies, at least the number of business days specified in the notice for the receipt of proxies, or if no number of days is specified, two business days before the day set for the holding of the meeting or any adjourned meeting; or

   ii. at the meeting or any adjourned meeting, by the chair of the meeting or adjourned meeting or by a person designated by the chair of the meeting or adjourned meeting; and

b. if a representative is appointed under this §12.5:

   i. the representative is entitled to exercise in respect of and at that meeting the same rights on behalf of the corporation that the representative represents as that corporation could exercise if it were a shareholder who is an individual, including, without limitation, the right to appoint a proxy holder; and

   ii. the representative, if present at the meeting, is to be counted for the purpose of forming a quorum and is deemed to be a shareholder present in person at the meeting.

Evidence of the appointment of any such representative may be sent to the Company by written instrument, fax or any other method of transmitting legibly recorded messages.

Proxy Provisions Do Not Apply to All Companies

12.6 If and for so long as the Company is a public company, then §12.7 to §12.15 are not mandatory, however the directors of the Company are authorized to apply all or part of such sections or to adopt alternative procedures for proxy form, deposit and revocation procedures to the extent that the directors deem necessary in order to comply with securities laws applicable to the Company.

Appointment of Proxy Holders

12.7 Every shareholder of the Company entitled to vote at a meeting of shareholders may, by proxy, appoint one or more (but not more than two) proxy holders to attend and act at the meeting in the manner, to the extent and with the powers conferred by the proxy.

Alternate Proxy Holders

12.8 A shareholder may appoint one or more alternate proxy holders to act in the place of an absent proxy holder.

Proxy Holder Need Not Be Shareholder

12.9 A proxy holder need not be a shareholder of the Company.

Deposit of Proxy

12.10 A proxy for a meeting of shareholders must:

a. be received at the registered office of the Company or at any other place specified, in the notice calling the meeting, for the receipt of proxies, at least the number of business days specified in the notice, or if no number of days is specified, two business days before the day set for the holding of the meeting or any adjourned meeting; or

b. unless the notice provides otherwise, be received, at the meeting or any adjourned meeting, by the chair of the meeting or adjourned meeting or by a person designated by the chair of the meeting or adjourned meeting.

A proxy may be sent to the Company by written instrument, fax or any other method of transmitting legibly recorded messages, including through Internet voting or by email if permitted by the notice calling the meeting or the information circular for the meeting.

Validity of Proxy Vote

12.11 A vote given in accordance with the terms of a proxy is valid notwithstanding the death or incapacity of the shareholder giving the proxy and despite the revocation of the proxy or the revocation of the authority under which the proxy is given, unless notice in writing of that death, incapacity or revocation is received:

a. at the registered office of the Company, at any time up to and including the last business day before the day set for the holding of the meeting or any adjourned meeting at which the proxy is to be used; or

b. at the meeting or any adjourned meeting by the chair of the meeting or adjourned meeting, before any vote in respect of which the proxy has been given has been taken.

Form of Proxy

12.12 A proxy, whether for a specified meeting or otherwise, must be either in the following form or in any other form approved by the directors or the chair of the meeting:

[name of company] (the “Company”)

The undersigned, being a shareholder of the Company, hereby appoints [name] or, failing that person, [name], as proxy holder for the undersigned to attend, act and vote for and on behalf of the undersigned

at the meeting of shareholders of the Company to be held on [month, day, year] and at any adjournment of that meeting.

Number of shares in respect of which this proxy is given (if no number is specified, then this proxy if given in respect of all shares registered in the name of the undersigned

Signed [month, day, year]

[Signature of shareholder]

[Name of shareholder-printed]

Revocation of Proxy

12.13 Subject to §12.14, every proxy may be revoked by an instrument in writing that is received:

a. at the registered office of the Company at any time up to and including the last business day before the day set for the holding of the meeting or any adjourned meeting at which the proxy is to be used; or

b. at the meeting or any adjourned meeting, by the chair of the meeting or adjourned meeting, before any vote in respect of which the proxy has been given has been taken.

Revocation of Proxy Must Be Signed

12.14 An instrument referred to in §12.13 must be signed as follows:

a. if the shareholder for whom the proxy holder is appointed is an individual, the instrument must be signed by the shareholder or his or her legal personal representative or trustee in bankruptcy; or

b. if the shareholder for whom the proxy holder is appointed is a corporation, the instrument must be signed by the corporation or by a representative appointed for the corporation under §12.5.

Production of Evidence of Authority to Vote

12.15 The chair of any meeting of shareholders may, but need not, inquire into the authority of any person to vote at the meeting and may, but need not, demand from that person production of evidence as to the existence of the authority to vote.

PART 13 DIRECTORS

Number of Directors

13.1 The number of directors, excluding additional directors appointed under §14.8, is set at the greater of three and the most recently set of:

(a) the number of directors set by a resolution of the directors (whether or not previous notice of the resolution was given); and

(b) the number of directors in office pursuant to §14.4.

Change in Number of Directors

13.2 If the number of directors is set under §13.1(a):

a. the shareholders may elect or appoint the directors needed to fill any vacancies in the board of directors up to that number; or

b. if the shareholders do not elect or appoint the directors needed to fill any vacancies in the board of directors up to that number then the directors, subject to §14.8, may appoint directors to fill those vacancies.

Directors' Acts Valid Despite Vacancy

13.3 An act or proceeding of the directors is not invalid merely because fewer than the number of directors set or otherwise required under these Articles is in office.

Qualifications of Directors

13.4 A director is not required to hold a share as qualification for his or her office but must be qualified as required by the Act to become, act or continue to act as a director.

Remuneration of Directors

13.5 The directors are entitled to the remuneration for acting as directors, if any, as the directors may from time to time determine.

Reimbursement of Expenses of Directors

13.6 The Company must reimburse each director for the reasonable expenses that he or she may incur in and about the business of the Company.

Special Remuneration for Directors

13.7 If any director performs any professional or other services for the Company that in the opinion of the directors are outside the ordinary duties of a director, he or she may be paid remuneration fixed by the directors, or at the option of the directors, fixed by ordinary resolution, and such remuneration will be in addition to any other remuneration that he or she may be entitled to receive.

Gratuity, Pension or Allowance on Retirement of Director

13.8 Unless otherwise determined by ordinary resolution, the directors on behalf of the Company may pay a gratuity or pension or allowance on retirement to any director who has held any salaried office or place of profit with the Company or to his or her spouse or dependants and may make contributions to any fund and pay premiums for the purchase or provision of any such gratuity, pension or allowance.

PART 14

ELECTION AND REMOVAL OF DIRECTORS

Election at Annual General Meeting

14.1 At every annual general meeting:

(a) the shareholders entitled to vote at the annual general meeting for the election of directors must elect a board of directors consisting of the number of directors for the time being set under these Articles; and

(b) all the directors cease to hold office immediately before the election or appointment of directors under §(a), but are eligible for re-election or re-appointment.

Consent to be a Director

14.2 No election, appointment or designation of an individual as a director is valid unless:

a. that individual consents to be a director in the manner provided for in the Act; or

b. that individual is elected or appointed at a meeting at which the individual is present and the individual does not refuse, at the meeting, to be a director.

Failure to Elect or Appoint Directors

14.3 If:

a. the Company fails to hold an annual general meeting on or before the date by which the annual general meeting is required to be held under the Act; or

b. the shareholders fail, at the annual general meeting to elect or appoint any directors; then each director then in office

continues to hold office until the earlier of the time when:

c. his or her successor is elected or appointed; and

d. he or she otherwise ceases to hold office under the Act or these Articles.

Places of Retiring Directors Not Filled

14.4 If, at any meeting of shareholders at which there should be an election of directors, the places of any of the retiring directors are not filled by that election, those retiring directors who are not re- elected and who are asked by the newly elected directors to continue in office will, if willing to do so,

continue in office to complete the number of directors for the time being set pursuant to these Articles but their term of office will expire when new directors are elected at a meeting of shareholders convened for that purpose. If any such election or continuance of directors does not result in the election or continuance of the number of directors for the time being set pursuant to these Articles, the number of directors of the Company is deemed to be set at the number of directors actually elected or continued in office.

Directors May Fill Casual Vacancies

14.5 Any casual vacancy occurring in the board of directors may be filled by the directors.

Remaining Directors Power to Act

14.6 The directors may act notwithstanding any vacancy in the board of directors, but if the Company has fewer directors in office than the number set pursuant to these Articles as the quorum of directors, the directors may only act for the purpose of appointing directors up to that number or of calling a meeting of shareholders for the purpose of filling any vacancies on the board of directors or, subject to the Act, for any other purpose.

Shareholders May Fill Vacancies

14.7 If the Company has no directors or fewer directors in office than the number set pursuant to these Articles as the quorum of directors, the shareholders may elect or appoint directors to fill any vacancies on the board of directors.

Additional Directors

14.8 Notwithstanding §13.1 and §13.2, between annual general meetings, the directors may appoint one or more additional directors, but the number of additional directors appointed under this
§14.8 must not at any time exceed one-third of the number of the current directors who were elected or appointed as directors other than under this §14.8.

Any director so appointed ceases to hold office immediately before the next election or appointment of directors under §14.l (a), but is eligible for re-election or re-appointment.

Ceasing to be a Director

14.9 A director ceases to be a director when:

a. the term of office of the director expires;

b. the director dies;

c. the director resigns as a director by notice in writing provided to the Company; or

d. the director is removed from office pursuant to §14.I 0 or §14.11.

Removal of Director by Shareholders

14.10 The Company may remove any director before the expiration of his or her term of office by special resolution. In that event, the shareholders may elect, or appoint by ordinary resolution, a director to fill the resulting vacancy. If the shareholders do not elect or appoint a director to fill the

resulting vacancy contemporaneously with the removal, then the directors may appoint or the shareholders may elect, or appoint by ordinary resolution, a director to fill that vacancy.

Removal of Director by Directors

14.11 The directors may remove any director before the expiration of his or her term of office if the director is convicted of an indictable offence, or if the director ceases to be qualified to act as a director of a company and does not promptly resign, and the directors may appoint a director to fill the resulting vacancy.

PART 15 ALTERNATE DIRECTORS

Appointment of Alternate Director

15.1 Any director (an "appointor") may by notice in writing received by the Company appoint any person (an "appointee") who is qualified to act as a director to be his or her alternate to act in his or her place at meetings of the directors or committees of the directors at which the appointor is not present unless (in the case of an appointee who is not a director) the directors have reasonably disapproved the appointment of such person as an alternate director and have given notice to that effect to his or her appointor within a reasonable time after the notice of appointment is received by the Company.

Notice of Meetings

15.2 Every alternate director so appointed is entitled to notice of meetings of the directors and of committees of the directors of which his or her appointor is a member and to attend and vote as a director at any such meetings at which his or her appointor is not present.

Alternate for More than One Director Attending Meetings

15.3 A person may be appointed as an alternate director by more than one director, and an alternate director:

(a) will be counted in determining the quorum for a meeting of directors once for each of his or her appointors and, in the case of an appointee who is also a director, once more in that capacity;

(b) has a separate vote at a meeting of directors for each of his or her appointors and, in the case of an appointee who is also a director, an additional vote in that capacity;

(c) will be counted in determining the quorum for a meeting of a committee of directors once for each of his or her appointors who is a member of that committee and, in the case of an appointee who is also a member of that committee as a directors, once more in that capacity; and

(d) has a separate vote at a meeting of a committee of directors for each of his or her appointors who is a member of that committee and, in the case of an appointee who is also a member of that committee as a director, an additional vote in that capacity.

Consent Resolutions

15.4 Every alternate director, if authorized by the notice appointing him or her, may sign in place of his or her appointor any resolutions to be consented to in writing.

Alternate Director an Agent

15.5 Every alternate director is deemed to be the agent of his or her appointor.

Revocation or Amendment of Appointment of Alternate Director

15.6 An appointor may at any time, by notice in writing received by the Company, revoke or amend the terms of the appointment of an alternate director appointed by him or her.

Ceasing to be an Alternate Director

15.7 The appointment of an alternate director ceases when:

a. his or her appointor ceases to be a director and is not promptly re-elected or re-appointed;

b. the alternate director dies;

c. the alternate director resigns as an alternate director by notice in writing provided to the Company or a lawyer for the Company;

d. the alternate director ceases to be qualified to act as a director; or

e. the term of his appointment expires, or his or her appointor revokes the appointment of the alternate directors.

Remuneration and Expenses of Alternate Director

15.8 The Company may reimburse an alternate director for the reasonable expenses that would be properly reimbursed if he or she were a director, and the alternate director is entitled to receive from the Company such proportion, if any, of the remuneration otherwise payable to the appointor as the appointor may from time to time direct.

PART 16

POWERS AND DUTIES OF DIRECTORS

Powers of Management

16.1 The directors must, subject to the Act and these Articles, manage or supervise the management of the business and affairs of the Company and have the authority to exercise all such powers of the Company as are not, by the Act or by these Articles, required to be exercised by the shareholders of the Company. Notwithstanding the generality of the foregoing, the directors may set the remuneration of the auditor of the Company.

Appointment of Attorney of Company

16.2 The directors may from time to time, by power of attorney or other instrument, under seal if so required by law, appoint any person to be the attorney of the Company for such purposes, and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the directors under these Articles and excepting the power to fill vacancies in the board of directors, to remove a director, to change the membership of, or fill vacancies in, any committee of the directors, to appoint or remove officers appointed by the directors and to declare dividends) and for such period, and with such remuneration and subject to such conditions as the directors may think fit. Any such power of attorney may contain such provisions for the protection or convenience of persons dealing with such attorney as the directors think fit. Any such attorney may be authorized by the directors to sub-delegate all or any of the powers, authorities and discretions for the time being vested in him or her.

PART 17

INTERESTS OF DIRECTORS AND OFFICERS

Obligation to Account for Profits

17.1 A director or senior officer who holds a disclosable interest (as that term is used in the Act) in a contract or transaction into which the Company has entered or proposes to enter is liable to account to the Company for any profit that accrues to the director or senior officer under or as a result of the contract or transaction only if and to the extent provided in the Act.

Restrictions on Voting by Reason of Interest

17.2 A director who holds a disclosable interest in a contract or transaction into which the Company has entered or proposes to enter is not entitled to vote on any directors' resolution to approve that contract or transaction, unless all the directors have a disclosable interest in that contract or transaction, in which case any or all of those directors may vote on such resolution.

Interested Director Counted in Quorum

17.3 A director who holds a disclosable interest in a contract or transaction into which the Company has entered or proposes to enter and who is present at the meeting of directors at which the contract or transaction is considered for approval may be counted in the quorum at the meeting whether or not the director votes on any or all of the resolutions considered at the meeting.

Disclosure of Conflict of Interest or Property

17.4 A director or senior officer who holds any office or possesses any property, right or interest that could result, directly or indirectly, in the creation of a duty or interest that materially conflicts with that individual's duty or interest as a director or senior officer, must disclose the nature and extent of the conflict as required by the Act.

Director Holding Other Office in the Company

17.5 A director may hold any office or place of profit with the Company, other than the office of auditor of the Company, in addition to his or her office of director for the period and on the terms (as to remuneration or otherwise) that the directors may determine.

No Disqualification

17.6 No director or intended director is disqualified by his or her office from contracting with the Company either with regard to the holding of any office or place of profit the director holds with the Company or as vendor, purchaser or otherwise, and no contract or transaction entered into by or on behalf of the Company in which a director is in any way interested is liable to be voided for that reason.

Professional Services by Director or Officer

17.7 Subject to the Act, a director or officer, or any person in which a director or officer has an interest, may act in a professional capacity for the Company, except as auditor of the Company, and the director or officer or such person is entitled to remuneration for professional services as if that director or officer were not a director or officer.

Director or Officer in Other Corporations

17.8 A director or officer may be or become a director, officer or employee of, or otherwise interested in, any person in which the Company may be interested as a shareholder or otherwise, and, subject to the Act, the director or officer is not accountable to the Company for any remuneration or other benefits received by him or her as director, officer or employee of, or from his or her interest in, such other person.

PART 18 PROCEEDINGS OF DIRECTORS

Meetings of Directors

18.1 The directors may meet together for the conduct of business, adjourn and otherwise regulate their meetings as they think fit, and meetings of the directors held at regular intervals may be held at the place, at the time and on the notice, if any, as the directors may from time to time determine.

Voting at Meetings

18.2 Questions arising at any meeting of directors are to be decided by a majority of votes and, in the case of an equality of votes, the chair of the meeting has a second or casting vote.

Chair of Meetings

18.3 The following individual is entitled to preside as chair at a meeting of directors:

(a) the chair of the board, if any;

(b) in the absence of the chair of the board, the president, if any, if the president is a director; or

(c) any other director chosen by the directors if:

(i) neither the chair of the board nor the president, if a director, is present at the meeting within 15 minutes after the time set for holding the meeting;

(ii) neither the chair of the board nor the president, if a director, is willing to chair the meeting; or

(iii) the chair of the board and the president, if a director, have advised the secretary, if any, or any other director, that they will not be present at the meeting.

Meetings by Telephone or Other Communications Medium

18.4 A director may participate in a meeting of the directors or of any committee of the directors:

a. in person;

b. by telephone; or

c. with the consent of all the directors who wish to participate in the meeting by other communications medium;

if all directors participating in the meeting, whether in person or by telephone or other communications medium, are able to communicate with each other. A director who participates in a meeting in a manner contemplated by this §18.4 is deemed for all purposes of the Act and these Articles to be present at the meeting and to have agreed to participate in that manner.

Calling of Meetings

18.5 A director may, and the secretary or an assistant secretary of the Company, if any, on the request of a director must, call a meeting of the directors at any time.

Notice of Meetings

18.6 Other than for meetings held at regular intervals as determined by the directors pursuant to §18.1, 48 hours' notice of each meeting of the directors, specifying the place, day and time of that meeting must be given to each of the directors by any method set out in §24.1 or orally or by telephone.

When Notice Not Required

18.7 It is not necessary to give notice of a meeting of the directors to a director if:

a. the meeting is to be held immediately following a meeting of shareholders at which that director was elected or appointed, or is the meeting of the directors at which that director is appointed; or

b. the director has waived notice of the meeting.

Meeting Valid Despite Failure to Give Notice

18.8 The accidental omission to give notice of any meeting of directors to, or the non- receipt of any notice by, any director, does not invalidate any proceedings at that meeting.

Waiver of Notice of Meetings

18.9 Any director may send to the Company a document signed by him or her waiving notice of any past, present or future meeting or meetings of the directors and may at any time withdraw that waiver with respect to meetings held after that withdrawal. After sending a waiver with respect to all future meetings and until that waiver is withdrawn, no notice of any meeting of the directors need be given to that director and all meetings of the directors so held are deemed not to be improperly called or constituted by reason of notice not having been given to such director. Attendance of a director or alternate director at a meeting of the directors is a waiver of notice of the meeting unless that director or alternate director attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

Quorum

18.10 The quorum necessary for the transaction of the business of the directors may be set by the directors and, if not so set, is deemed to be a majority of the directors.

Validity of Acts Where Appointment Defective

18.11 Subject to the Act, an act of a director or officer is not invalid merely because of an irregularity in the election or appointment or a defect in the qualification of that director or officer.

Consent Resolutions in Writing

18.12 A resolution of the directors or of any committee of the directors may be passed without a meeting:

a. in all cases, if each of the directors entitled to vote on the resolution consents to it in writing; or

b. in the case of a resolution to approve a contract or transaction in respect of which a director has disclosed that he or she has or may have a disclosable interest, if each of the other directors who have not made such a disclosure consents in writing to the resolution.

A consent in writing under this Part 18 may be by signed document, fax, email or any other method of transmitting legibly recorded messages. A consent in writing may be in two or more counterparts which together are deemed to constitute one consent in writing. A resolution of the directors or of any committee of the directors passed in accordance with this §18.12 is effective on the date stated in the consent in writing or on the latest date stated on any counterpart and is deemed to be a proceeding at a meeting of directors or of the committee of the directors and to be as valid and effective as if it had been passed at a meeting of the directors or of the committee of the directors that satisfies all the requirements of the Act and all the requirements of these Articles relating to meetings of the directors or of a committee of the directors.

PART 19

EXECUTIVE AND OTHER COMMITTEES

Appointment and Powers of Executive Committee

19.1 The directors may, by resolution, appoint an executive committee consisting of the director or directors that they consider appropriate, and this committee has, during the intervals between meetings of the board of directors, all of the directors' powers, except:

(a) the power to fill vacancies in the board of directors;

(b) the power to remove a director;

(c) the power to change the membership of, or fill vacancies in, any committee of the directors; and

(d) such other powers, if any, as may be set out in the resolution or any subsequent directors' resolution.

Appointment and Powers of Other Committees

19.2 In addition to any executive committee, the directors may, by resolution:

a. appoint one or more committees consisting of the director or directors that they consider appropriate;

b. delegate to a committee appointed under §(a) any of the directors' powers, except:

i. the power to fill vacancies in the board of directors;

ii. the power to remove a director;

iii. the power to change the membership of, or fill vacancies in, any committee of the directors; and

iv. the power to appoint or remove officers appointed by the directors; and

c. make any delegation referred to in §(b) subject to the conditions set out in the resolution or any subsequent directors' resolution.

Obligations of Committees

19.3 Any committee appointed under §19.1 or §19.2, in the exercise of the powers delegated to it, must:

a. conform to any rules that may from time to time be imposed on it by the directors; and

b. report every act or thing done in exercise of those powers at such times as the directors may require.

Powers of Board

19.4 The directors may, at any time, with respect to a committee appointed under §19.1 or §19.2:

a. revoke or alter the authority given to the committee, or override a decision made by the committee, except as to acts done before such revocation, alteration or overriding;

b. terminate the appointment of, or change the membership of, the committee; and

c. fill vacancies in the committee. Committee Meetings

19.5 Subject to §19.3(a) and unless the directors otherwise provide in the resolution appointing the committee or in any subsequent resolution, with respect to a committee appointed under §19.1 or §19.2:

d. the committee may meet and adjourn as it thinks proper;

e. the committee may elect a chair of its meetings but, if no chair of a meeting is elected, or if at a meeting the chair of the meeting is not present within 15 minutes after the time set for holding the meeting, the directors present who are members of the conunittee may choose one of their number to chair the meeting;

f. a majority of the members of the committee constitutes a quorum of the committee; and

g. questions arising at any meeting of the committee are determined by a majority of votes of the members present, and in case of an equality of votes, the chair of the meeting does not have a second or casting vote.

PART 20 OFFICERS

Directors May Appoint Officers

201 The directors may, from time to time, appoint such officers, if any, as the directors determine and the directors may, at any time, terminate any such appointment.

Functions, Duties and Powers of Officers

20.2 The directors may, for each officer:

(a) determine the functions and duties of the officer;

(b) entrust to and confer on the officer any of the powers exercisable by the directors on such terms and conditions and with such restrictions as the directors think fit; and

(c) revoke, withdraw, alter or vary all or any of the functions, duties and powers of the officer.

Qualifications

20.3 No person may be appointed as an officer unless that person is qualified in accordance with the Act. One person may hold more than one position as an officer of the Company. An officer will not be a director, except that a person appointed the chair of the board or as a managing director must be a director.

Remuneration and Terms of Appointment

20.4 All appointments of officers are to be made on the terms and conditions and at the remuneration (whether by way of salary, fee, commission, participation in profits or otherwise) that the directors thinks fit and are subject to termination at the pleasure of the directors, and an officer may in addition to such remuneration be entitled to receive, after he or she ceases to hold such office or leaves the employment of the Company, a pension or gratuity.

PART 21 INDEMNIFICATION

Definitions

21.1 In this Part 21:

(a) "eligible party" means an individual who:

(i) is or was a director or officer of the Company;

(ii) is or was a director or officer of another corporation

(A) at a time when the corporation is or was an affiliate of the Company, or

(B) at the request of the Company; or

(iii) at the request of the Company, is or was, or holds or held a position equivalent to that of, a director or officer of a partnership, trust, joint venture or other unincorporated entity;

(b) "eligible penalty" means a judgment, penalty or fine awarded or imposed in, or an amount paid in settlement of, an eligible proceeding;

(c) "eligible proceeding" means a legal proceeding or investigative action, whether current, threatened, pending or completed, in which a director or former director of the Company or any of the heirs and legal personal representatives of the eligible party, by reason of the eligible party being or having been a director of the Company:

(i) is or may be joined as a party; or

(ii) is or may be liable for or in respect of a judgment, penalty or fine in, or expenses related to, the proceeding;

and will include any other proceeding or action contemplated by the Act; and

(d) "expenses" has the meaning set out in the Act and includes costs, charges and expenses, including legal and other fees, but does not include judgments, penalties, fines or amounts paid in settlement of a proceeding.

Mandatory Indemnification of Eligible Parties

21.2 Subject to the Act, the Company must indemnify each eligible party and his or her heirs and legal personal representatives against all eligible penalties to which such person is or may be liable, and the Company must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by such person in respect of that proceeding. Each eligible party is deemed to have contracted with the Company on the terms of the indemnity contained in this §21.2.

Indemnification of Other Persons

21.3 Subject to any restrictions in the Act, the Company may agree to indemnify and may indemnify any person (including an eligible party) against eligible penalties and pay expenses incurred in connection with the performance of services by that person for the Company.

Authority to Advance Expenses

21.4 The Company may advance expenses to an eligible party to the extent permitted by and in accordance with the Act.

Non-Compliance with Act

21.5 Subject to the Act, the failure of an eligible party of the Company to comply with the Act or these Articles or, if applicable, any former Companies Act or former Articles does not, of itself, invalidate any indemnity to which he or she is entitled under this Part 21.

Company May Purchase Insurance

21.6 The Company may purchase and maintain insurance for the benefit of any eligible party person (or his or her heirs or legal personal representatives) against any liability incurred by him or her as such director, officer or person who holds or held such equivalent position.

PART 22 DIVIDENDS

Payment of Dividends Subject to Special Rights

22.1 The provisions of this Part 22 are subject to the rights, if any, of shareholders holding shares with special rights as to dividends.

Declaration of Dividends

22.2 Subject to the Act, the directors may from time to time declare and authorize payment of such dividends as they may deem advisable.

Record Date

22.3 The directors must set a date as the record date for the purpose of determining shareholders entitled to receive payment of a dividend. The record date must not precede the date on which the dividend is to be paid by more than two months.

Manner of Paying Dividend

22.4 A resolution declaring a dividend may direct payment of the dividend wholly or partly in money or by the distribution of specific assets or of fully paid shares or of bonds, debentures or other securities of the Company or any other corporation, or in any one or more of those ways.

Settlement of Difficulties

22.5 If any difficulty arises in regard to a distribution under §22.4, the directors may settle the difficulty as they deem advisable, and, in particular, may:

(a) set the value for distribution of specific assets;

(b) determine that money in substitution for all or any part of the specific assets to which any shareholders are entitled may be paid to any shareholders on the basis of the value so fixed in order to adjust the rights of all parties; and

(c) vest any such specific assets in trustees for the persons entitled to the dividend. When Dividend Payable

22.6 Any dividend may be made payable on such date as is fixed by the directors. Dividends to be Paid in Accordance with Number of Shares

22.7 All dividends on shares of any class or series of shares must be declared and paid according to the number of such shares held.

Receipt by Joint Shareholders

22.8 If several persons are joint shareholders of any share, any one of them may give an effective receipt for any dividend, bonus or other money payable in respect of the share.

Dividend Bears No Interest

22.9 No dividend bears interest against the Company. Fractional Dividends

22.10 If a dividend to which a shareholder is entitled includes a fraction of the smallest monetary unit of the currency of the dividend, that fraction may be disregarded in making payment of the dividend and that payment represents full payment of the dividend.

Payment of Dividends

22.11 Any dividend or other distribution payable in money in respect of shares may be paid by cheque, made payable to the order of the person to whom it is sent, and mailed to the registered address of the shareholder, or in the case of joint shareholders, to the registered address of the joint shareholder who is first named on the central securities register, or to the person and to the address the shareholder or joint shareholders may direct in writing. The mailing of such cheque will, to the extent of the sum represented

by the cheque (plus the amount of the tax required by law to be deducted), discharge all liability for the dividend unless such cheque is not paid on presentation or the amount of tax so deducted is not paid to the appropriate taxing authority.

Capitalization of Retained Earnings or Surplus

22.12 Notwithstanding anything contained in these Articles, the directors may from time to time capitalize any retained earnings or surplus of the Company and may from time to time issue, as fully paid, shares or any bonds, debentures or other securities of the Company as a dividend representing the retained earnings or surplus so capitalized or any part thereof.

PART 23
ACCOUNTING RECORDS AND AUDITORS

Recording of Financial Affairs

23.1 The directors must cause adequate accounting records to be kept to record properly the financial affairs and condition of the Company and to comply with the Act.

Inspection of Accounting Records

23.2 Unless the directors determine otherwise, or unless otherwise determined by ordinary resolution, no shareholder of the Company is entitled to inspect or obtain a copy of any accounting records of the Company.

Remuneration of Auditor

23.3 The directors may set the remuneration of the auditor of the Company.

PART 24 NOTICES

Method of Giving Notice

24.1 Unless the Act or these Articles provide otherwise, a notice, statement, report or other record required or permitted by the Act or these Articles to be sent by or to a person may be sent by:

(a) mail addressed to the person at the applicable address for that person as follows:

(i) for a record mailed to a shareholder, the shareholder’s registered address;

(ii) for a record mailed to a director or officer, the prescribed address for mailing shown for the director or officer in the records kept by the Company or the mailing address provided by the recipient for the sending of that record or records of that class;

(iii) in any other case, the mailing address of the intended recipient;

(b) delivery at the applicable address for that person as follows, addressed to the person:

(i) for a record delivered to a shareholder, the shareholder's registered address;

(ii) for a record delivered to a director or officer, the prescribed address for delivery shown for the director or officer in the records kept by the Company or the delivery address provided by the recipient for the sending of that record or records of that class;

(iii) in any other case, the delivery address of the intended recipient;

(c) sending the record by fax to the fax nwnber provided by the intended recipient for the sending of that record or records of that class;

(d) sending the record by email to the email address provided by the intended recipient for the sending of that record or records of that class; and

(e) physical delivery to the intended recipient.

Deemed Receipt of Mailing

24.2 A notice, statement, report or other record that is:

a. mailed to a person by ordinary mail to the applicable address for that person referred to in §24.1 i is deemed to be received by the person to whom it was mailed on the day (Saturdays, Sundays and holidays excepted) following the date of mailing;

b. faxed to a person to the fax number provided by that person referred to in §24.1.is deemed to be received by the person to whom it was faxed on the day it was faxed; and

c. emailed to a person to the e-mail address provided by that person referred to in §24.1 is deemed to be received by the person to whom it was e-mailed on the day that it was emailed.

Certificate of Sending

24.3 A certificate signed by the secretary, if any, or other officer of the Company or of any other corporation acting in that capacity on behalf of the Company stating that a notice, statement, report or other record was sent in accordance with §24.1 is conclusive evidence of that fact.

Notice to Joint Shareholders

24.4 A notice, statement, report or other record may be provided by the Company to the joint shareholders of a share by providing such record to the joint shareholder first named in the central securities register in respect of the share.

Notice to Legal Personal Representatives and Trustees

24.5 A notice, statement, report or other record may be provided by the Company to the persons entitled to a share in consequence of the death, bankruptcy or incapacity of a shareholder by:

a. mailing the record, addressed to them:

i. by name, by the title of the legal personal representative of the deceased or incapacitated shareholder, by the title of trustee of the bankrupt shareholder or by any similar description; and

ii. at the address, if any, supplied to the Company for that purpose by the persons claiming to be so entitled; or

b. if an address referred to in §(a)(ii) has not been supplied to the Company, by giving the notice in a manner in which it might have been given if the death, bankruptcy or incapacity had not occurred.

Undelivered Notices

24.6 If on two consecutive occasions, a notice, statement, report or other record is sent to a shareholder pursuant to §24.1 and on each of those occasions any such record is returned because the shareholder cannot be located , the Company will not be required to send any further records to the shareholder until the shareholder informs the Company in writing of his or her new address.

PART 25 SEAL

Who May Attest Seal

25.1 Except as provided in §25.2 and §25.3, the Company's seal, if any, must not be impressed on any record except when that impression is attested by the signatures of:

(a) any two directors;

(b) any officer, together with any director;

(c) if the Company only has one director, that director; or

(d) any one or more directors or officers or persons as may be determined by the directors.

Sealing Copies

25.2 For the purpose of certifying under seal a certificate of incumbency of the directors or officers of the Company or a true copy of any resolution or other document, despite §25.1, the impression of the seal may be attested by the signature of any director or officer or the signature of any other person as may be determined by the directors.

Mechanical Reproduction of Seal

25.3 The directors may authorize the seal to be impressed by third parties on share certificates or bonds, debentures or other securities of the Company as they may determine appropriate from time to time. To enable the seal to be impressed on any share certificates or bonds, debentures or other securities of the Company, whether in definitive or interim form, on which facsimiles of any of the signatures of the directors or officers of the Company are, in accordance with the Act or these Articles, printed or otherwise mechanically reproduced, there may be delivered to the person employed to engrave, lithograph

or print such definitive or interim share certificates or bonds, debentures or other securities one or more unmounted dies reproducing the seal and such persons as are authorized under §25.1 to attest the Company's seal may in writing authorize such person to cause the seal to be impressed on such definitive or interim share certificates or bonds, debentures or other securities by the use of such dies. Share certificates or bonds, debentures or other securities to which the seal has been so impressed are for all purposes deemed to be under and to bear the seal impressed on them.

PART 26

SPECIAL RIGHTS AND RESTRICTIONS ATTACHED TO PREFERRED SHARES

Attachment of Special Rights and Restrictions

26.1 There are attached to the Preferred Shares as a class the following special rights and restrictions:

(a) the board may at any time and from time to time issue Preferred Shares in one or more series, each series to consist of such number of shares as is determined by the board before the issue of any thereof;

(b) a holder of a Preferred Share will as such be entitled to receive notice of, attend, speak and vote at a general meeting of the members of the Company, except as otherwise provided in the special rights and restrictions attached to the share by the board;

(c) holders of Preferred Shares will be entitled to:

(i) preference with respect to payment of dividends on such shares over the payment of dividends on the Common Shares and on any other shares ranking junior to the Preferred Shares with respect to the payment of dividends; and

(ii) in the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, or other distribution of the assets of the Company among its members for the purpose of winding up its affairs, preference on a distribution of assets:

(A) in repayment of capital, over any distribution to holders of Common Shares or to holders of other shares not ranking with respect to such distribution equally with or in priority to the repayment of capital on the Preferred Shares; and

(B) on account of undeclared accumulated dividends, over any distribution to holders of Common Shares or any distribution to holders of other shares not ranking with respect to such distribution equally with or in priority to the payment of dividends on the Preferred Shares;

(d) the Company will not without, but may from time to time with, the approval by a separate class resolution of the holders of the Preferred Shares given in accordance with §26.3:

(i) increase the authorized number of Preferred Shares;

(ii) attach special rights and restrictions to, or alter or vary the special rights and restrictions attached to, shares of any other class whereby such shares rank equally with or in priority to the Preferred Shares with respect to the declaration or payment of dividends or the distribution of the assets of the Company among its members for any reason;

(iii) create or increase the authorized number of shares of any class ranking equally with or in priority to the Preferred Shares with respect to the declaration or payment of dividends or the distribution of the assets of the Company among its members for any reason; and

(iv) alter, vary or abrogate the special rights or restrictions attaching to the Preferred Shares as a class.

26.2 The board will, before the first issue of Preferred Shares of any series, alter the Memorandum or Articles of the Company or both to fix the number of Preferred Shares in, and to determine the designation of and the special rights and restrictions to be attached to, the Preferred Shares of that series.

Separate Class Resolution

26.3 Approval by separate class resolution of the holders of Preferred Shares must be by a separate resolution:

a. consented to in writing by all holders of Preferred Shares; or

b. presented at a meeting of holders of Preferred Shares, called for such purpose in accordance with these Articles, at which one or more persons are present representing in person or by proxy at least 33 113% of the issued and outstanding Preferred Shares, and passed by the affirmative vote of at least 66 2/3% of the votes cast.”.

RECEIVED FOR DEPOSIT AT THE RECORDS OFFICE ON MAY 14, 2013.

TEKMIRA PHARMACEAUTICALS CORPORATION
(the "Company")

ORDINARY RESOLUTION PASSED BY THE SHAREHOLDERS OF THE COMPANY AT THE ANNUAL AND SPECIAL MEETING OF THE SHAREHOLDERS COMPANY HELD ON MAY 14, 2013

"**BE IT RESOLVED AS AN ORDINARY RESOLUTION THAT:**

1. the Articles of the Company be altered by adding the text substantially in the form attached as Exhibit "B" to the Information Circular of Tekmira Pharmaceuticals Corporation dated March 27, 2013 as and at Section 13.9 of the Articles of the Company; and

2. any one or more of the directors or officers of the Company be authorized to take all such actions, do such things and execute and deliver, whether under the common seal of the Company or otherwise, all such agreements, instruments, statements, forms and other documents as they may be advised by counsel so to do in connection with this alteration of the Articles."

CERTIFIED A TRUE COPY as of the 14th day of May, 2013.

"R. Hector MacKay-Dunn"
R. Hector MacKay-Dunn Title: Corporate Secretary

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EXHIBIT "B" TO THE INFORMATION CIRCULAR OF
TEKMIRA PHARMACEUTICALS CORPORATION

Nominations of Directors

13.9 Only persons who are nominated in accordance with the following procedures shall be eligible for election as directors of the Company. Nominations of persons for election to the board of directors of the Company may be made at any annual general meeting of shareholders, or at any special meeting of shareholders if one of the purposes for which the special meeting was called was the election of directors:

(a) by or at the direction of the board, including pursuant to a notice of meeting;

(b) by or at the direction or request of one or more shareholders pursuant to a proposal made in accordance with the Act, or a requisition of the shareholders made in accordance with the provisions of the Act; or

(c) by any person (a "Nominating Shareholder"): (A) who, at the close of business on the date of the giving by the Nominating Shareholder of the notice provided for below in this Section 13.9 and at the close of business on the record date for notice of such meeting, is entered in the securities register of the Company as a holder of one or more shares carrying the right to vote at such meeting or who beneficially owns shares that are entitled to be voted at such meeting; and (B) who complies with the notice procedures set forth below in this Section 13.9.

In addition to any other requirements under applicable laws, for a nomination to be made by a Nominating Shareholder, the Nominating Shareholder must have given notice thereof that is both timely (in accordance with this Section 13.9) and in proper written form (in accordance with this Section 13.9) to the Secretary of the Company at the principal executive offices of the Company.

To be timely, a Nominating Shareholder's notice to the Secretary of the Company must be made:

(a) in the case of an annual general meeting of shareholders, not less than 30 nor more than 65 days prior to the date of the annual general meeting of shareholders; provided, however, that in the event that the annual general meeting of shareholders is to be held on a date that is less than 50 days after the date (the "Notice Date") on which the first public announcement of the date of the annual general meeting was made, notice by the Nominating Shareholder may be made not later than the close of business on the tenth (10th) day following the Notice Date; and

(b) in the case of a special meeting (which is not also an annual general meeting) of shareholders called for the purpose of electing directors (whether or not called for other purposes), not later than the close of business on the fifteenth (15th) day following the day on which the first public announcement of the date of the special meeting of shareholders was made.

The time periods for the giving of a Nominating Shareholder's notice set forth above shall in all cases be determined based on the original date of the applicable annual meeting or special meeting of shareholders,

and in no event shall any adjournment or postponement of a meeting of shareholders or the announcement thereof commence a new time period for the giving of such notice.

To be in proper written form, a Nominating Shareholder's notice to the Secretary of the Company must set forth:

(a) as to each person whom the Nominating Shareholder proposes to nominate for election as a director: (A) the name, age, business address and residential address of the person; (B) the principal occupation or employment of the person, and the principal occupation or employment of the person for the past 5 years; (C) the citizenship of such person; (D) the class or series and number of shares in the capital of the Company which are controlled or which are owned beneficially or of record by the person as of the record date for the meeting of shareholders (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice; and (E) any other information relating to the person that would be required to be disclosed in a dissident's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and Applicable Securities Laws (as defined below); and

(b) as to the Nominating Shareholder giving the notice, full particulars regarding any proxy, contract, agreement, arrangement or understanding pursuant to which such Nominating Shareholder has a right to vote or direct the voting of any shares of the Company and any other information relating to such Nominating Shareholder that would be required to be made in a dissident's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and Applicable Securities Laws (as defined below).

The Company may require any proposed nominee to furnish such other information as may reasonably be required by the Company to determine the eligibility of such proposed nominee to serve as an independent director of the Company or that could be material to a reasonable shareholder's understanding of the independence, or lack thereof, of such proposed nominee.

No person shall be eligible for election as a director of the Company unless nominated in accordance with the provisions of this Section 13.9; provided, however, that nothing in this Section 13.9 shall be deemed to preclude discussion by a shareholder (as distinct from the nomination of directors) at a meeting of shareholders of any matter that is properly before such meeting pursuant to the provisions of the Act or the discretion of the Chairman. The Chairman of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures set forth in the foregoing provisions and, if any proposed nomination is not in compliance with such foregoing provisions, to declare that such defective nomination shall be disregarded.

For purposes of this Section 13.9:

(a) "public announcement" shall mean disclosure in a press release reported by a national news service in Canada, or in a document publicly filed by the Company under its profile on the System for Electronic Document Analysis and Retrieval at www.sedar.com; and

(b) "Applicable Securities Laws" means the applicable securities legislation of each relevant province and territory of Canada, as amended from time to time, the rules, regulations and forms made or promulgated under any such statute and the published national instruments, multilateral

instruments, policies, bulletins and notices of the securities commission and similar regulatory authority of each province and territory of Canada.

Notwithstanding any other provision of this Section 13.9 and the Articles, notice given to the Secretary of the Company pursuant to this Section 13.9 may only be given by personal delivery, facsimile transmission or by email (at such email address as may be stipulated from time to time by the Secretary of the Company for purposes of this notice), and shall be deemed to have been given and made only at the time it is served by personal delivery to the Secretary of the Company at the principal executive offices of the Company, email (at the address as aforesaid) or sent by facsimile transmission (provided that receipt of confirmation of such transmission has been received); provided that if such delivery or electronic communication is made on a day which is a not a business day or later than 5:00 p.m. (Vancouver time) on a day which is a business day, then such delivery or electronic communication shall be deemed to have been made on the next following day that is a business day.

Notwithstanding the foregoing, the Board may, in its sole discretion, waive any requirement in this Section 13.9.

RECEIVED FOR DEPOSIT AT THE RECORDS OFFICE ON MARCH 4, 2018.

TEKMIRA PHARMACEUTICALS CORPORATION
("Tekmira")

ORDINARY RESOLUTION PASSED BY THE SHAREHOLDERS OF TEKMIRA AT THE SPECIAL MEETING OF THE SHAREHOLDERS HELD ON MARCH 3, 2015 CALLED TO CONSIDER AND APPROVE AN AGREEMENT AND PLAN OF MERGER, DATED JANUARY 11, 2015 (THE "MERGER AGREEMENT"), BY AND AMONG TEKMIRA, TKM ACQUISITION CORPORATION, A WHOLLY OWNED SUBSIDIARY OF TEKMIRA, AND ONCORE BIOPHARMA, INC. ALL AS MORE PARTICULARLY DESCRIBED IN THE NOTICE OF MEETING DATED FEBRUARY 4, 2015 AND THE PROXY STATEMENT/INFORMATION CIRCULAR ATTACHED THERETO, AND AN AMENDMENT TO THE ARTICLES OF TEKMIRA AS SET OUT IN ANNEX C TO THE NOTICE OF MEETING, A COPY OF WHICH IS ATTACHED TO AND FORMS PART OF THIS CERTIFIED RESOLUTION

"BE IT RESOLVED AS AN ORDINARY RESOLUTION THAT, UPON THE MERGER BECOMING EFFECTIVE AS CONTEMPLATED IN THE MERGER AGREEMENT:

1. the Articles of Tekmira be altered by adding the text substantially in the form attached as Annex C to this proxy statement/information circular;

2. the Articles of Tekmira be altered by removing the right of the chair to a second or casting vote at a meeting of the board of directors of Tekmira; and

3. any one or more of the directors or officers of Tekmira be authorized to take all such actions, do such things and execute and deliver, whether under the common seal of Tekmira or otherwise, all such agreements, instruments, statements, forms and other documents as they may be advised by counsel so to do in connection with is alteration of the Articles."

CERTIFIED A TRUE COPY as of the 4th day of March, 2015

"R. Hector MacKay-Dunn"
R. Hector MacKay-Dunn Title: Corporate Secretary

AMENDMENT TO TEKMIRA PHARMACEUTICALS CORPORATION ARTICLES OF INCORPORATION
Part 18.2

Questions arising at any meeting of directors are to be decided by a majority of votes (subject to Part 27), and, in the case of an equality of votes, the chair of the meeting shall not have a second (or casting) vote.

Part 27 - Transitional Governance Matters

Notwithstanding any other provision of these Articles, for a period commencing upon the effective date of the merger (the "**Merger**") between TKM Acquisition Corporation, a wholly-owned subsidiary of the Company, and OnCore Biopharma, Inc., a Delaware corporation, undertaken pursuant to an Agreement and Plan of Merger and Reorganization dated January 11, 2015, and ending upon the earlier of (i) thirty- six (36) months following the effective date of the Merger and (ii) when RS no longer has a right to nominate one or more directors under Section 1 of this Part 28, the following provisions shall apply:

Supermajority Matters

1. Any one of the following matters shall require the approval of at least seventy percent (70%) of the number of directors then in office, whether such approval is given by way of a vote at a meeting of directors or by written consent:
   (a) the removal or replacement of the chair of the board of directors of the Company;
   (b) the removal or replacement of the chief executive officer of the Company,
   (c) subject to Part 28, the nomination of a director for election to the board of directors of the Company;
   (d) subject to Part 28, the appointment of a director to the board of directors of the Company to fill a vacancy created by the resignation or death of a director;
   (e) subject to Part 28, the appointment of an additional director to the board of directors of the Company;
   (f) any take-over bid, issuer bid, amalgamation, plan of arrangement, business combination, merger, tender offer, exchange offer, consolidation, recapitalization, reorganization, liquidation, dissolution or winding-up in respect of, or involving, the Company or any subsidiary of the Company;
   (g) any sale or issuance of shares of the Company or other equity interests in the Company (or rights, interests or securities convertible into or exercisable for such shares or other equity interests), in one or more connected transactions, which would be greater than 5% of the outstanding shares of stock of the company, other than the grant or issuance of such equity interests in connection with any stock-based compensation plan or plans approved by the board of directors of the Company;
   (h) any sale of assets (or any strategic alliance, joint venture, license or other arrangement having the same economic effect as a sale) of the Company or any subsidiary of the Company representing a transaction value and/or payments greater than $10 million;
   (i) ceasing or abandoning any research, development or commercialization efforts that were publicly disclosed by the Company as having been underway as at the effective date of the Merger, or declining to advance the development or commercialization of such programs, whether by failing to continue to fund such programs or otherwise;
   (j) incurring any indebtedness or third party guarantees in excess of $5,000,000 individually or $10,000,000 in the aggregate; or
   (k) any amendment or proposed amendment to the Articles or Notice of Articles of the Company,

(collectively referred to as "**Supermajority Matters**").

Inconsistencies

2. In the event of an inconsistency between a provision of this Part 27 and any other provision of these Articles, the provision of this Part 27 shall prevail.

Alterations of Part 27 and Section 18.2

3. This Part 27 and Section 18.2 may only be amended by special resolution.

Part 28 - Director Election Matters

Definitions

In this Part, the following terms shall have the meaning assigned to them below:

"**Calculated on an Undiluted Basis**" means calculated before giving effect to the exercise, conversion or exchange of any securities exercisable for, convertible into, or exchangeable for, Company Shares;

"**Company Shares**" means the common shares in the capital of the Company as constituted on the date hereof;

"**Record Date Notice**" means the date of the letter filed on SEDAR by the Company's registrar and transfer agent giving notice of the record date for determination of the shareholders entitled to notice of and to vote at any Shareholder Meeting; and

"**Shareholder Meeting**" means an annual general meeting of shareholders or special meeting of shareholders of the Company called for the purpose of electing directors to the board of directors of the Company.

Election of Directors

1. For so long as Roivant Sciences Ltd. ((the "**Nominating Shareholder**" or "**RS**") has "beneficial ownership" (as defined pursuant Rule 13d-3 under the United States, Securities Exchange Act of 1934, as amended) ("**Beneficial Ownership**") owns or exercises control or direction over not less than:

(a) twenty- percent (20%) of the issued and outstanding Company Shares Calculated on an Undiluted Basis as at the Record Date Notice, RS has the right to nominate two (2) individuals for election to the board of directors of the Company at each Shareholder Meeting; and

(b) ten percent (10%) of the issued and outstanding Company Shares Calculated on an Undiluted Basis as at the Record Date Notice, RS has the right to nominate one (1) individual for election to the board of directors of the Company at each Shareholder Meeting,

(where such designee directors are referred to as the "**RS Nominated Directors**").

2. Upon the Nominating Shareholder having Beneficial Ownership or exercising control or direction over less than ten percent (10%) of the outstanding Company Shares Calculated on an Undiluted Basis as at the Record Date Notice, the nomination rights provided under Section 1 will be of no further force and effect.

Number of Directors

3. For so long as the Nominating Shareholder has a right to nominate one or more directors under Section 1 of this Part 28, the number of directors of the Company shall not exceed seven (7) directors without the prior written consent of the Nominating Shareholder.

Nomination Procedure

4. For so long as the Nominating Shareholder has a right to nominate one or more directors under Section 1 of this Part 28:

(a) No earlier than ninety (90) days and no later than sixty (60) days prior to the date of each Shareholder Meeting, the Company shall notify RS in writing of the date of the Shareholder Meeting (the "**Company Notice**"). The Company Notice shall specify the total number of Company Shares issued and outstanding Calculated on an Undiluted Basis as at the Record Date Notice.

(b) RS shall have the right and option, exercisable within fifteen (15) days from receipt of the Company Notice (the "**Nomination Right Notice Period**") by written notice to the Company (the "**Nomination Notice**") to exercise the Nomination Right. If RS wishes to exercise the Nomination Right, RS must specify in the Nomination Notice (i) the number of Company Shares beneficially owned by the Nominating Shareholder as at the date of the Nomination Notice, (ii) the name of the individual(s) RS wishes to nominate for election to the board of directors of the Company, and (iii) confirm that the nominee(s) are eligible to act as director(s) under the Act or, if the Company is otherwise governed by another statue or regime, that the nominee(s) are eligible to act as a director under such statute or regime. As soon as reasonably possible after the request by the Company, duly completed forms and any other information in respect of the RS Nominated Directors, as required by the relevant stock exchange, shall be provided by the RS Nominated Directors.

(c) If RS fails to deliver a Nomination Notice in response to a Company Notice within the Nomination Right Notice Period, then the Company will not be required to nominate individuals identified by RS for election to the board of directors of the Company at the Shareholder Meeting with respect to which RS failed to deliver the Nomination Notice, and RS shall have the right to nominate person(s) for election to the board of directors of the Company at the next Shareholder Meeting in accordance with this Part 28.

(d) If RS delivers a Nomination Notice in response to a Company Notice within the Nomination Right Notice Period then, subject only to the nominee(s) identified in the Nomination Notice being eligible to act as director(s) of the Company, the Company shall (i) nominate the RS nominee(s) to stand for election to the board of directors of the Company at the Shareholder Meeting, and (ii) solicit proxies from the holders of Company Shares in respect thereof which will be satisfied by delivery of a form of proxy to the holders of Company Shares following standard procedures consistent with past practice. For greater certainty, the Company (x) shall not be required to retain a third party solicitation agent, and (y) shall include the name of the RS nominee(s) to stand for election to the board of directors of the Company in the proxy to be delivered to each holder of Company Shares in respect of the Shareholder Meeting. The Nominating Shareholder shall also provide to the Company such other information regarding the RS nominee(s) as may be reasonably requested by the Company so as to comply with applicable proxy disclosure requirements under applicable securities laws, together with such other information, including a biography of the RS Nominated Directors, that is

consistent with the information the Company intends to publish about management nominees as directors of the Company in the information circular to be prepared by the Company in connection with the election of directors at a Shareholder Meeting.

Casual Vacancies

5. In the event that an RS Nominated Director resigns, dies, becomes incapacitated or otherwise ceases to be a director prior to the expiration of his or her term as a director, such vacancy on the board of directors shall be filled by the remaining directors with the nominee identified by RS promptly. The Company shall use all commercially reasonable steps, promptly upon receipt by it of a written notice from RS to fill such vacancy, as are necessary to call (no later than five (5) days following notice of such identified nominee by RS) a meeting of the board of directors to vote on the appointment of such Shareholder Designee to fill such vacancy (or to obtain a vote of the directors by way of unanimous written resolution) and take all such other steps as are required by the Act with respect to such appointment.

Transitional Period

6. This Part 28 shall remain in effect until the date that is the earlier of (i) thirty-six (36) months following the effective date of the Merger and (ii) when RS no longer has a right to nominate one or more directors under Section 1 of this Part 28.

Inconsistencies

7. In the event of an inconsistency between a provision of this Part 28 and any other provision of these Articles, the provision of this Part 28 shall prevail.

RECEIVED FOR DEPOSIT AT THE RECORDS OFFICE ON JULY 10, 2015

TEKMIRA PHARMACEAUTICALS CORPORATION
(the "Company")

ORDINARY RESOLUTION PASSED BY THE SHAREHOLDERS OF THE COMPANY AT THE ANNUAL MEETING OF THE SHAREHOLDERS COMPANY HELD ON JULY 9, 2015

"Section 11.3 of the Articles of Tekmira be deleted and replaced in entirety with the following:

11.3 Subject to the special rights and restrictions attached to the shares of any class or series of shares, and to §11.4, the quorum for the transaction of business at a meeting of shareholders is at least two people who are, or who represent by proxy, one or more shareholders who, in the aggregate, hold at least five percent (5%) of the issued shares entitled to be voted at the meeting; provided, however, that for so long as any class or series of shares is listed for trading on NASDAQ, then:

(a) the quorum for the transaction of business at a meeting of shareholders of the Company is at least two people who are, or who represent by proxy, one or more shareholders who, in the aggregate, hold at least thirty three and one-third percent (33 1/3%) of the issued shares entitled to be voted at the meeting (the "NASDAQ Quorum"), and all references in the Articles to a "quorum" in Part 11 shall be deemed to refer to the NASDAQ Quorum;

(b) where a separate vote by class or series or classes or series of shares is required at a meeting of shareholders of the Company, the presence, in person or by proxy, of the holders of at least the NASDAQ Quorum of the issued and outstanding shares of each such class or series shall also be required to constitute a NASDAQ Quorum;

(c) if a NASDAQ Quorum is present at an original meeting, a NASDAQ Quorum need not be present at an adjourned session of that meeting; and

(d) Neither §11.7(b) nor §11.8 shall have any force or effect."

CERTIFIED A TRUE COPY as of the 10th day of July, 2015.

"R. Hector MacKay-Dunn"
R. Hector MacKay-Dunn Title: Corporate Secretary

28183|2278942_1|MBASA
17/07/2015

RECORD RECEIVED FOR DEPOSIT AND DEEMED TO BE IN EFFECT ON OCTOBER 16, 2017

ARBUTUS BIOPHARMA CORPORATION
(the "Company")

EXTRACT OF RESOLUTIONS CONSENTED TO IN WRITING BY ALL THE DIRECTORS OF THE COMPANY ON OCTOBER 2, 2017

"BE IT RESOLVED THAT:

.....

Designation of Preferred Shares

8. Pursuant to Article 26.1 of the Articles, the following series of Preferred Shares be designated with the identifying name and the maximum number of shares of each series set out below:

Identifying Name of Series	**Number of Preferred Shares of Series**
Series A Participating Convertible Preferred Shares	1,164,000

9. There be created and attached to the Preferred Shares, Series A (the "**Preferred Shares**") the special rights and restrictions in the form attached hereto as Schedule "A" (the "**Preferred Share Rights**") and the Articles be altered by adding as Part 26A the wording set out in Schedule "A", with such additions, omissions or revisions thereto, if any, as any director or officer of the Company (other than an Interested Director) may determine.

10. The Notice of Articles be altered to reflect the alterations authorized by these resolutions.

11. Pursuant to section 259 of the BCBCA, the alteration of the authorized share structure of the Company and the alteration of the Articles shall not take effect until these resolutions are received for deposit at the Company's records office and a Notice of Alteration to Notice of Articles identifying the date of these resolutions has been filed with the Registrar of Companies.

12. Farris, Vaughan, Wills & Murphy LLP to act as its agent to attend to the electronic filing of the Notice of Alteration to Notice of Articles with the Registrar of Companies."

[Remainder of page intentionally left blank - signature page follows]

Certified as of the 16th day of October, 2017.

Bruce G. Cousins, Chief Financial Officer

SCHEDULE "A"

Series A Participating Convertible Preferred Shares Special Rights and Restrictions

26A SPECIAL RIGHTS AND RESTRICTIONS ATTACHED TO PREFERRED SHARES, SERIES A

The rights, privileges, restrictions and conditions attaching to the Series A Preferred Shares are as set forth below.

Interpretation

26A.1 In this Part 26A, unless the context otherwise requires the following terms have the following meanings:

(a) "**Conversion Price**" means initially $7.13, as adjusted from time to time as provided in Article 26A.6(f).

(b) "**Daily VWAP**" means the volume-weighted average price per share of Common Shares (or per minimum denomination or unit size in the case of any security other than Common Shares) as displayed under the heading "Bloomberg VWAP" on the Bloomberg page for the "<equity> AQR" page corresponding to the "ticker" for such Common Share or unit (or its equivalent successor if such page is not available) in respect of the period from the scheduled open of trading until the scheduled close of trading of the primary trading session on such Trading Day (or if such volume-weighted average price is unavailable, the market value of one Common Share (or per minimum denomination or unit size in the case of any security other than Common Shares) on such Trading Day. The "volume weighted average price" shall be determined without regard to after-hours trading or any other trading outside of the regular trading session trading hours.

(c) "**Dividend**" means, as the context requires, Participating Dividend and Participating Penalty Dividends.

(d) "**Exchange**" means the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market The New York Stock Exchange, the Toronto Stock Exchange or any of their respective successors.

(e) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(f) "**Ex-Date**" means the first date on which the Common Shares trade on the applicable Exchange or in the applicable market, regular way, without the right to receive the issuance, dividend or distribution in question from the Company or, if applicable, from the seller of the Common Shares on such Exchange or market (in the form of due bills or otherwise) as determined by such Exchange or market.

(g) "**Fundamental Change**" means (i) a Transaction; (ii) any transaction or series of related transactions, after giving effect to which in excess of fifty percent (50%) of the Company's voting power is owned directly, or indirectly through one or more entities, by any "Person" (as that term is used in Section 13(d)(3) of the Exchange Act); provided, however, that Roivant Sciences Ltd. and anyone else with whom Roivant Sciences Ltd. is

acting jointly or concert in connection with the acquisition of the Company's voting power (within the meaning of British Columbia securities law) shall not constitute a Person for the purpose of this subclause (ii); (iii) any sale, lease or other transfer in one transaction or a series of transactions of all or substantially all of the consolidated assets of the Company and its subsidiaries taken as a whole, to any Person other than one of the Company's wholly-owned subsidiaries; (iv) shareholders approve any plan or proposal for the liquidation or dissolution of the Company; and (v) the Common Shares (or Reference Property, to the extent applicable) ceases to be listed or quoted on any Exchange.

(h) "**Liquidation Event**" means (i) approval by shareholders of the voluntary liquidation, dissolution or winding-up of the Company, (ii) the involuntary liquidation, dissolution or winding-up of the Company, (iii) the commencement by the Company of any case under applicable bankruptcy, insolvency or other similar laws now or hereafter in effect, including pursuant to Chapter 11 of the U.S. Bankruptcy Code or the *Bankruptcy and Insolvency Act* (Canada), (iv) the consent to entry of an order for relief in an involuntary case under applicable bankruptcy, insolvency or other similar laws now or hereafter in effect, and (v) the consent to the appointment of or taking possession by a receiver, liquidator, assignee, custodian, trustee or similar official of the Company, or any general assignment for the benefit of creditors.

(i) "**Mandatory Conversion Date**" mean the date that is four years after the Tier 1 Closing Date (as such term is defined in the Subscription Agreement); *provided* that if the Mandatory Conversion Date is not a business day, the Mandatory Conversion Date shall be postponed to the next following business day.

(j) "**Market Disruption Event**" means the occurrence or existence for more than one half hour period in the aggregate on any scheduled Trading Day for the Common Shares (or Reference Property, to the extent applicable) of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the applicable Exchange or otherwise) in the Common Shares (or Reference Property, to the extent applicable) or in any options, contracts or future contracts relating to the Common Shares (or Reference Property, to the extent applicable), and such suspension or limitation occurs or exists at any time before 4:00 p.m. (New York City time) on such day.

(k) "**Person**" means any individual, corporation, limited liability company, limited or general partnership, joint venture, association, joint-stock company, trust, unincorporated organization, government, any agency or political subdivisions thereof or other "Person" as contemplated by Section 13(d) of the Exchange Act.

(l) "**Purchase Price**" means $100.00 per Series A Preferred Share, as the same may be increased pursuant to Article 26A.3.

(m) "**Total Current Voting Power**" means, with respect to any Person, at the time of determination of Total Current Voting Power, the total number of votes which may be

cast in the general election of directors of such Person (or, in the event the Person is not a corporation, the governing members, board or other similar body of such Person).

(n) "**Trading Day**" means any day on which (i) there is no Market Disruption Event and (ii) NASDAQ or, if the Common Shares (or Reference Property, to the extent applicable) is not listed on NASDAQ, the principal national securities exchange on which the Common Shares (or Reference Property, to the extent applicable) is listed and is open for trading or, if the Common Shares (or Reference Property, to the extent applicable) is not so listed, admitted for trading or quoted, any business day. A Trading Day only includes those days that have a scheduled closing time of 4:00 p.m. (New York City time) or the then standard closing time for regular trading on the relevant Exchange or trading system.

(o) Each of the following terms is defined in the Article set forth opposite such term:

Term	**Article**
Common Dividend	26A.3(b)
Company	Recitals
Conversion Date	26A.6(d)
In-Kind Common Dividend	26A.3(c)
Junior Securities	26A.2(b)(i)
Liquidation Preference	26A.6(c)(i)
Optional Conversion Date	26A.6(a)
Parity Securities	26A.2(b)(ii)
Participating Cash Dividend	26A.3(b)
Participating Cash Penalty Dividends	26A.3(b)
Participating Dividends	26A.3(c)
Participating In-Kind Dividend	26A.3(c)
Participating In-Kind Penalty Dividends	26A.3(c)
Participating Penalty Dividends	26A.3(c)
Preferred Shares	Recitals

Term	**Article**
Reference Property	26A.6(f)(iii)
Senior Securities	26A.2(b)(iii)
Series A Preferred Shares	26A.2(a)
Shareholder Rights Plan	26A.3(c)
Transaction	26A.6(f)(iii)

(p) Unless otherwise provided for herein, all monetary values stated herein are expressed in United States currency and all references to "dollars" or "$" will be deemed references to the lawful currency of the United States.

Number; Designation; Rank

26A.2

(a) This series of convertible participating Preferred Shares is designated as the "Series A Participating Convertible Preferred Shares" (the "**Series A Preferred Shares**").

(b) The Series A Preferred Shares rank, with respect to the payment of dividends, redemption payments, rights (including as to the distribution of assets upon liquidation, dissolution or winding-up of the Company) or otherwise:

(i) senior in preference and priority to the Common Shares and each other class or series of the shares, except for any class or series of shares hereafter issued in compliance with the terms hereof and the terms of which expressly provide that it will rank senior to or on parity, without preference or priority, with the Series A Preferred Shares with respect to the payment of dividends, redemption payments, rights (including as to the distribution of assets) upon liquidation, dissolution or winding-up of the Company, or otherwise (collectively with the Common Shares, the "**Junior Securities**");

(ii) on parity, without preference and priority, with each other class or series of shares hereafter issued in compliance with the terms hereof and the terms of which expressly provide that it will rank on parity, without preference or priority, with the Series A Preferred Shares with respect to the payment of dividends, redemption payments, rights (including as to the distribution of assets) upon liquidation, dissolution or winding-up of the Company, or otherwise (collectively, the "**Parity Securities**"); and

(iii) junior in preference and priority to each other class or series of Preferred Shares or any other shares hereafter issued in compliance with the terms hereof

Dividends

26A.3

and the terms of which expressly provide that it will rank senior in preference or priority to the Series A Preferred Shares with respect to the payment of dividends, redemption payments, rights (including as to the distribution of assets) upon liquidation, dissolution or winding-up of the Company or otherwise (collectively, "**Senior Securities**").

(a) Dividends. No dividends shall accrue or be payable to holders of the Series A Preferred Shares except as set forth in Articles 26A.3(b) and (c).

(b) Participating Cash Dividends. If the Company declares, makes or pays any cash dividend or distribution in respect of all or substantially all holders of Common Shares (a "**Common Dividend**"), each shareholder holding Series A Preferred Shares shall receive a dividend (a "**Participating Cash Dividend**") in the same amount in respect of each Preferred Share held thereby, at the same time as holders of Common Shares, as such holders of Series A Preferred Shares would have received if, immediately prior to the record date of such Common Dividend, they had held the number of Common Shares issuable upon the Mandatory Conversion Date. If and to the extent that the Company does not for any reason pay the entire Participating Cash Dividend when the Common Dividend is paid to the holders of Common Shares, during the period in which such Participating Cash Dividend remains unpaid, an additional dividend (the "**Participating Cash Penalty Dividends**") shall be payable at an annual rate equal to 8.75% compounded annually on the amount of the unpaid Participating Cash Dividend through the daily addition of such Participating Cash Penalty Dividends to the Purchase Price (whether or not such Participating Cash Penalty Dividends are declared by the board).

(c) Participating In-Kind Dividends. If the Company distributes shares, evidences of its indebtedness or other assets, securities or property, including rights to acquire assets, securities or property, to all or substantially all holders of Common Shares (an "**In-Kind Common Dividend**"), including without limitation any spin-off of one or more subsidiaries or businesses of the Company but excluding: (I) dividends or distributions referred to in Article 26A.6(f)(i); and (II) cash dividends with respect to which holders of Series A Preferred Shares are entitled to Participating Cash Dividends, then such shareholders shall receive in such distribution or other transaction, at the same time and in the same manner as holders of Common Shares, the same type and amount of consideration (the "**Participating In-Kind Dividend**" and, together with the Participating Cash Dividend, the "**Participating Dividends**") as holders of Series A Preferred Shares would have received if, immediately prior to the record date of such In- Kind Common Dividend, they had held the number of Common Shares issuable upon the Mandatory Conversion Date. To the extent that the Company establishes or adopts a shareholder rights plan or agreement (i.e., a "poison pill") (each, a "**Shareholder Rights Plan**"), the Company shall ensure that such shareholders will receive, as a Participating In-Kind Dividend, rights under the Shareholder Rights Plan with respect to any Common Shares that at the time of such distribution would be issuable upon conversion of the

Preferred Shares. If and to the extent that the Company does not for any reason pay the entire Participating In-Kind Dividend when the In-Kind Common Dividend is paid to the holders of Common Shares, during the period in which such Participating In-Kind Dividend remains unpaid, an additional dividend (the "**Participating In-Kind Penalty Dividends**" and, together with Participating Cash Penalty Dividends, the "**Participating Penalty Dividends**") shall be payable at an annual rate equal to 8.75% on the amount of the unpaid Participating In-Kind Dividend through the daily addition of such Participating In-Kind Penalty Dividends to the Purchase Price (whether or not such Participating In-Kind Penalty Dividends are declared by the board).

Liquidation Preference

26A.4

(a) Upon any Liquidation Event, each Series A Preferred Share entitles the holders thereof to receive and to be paid out of the assets of the Company legally available for distribution to the Company's shareholders, before any distribution or payment may be made to a holder of any Junior Securities, an amount in cash per share equal to an amount the holders of such share would have received upon such Liquidation Event had such shareholder converted such Series A Preferred Share into Common Shares (or Reference Property, to the extent applicable) upon the Mandatory Conversion Date.

(b) If upon any such Liquidation Event, the assets of the Company legally available for distribution to all shareholders of the Company are insufficient to pay the holders of Series A Preferred Shares the full Liquidation Preference and the holders of all Parity Securities the full liquidation preferences to which they are entitled, the shareholders of the Series A Preferred Shares and the holders of such Parity Securities will share ratably in any such distribution of the assets of the Company in proportion to the full respective amounts to which they are entitled.

(c) After payment to the holders of the Series A Preferred Shares of the full Liquidation Preference to which they are entitled, such shareholders, as such, will have no right or claim to any of the assets of the Company.

(d) The value of any property not consisting of cash that is distributed by the Company to the holders of the Series A Preferred Shares will equal the fair market value thereof (as determined in good faith by the board) on the date of distribution.

(e) No holder of Junior Securities shall receive any cash upon a Liquidation Event unless the entire Liquidation Preference in respect of the Series A Preferred Shares has been paid in cash. To the extent that there is insufficient cash available to pay the entire Liquidation Preference in respect of the Series A Preferred Shares and any liquidation preference in respect of Parity Securities in full in cash upon a Liquidation Event, the holders of the Series A Preferred Shares and the holders of such Parity Securities will share ratably in any cash available for distribution in proportion to the full respective amounts to which they are entitled upon such Liquidation Event.

(f) For the avoidance of doubt, a Transaction or Fundamental Change shall not be treated as a Liquidation Event for the purpose of this Article 26A.4 (unless in connection therewith, the liquidation, dissolution or winding up of the Company is specifically approved), but shall be treated as provided for in Article 26A.6(c) hereof.

Voting Rights

26A.5 The Series A Preferred Shares shall not have the right to vote on any matters except as required by law, including under the British Columbia *Business Corporations Act*. Where such vote is required by law, as of any record date or other determination date, each shareholder holding Series A Preferred Shares shall be entitled to the number of votes such shareholder would have had if all Series A Preferred Shares held by such shareholder on such date would be converted into Common Shares on the Mandatory Conversion Date.

Conversion

26A.6 Each Series A Preferred Share is convertible into Common Shares (or Reference Property, to the extent applicable) as provided in this Article 26A.6.

(a) Conversion at the Option of Holders of Series A Preferred Shares. Subject to Article 26A.6(b) hereof, each holder of Series A Preferred Shares is entitled to convert any or all outstanding Series A Preferred Shares held by such shareholder and receive therefor the property described in Article 26A.6(c) upon such conversion in the event of (A) a transaction that involves a fundamental transfer of value to the Common Shares by means of a distribution, event or other transaction in which the Preferred Shares do not have the right to pursuant to Articles 26A.3(b) or (c), or (B) a Fundamental Change. In order to convert Series A Preferred Shares into Common Shares (or Reference Property, to the extent applicable), the holder of the Series A Preferred Shares must surrender the certificates representing such Series A Preferred Shares at the office of the Company's transfer agent for the Series A Preferred Shares (or at the registered and records office of the Company, if the Company serves as its own transfer agent), together with (x) written notice that such shareholder elects to convert all or part of the Series A Preferred Shares represented by such certificates as specified therein, (y) a written instrument or instructions of transfer or other documents and endorsements reasonably acceptable to the transfer agent or the Company, as applicable (if reasonably required by the transfer agent or the Company, as applicable), and (z) funds for any stock transfer, documentary, stamp or similar taxes, if payable by the shareholder pursuant to Article 26A.6(e)(i). Except as provided in Article 26A.6(b), the date the transfer agent or the Company, as applicable, receives such certificates, together with such notice and any other documents and amounts required to be paid by the holders of Series A Preferred Shares pursuant to this Article 26A.6(a), will be the date of conversion (the "**Optional Conversion Date**").

(b) Mandatory Conversion. In the event that any holder of Series A Preferred Shares has not elected to convert the Series A Preferred Shares held by such holder pursuant to Article 26A.6(a) on or before the Mandatory Conversion Date, then such shareholder's Series A Preferred Shares shall be automatically converted (without any further action by the shareholder and whether or not the certificates representing the Series A Preferred

Shares are surrendered), in whole and not in part, into the property described in Article 26A.6(c), effective as of the Mandatory Conversion Date. As promptly as practicable (but in no event more than five (5) business days) following the Mandatory Conversion Date, the Company shall deliver a notice to any shareholder whose Series A Preferred Shares have been converted pursuant to this Article 26A.6(b), informing such shareholder of the number of Common Shares into which such Series A Preferred Shares have been converted, together with certificates evidencing such Common Shares. Notwithstanding the foregoing, any notice delivered by the Company in compliance with this Article 26A.6(b) shall be conclusively presumed to have been duly given, whether or not such holder of Series A Preferred Shares actually receives such notice, and neither the failure of a shareholder to actually receive such notice given as aforesaid nor any immaterial defect in such notice shall affect the validity of the proceedings for the conversion of the Series A Preferred Shares as set forth in this Article 26A.6(b).

(c) Amounts Received Upon Conversion. Upon a conversion of Series A Preferred Shares pursuant to Articles 26A.6(a) or 26A.6 (b), the holder of such converted Series A Preferred Shares shall, subject to the limitations and adjustments pursuant to the first paragraph of Article 26A.6, receive in respect of each Series A Preferred Share:

(i) a number of Common Shares (or Reference Property, to the extent applicable) equal to the amount determined by dividing (A) the Purchase Price for the Series A Preferred Share to be converted plus an amount equal to 8.75% of the Purchase Price per annum compounded annually including, in the case of a conversion pursuant to Article 26A.6(a), as if the Mandatory Conversion Date had occurred irrespective of the timing of such conversion (the "**Liquidation Preference**") by (B) the Conversion Price in effect at the time of conversion;

(ii) cash in an amount equal to the amount of any accrued but unpaid Participating Cash Dividends (to the extent not included in the Purchase Price) on the Series A Preferred Shares being converted; *provided* that, to the extent the Company is prohibited by law or by contract from paying such amount, then the Company shall provide written notice to the applicable holder of such inability to pay, and at the written election of the shareholder (which written election shall be delivered to the Company within five (5) business days of receipt of such written notice from the Company), the Company shall either pay such amount as soon as payment is no longer so prohibited or issue Common Shares (or Reference Property, to the extent applicable) in the manner specified in Article 26A.6(c)(i) as if the amount of such accrued but unpaid Participating Cash Dividends were added to the Purchase Price; and

(iii) any accrued and unpaid Participating In-Kind Dividends.

(d) Fractional Shares. No fractional shares of Common Shares (or fractional shares in respect of Reference Property, to the extent applicable) will be issued upon conversion of the Series A Preferred Shares. In lieu of fractional shares, the Company shall pay cash in respect of each fractional share equal to such fractional amount multiplied by the Daily VWAP of the Common Shares over the thirty (30) consecutive Trading Day period

ending on the Trading Day immediately preceding the Optional Conversion Date or the Mandatory Conversion Date, as the case may be (each, a "**Conversion Date**"). If more than one Series A Preferred Share is being converted at one time by the same holder thereof, then the number of full shares issuable upon conversion will be calculated on the basis of the aggregate number of Series A Preferred Shares converted by such shareholder at such time.

(e) Mechanics of Conversion.

(i) As soon as reasonably practicable after the Conversion Date (and in any event within four (4) Trading Days after either such date), the Company shall issue and deliver to such shareholder one or more certificates for the number of Common Shares (or Reference Property, to the extent applicable) to which such holder of Series A Preferred Shares is entitled, together with, at the option of the shareholder, a certified cheque or wire transfer of immediately available funds for payment of fractional shares and any payment required by Article 26A.6(c)(ii) in exchange for the certificates representing the converted Series A Preferred Shares. Such conversion will be deemed to have been made on the Conversion Date, and the Person entitled to receive the Common Shares (or Reference Property, to the extent applicable) issuable upon such conversion shall be treated for all purposes as the record holder of such Common Shares (or Reference Property, to the extent applicable) on such date. The delivery of Common Shares upon conversion of Series A Preferred Shares shall be made, at the option of the applicable shareholder, in certificated form or by book-entry. Any such certificate or certificates shall be delivered by the Company to the appropriate shareholder on a book-entry basis or by mailing certificates evidencing the shares to the holders of the Series A Preferred Shares at their respective addresses as set forth in the conversion notice. In cases where fewer than all the Series A Preferred Shares represented by any such certificate are to be converted, a new certificate shall be issued representing the unconverted Series A Preferred Shares. The Company shall pay any documentary, stamp or similar issue or transfer tax due on the issue of Common Shares (or Reference Property, to the extent applicable) upon conversion or due upon the issuance of a new certificate for any Series A Preferred Shares not converted to the converting shareholder; provided that the Company shall not be required to pay any such amounts, and any such amounts shall be paid by the converting shareholder, in the event that such Common Shares or Series A Preferred Shares are issued in a name other than the name of the converting shareholder.

(ii) For the purpose of effecting the conversion of Series A Preferred Shares, the Company shall: (A) at all times reserve and keep available, free from any pre- emptive rights, out of its treasury or authorized but unissued Common Shares (or Reference Property, to the extent applicable) the full number of Common Shares (or Reference Property, to the extent applicable) deliverable upon the conversion of all outstanding Series A Preferred Shares after taking into account any adjustments to the Conversion Price from time to time pursuant to the terms of this Article 26A.6 and any increases to the Purchase Price from time to time and

assuming for the purposes of this calculation that all outstanding Series A Preferred Shares are held by one holder) and (B) without prejudice to any other remedy at law or in equity any holder of Series A Preferred Shares may have as a result of such default, take all actions reasonably required to amend its Notice of Articles or Articles, as expeditiously as reasonably practicable, to increase the authorized and available amount of Common Shares (or Reference Property, to the extent applicable) if at any time such amendment is necessary in order for the Company to be able to satisfy its obligations under this Article 26A.6.

(iii) From and after the Conversion Date, the Series A Preferred Shares converted on such date, will no longer be deemed to be outstanding and all rights of the holder thereof including the right to receive Dividends, but excluding the right to receive from the Company the Common Shares (or Reference Property, to the extent applicable) or any cash payment upon conversion, and except for any rights of shareholders holding Series A Preferred Shares (including any voting rights) pursuant to this Article 26A.6 which by their express terms continue following conversion or, for the avoidance of doubt, rights which by their express terms continue following conversion pursuant to the Subscription Agreement, shall immediately and automatically cease and terminate with respect to such Series A Preferred Shares; *provided* that, in the event that a Series A Preferred Share is not converted due to a default by the Company or because the Company is otherwise unable to issue the requisite Common Shares (or Reference Property, to the extent applicable), such Series A Preferred Share will, without prejudice to any other remedy at law or in equity any shareholder holding Series A Preferred Shares may have as a result of such default, remain outstanding and will continue be entitled to all of the rights attendant to such Series A Preferred Share as provided herein.

(iv) The Company shall comply with all federal, provincial and state laws, rules and regulations and applicable rules and regulations of the Exchange on which Common Shares (or Reference Property, to the extent applicable) are then listed. If any Common Shares (or Reference Property, to the extent applicable) to be reserved for the purpose of conversion of Series A Preferred Shares require registration with or approval of any Person or group (as such term is defined in Section 13(d)(3) of the Exchange Act) under any federal or state law or the rules and regulations of the Exchange on which Common Shares (or Reference Property, to the extent applicable) are then listed before such shares may be validly issued or delivered upon conversion, then the Company will, as expeditiously as reasonably practicable, use commercially reasonable efforts to secure such registration or approval, as the case may be. So long as any Common Shares (or Reference Property, to the extent applicable) into which the Series A Preferred Shares are then convertible is then listed on an Exchange, the Company will list and keep listed on any such Exchange, upon official notice of issuance, all Common Shares (or Reference Property, to the extent applicable) issuable upon conversion.

(v) All Common Shares (or Reference Property, to the extent applicable) issued upon conversion of the Series A Preferred Shares will, upon issuance by the Company, be duly and validly issued, fully paid and non-assessable, not issued in violation of any pre-emptive or similar rights arising under law or contract and free from all taxes, liens and charges with respect to the issuance thereof, and the Company shall take no action which will cause a contrary result.

(f) Adjustments to Conversion Price.

(i) Common Stock Dividends, Splits and Combinations. The Conversion Price shall be adjusted if the Company issues Common Shares as a dividend or distribution on its Common Shares, or if the Company effects a share split or share combination with respect to Common Shares, the Conversion Price based on the following formula:

$$CP_1 = CP_0 \times \frac{OS_0}{OS_1}$$

where,

CP_0 = the Conversion Price in effect immediately prior to the open of business on the Ex-Date for such dividend or distribution, or the open of business on the effective date of such share split or share combination, as the case may be;

CP_1 = the Conversion Price in effect immediately after the open of business on the Ex-Date for such dividend or distribution, or the open of business on the effective date of such share split or share combination, as the case may be;

OS_0 = the number of Common Shares outstanding immediately prior to the open of business on the Ex-Date for such dividend or distribution, or the open of business on the effective date of such share split or share combination, as the case may be; and

OS_1 = the number of Common Shares outstanding immediately after such dividend or distribution, or such share split or share combination, as the case may be.

Any adjustment made under this Article 26A.6(f)(i) shall become effective immediately after the open of business on the Ex-Date for such dividend or distribution, or immediately after the open of business on the effective date for such share split or share combination, as the case may be. If any dividend or distribution of the type described in this Article 26A.6(f)(i) is declared but not so paid or made, or any share split or combination of the type described in this Article 26A.6(f)(i) is announced but the outstanding Common Shares are not split or combined, as the case may be, the Conversion Price shall be immediately

readjusted, effective as of the date the board determines not to pay such dividend or distribution, or not to split or combine the outstanding Common Shares, as the case may be, to the Conversion Price that would then be in effect if such dividend, distribution, share split or share combination had not been declared or announced.

(ii) Impact of Conversion. Notwithstanding anything in this Article 26A.6(f) to the contrary, if a Conversion Price adjustment becomes effective pursuant to Article 26A.6(f)(i) on any Ex-Date as described above, and a shareholder holding Series A Preferred Shares that converts its Series A Preferred Shares on or after such Ex-Date and on or prior to the related record date would be treated as the record holder of Common Shares as of the related Conversion Date based on an adjusted Conversion Price for such Ex-Date and participate on an adjusted basis in the related dividend or other event giving rise to such adjustment, then, notwithstanding the foregoing Conversion Price adjustment provisions, the Conversion Price adjustment relating to such Ex-Date will not be made for such converting shareholder. Instead, such shareholder will be treated as if such shareholder were the record owner of the Common Shares on an un-adjusted basis and participate in the related dividend, distribution or other event giving rise to such adjustment.

(iii) Reference Property. In the case of any recapitalization, reclassification or change of the Common Shares (other than changes resulting from a subdivision or combination described in Article 26A.6(f)(i)), a consolidation, merger or combination involving the Company, a sale, lease or other transfer to a third party of all or substantially all of the assets of the Company (or the Company and its subsidiaries on a consolidated basis), or any statutory share exchange, in each case as a result of which the Common Shares would be converted into, or exchanged for, stock, other securities, other property or assets (including cash or any combination thereof) (any of the foregoing, a "**Transaction**"), then, at the effective time of the Transaction, the right to convert each Series A Preferred Share will be changed into a right to convert such Series A Preferred Share into the kind and amount of shares of stock, other securities, other property or assets (including cash or any combination thereof) (the "**Reference Property**") that a holder of Series A Preferred Shares would have received in respect of the Common Shares issuable upon conversion of such Series A Preferred Shares immediately prior to such Transaction. In the event that holders of Common Shares have the opportunity to elect the form of consideration to be received in the Transaction, the Company shall make adequate provision whereby the holders of Series A Preferred Shares shall have a reasonable opportunity to determine the form of consideration into which Series A Preferred Shares shall be convertible from and after the effective date of the Transaction. Any such determination by the holders of Series A Preferred Shares shall be subject to any limitations to which all holders of Common Shares are subject, such as pro rata reductions applicable to any portion of the consideration payable in the Transaction, and shall be conducted in such a manner as to be completed at approximately the same time as the time elections are made by holders of Common Shares. The provisions of this Article 26A.6(f)(iii) and any equivalent thereof in any such securities

similarly shall apply to successive Transactions. The Company shall not become a party to any Transaction unless its terms are in compliance with the foregoing.

(iv) Rules of Calculation; Treasury Shares. All calculations will be made to the nearest one-hundredth of a cent or to the nearest one-ten thousandth of a share. Except as explicitly provided herein, the number of Common Shares (or Reference Property, to the extent applicable) outstanding will be calculated on the basis of the number of issued and outstanding Common Shares (or Reference Property, to the extent applicable), not including shares held in the treasury of the Company. The Company shall not pay any dividend on or make any distribution to Common Shares (or Reference Property, to the extent applicable) held in treasury.

(v) Notice of Record Date. In the event of:

(A) any event described in Article 26A.6(f)(i);

(B) any Transaction to which Article 26A.6(f)(iii) applies; or

(C) the dissolution, liquidation or winding-up of the Company,

then the Company shall mail to the holders of the Series A Preferred Shares at their last addresses as shown on the records of the Company, at least twenty (20) days prior to the record date specified in (A) below or twenty (20) days prior to the date specified in (B) below, as applicable, a notice stating:

(A) the record date for the dividend, other distribution, stock split or combination or, if a record is not to be taken, the date as of which the holders of record of Common Shares to be entitled to such dividend, other distribution, stock split or combination; or

(B) the date on which such reclassification, change, dissolution, liquidation, winding-up or other event constituting a Transaction, is reasonably anticipated to become effective or otherwise occur, and the date as of which it is expected that holders of Common Shares of record will be entitled to exchange their Common Shares for Reference Property, other securities or other property deliverable upon such reclassification, change, liquidation, dissolution, winding-up or a Transaction is reasonably anticipated to occur.

(vi) Certificate of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Article 26A.6, the Company at its expense shall as promptly as reasonably practicable compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series A Preferred Shares a certificate, signed by an officer of the Company (in his or her capacity as such and not in an individual capacity), setting forth (A) the calculation of such adjustments and readjustments in reasonable detail, (B) the facts upon which such adjustment or readjustment is based, (C) the

Conversion Price then in effect, and (D) the number of Common Shares (or Reference Property, to the extent applicable) and the amount, if any, of the shares, other securities or other property (including but not limited to cash and evidences of indebtedness) which then would be received upon the conversion of a Series A Preferred Share.

(vii) No Impairment. The Company will not, except with any approval required by Article 26A.5 hereof and applicable law, by amendment of the Articles of the Company or through any reorganization, recapitalization, transfer of assets, merger, consolidation, dissolution, issue or sale of shares or other securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company but will at all times in good faith assist in the carrying out of all the provisions of this Article 26A.6 and in the taking of all such actions as may be necessary or appropriate in order to protect the conversion rights of the holders of the Series A Preferred Shares against impairment; provided, however, that nothing in this Article 26A.6 shall serve to limit or otherwise affect the right of the Company to enter into a Transaction or effect a Fundamental Change.

(g) No Other Conversion Rights. The holders of Series A Preferred Shares shall have no rights of conversion other than as specifically set forth herein.

Arbutus BIOPHARMA
Curing Chronic Hepatitis B

100 - 8900 Glenlyon Parkway | Burnaby, British Columbia | Canada V5J 5J8 | Tel: 604.419.3200 | www.arbutusbio.com

Without Prejudice
Private & Confidential

February 8, 2018

Bruce Cousins

Re: Termination and Severance Agreement

Further to our recent discussions, set out below are the terms we have agreed upon regarding the ending of your employment with Arbutus Biopharma Corporation (the "Company"). Please review the letter and enclosure carefully and seek any advice you deem appropriate.

1. Your last day of work will be February 16, 2018 (the "Termination Date"). You will receive any earned but unpaid Base Salary, a bonus of USD$115,000 for the 2017 calendar year, and any accrued and unused vacation time as of this date.

2. Subject to you executing and returning the attached Release within 60 days of the Termination Date, you will be provided with a lump sum, all-inclusive payment in the amount of $525,000 USD, less required deductions. This payment represents your Base Salary for a period of eighteen (18) months, as set out in paragraphs 2(a) and 6(b)(i) of your August 4, 2015 Employment Agreement.

   In addition, you will be paid USD$15,385, which represents payment of a pro-rated bonus based on the average actual bonus paid over the previous three calendar years, as set out in paragraph 6(b)(ii) of your Employment Agreement.

3. As per paragraph 6(b)(iii) of your Employment Agreement, you are eligible for the continuation of coverage under Arbutus' company group benefits plan(s) that you and your dependents are eligible to receive for the earlier of (x) a period of up to 24 months from the Termination Date, or (y) until you become eligible to receive health insurance benefits under any other employer's group health plan.

4. Except as noted in paragraphs 3 and 5 of this letter, no other payments will be provided to you and no perquisites or benefits of any nature or kind will be provided or continued, including those set out in paragraphs 6(b)(iii) of your Employment Agreement.

5. As per the Arbutus Stock Option Plan, you have three months from the Termination Date to exercise any vested stock options that have been allocated to you. Please contact Jean Jen if you require assistance with the procedure for exercising stock options.

6. Release

The payments and other terms described above are in full satisfaction of all matters and claims related to your employment with the Company and as such we will require you to sign a release in favour of the Company. A copy of the Release is enclosed.

7. Consulting

Following your Termination Date, you will enter in to a consulting agreement with the Company, the principal terms of which will be that you will provide transitional business management services to the Company for a period of six (6) months. A formal consulting agreement will be provided to you in due course.

Per recent Compensation Committee approval, any options granted to you will continue to vest during the consulting contract and will expire six (6) months after the consulting contract terminates unless exercised by you.

8. Confidentiality, Non-Competition and Non-Solicitation

We take this opportunity to remind you of your on-going obligations to the Company regarding Confidentiality, Non-Competition and Non-Solicitation as set out in your Employment Agreement. By signing this letter and accepting the payments referred to above, you acknowledge and agree that you are bound by these obligations.

Notwithstanding anything in this letter, the attached General Release or the Confidentiality, Non-Competition and Non-Solicitation as set out in your Employment Agreement (collectively, the "Agreements"), nothing in the Agreements prohibits you from reporting possible violations of United States federal law or regulation to any United States governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any agency Inspector General, or making other disclosures that are protected under the whistleblower provisions of United States federal law or regulation without prior authorization from or any notice to the Company.

I trust the above terms are an accurate reflection of our agreement. To confirm your acceptance and to allow us to process the payment and expeditiously address the other matters, I ask that you sign the enclosed duplicate copy of this letter and return it to me on or before February 16, 2018. Your signature will constitute a binding agreement between you and the Company. Please also ensure that you sign (in the presence of a witness) and return to me the enclosed Release no later than 60 days from the Termination Date.

Bruce, thank you for your service to the Company and best wishes in your future endeavours.
Yours truly,

/s/ **Mark Murray,**
President and Chief Executive Officer
/encls

Accepted and agreed by Bruce Cousins:

Date /s/ **Bruce Cousins**

GENERAL RELEASE

The Executive agrees, for himself, his spouse, heirs, executor or administrator, assigns, insurers, attorneys, and other persons or entities acting or purporting to act on his behalf (the "**Executive's Parties**"), to irrevocably and unconditionally release, acquit, and forever discharge the Company, its affiliates, subsidiaries, directors, officers, employees, shareholders, partners, agents, representatives, predecessors, successors, assigns, insurers, attorneys, benefit plans sponsored by the Company, and said plans' fiduciaries, agents and trustees (the "**Company's Parties**"), from any and all actions, causes of action, suits, claims, obligations, liabilities, debts, demands, contentions, damages, judgments, levies, and executions of any kind, whether in law or in equity, known or unknown, which the Executive's Parties have, have had, or may in the future claim to have against the Company's Parties by reason of, arising out of, related to, or resulting from the Executive's employment with the Company or the termination of that employment. This release specifically includes without limitation any claims arising in tort or contract, any claim based on wrongful discharge, any claim based on breach of contract, any claim arising under federal, state or local law prohibiting race, sex, age, religion, national origin, handicap, disability, or other forms of discrimination, any claim arising under federal, state, or local law concerning employment practices, and any claim relating to compensation or benefits. It is understood and agreed that the waiver of benefits and claims contained in this section does not include (a) a waiver of the right to payment of any vested, non-forfeitable benefits to which the Executive or a beneficiary of the Executive may be entitled under the terms and provisions of any employee benefit plan of the company which have accrued as of the Date of Termination, and (b) does not include a waiver of the right to benefits and payment of consideration to which the Executive may be entitled under this Agreement or any of the agreements contemplated by this Agreement (including the indemnification agreement and the stock option agreement). The Executive acknowledges that he is entitled to only the severance benefits and compensation set forth in this Agreement, and that all other claims for any other benefits or compensation are hereby waived, except those expressly stated in the preceding sentence.

Executive agrees that he will not make any derogatory statements, either oral or written, or otherwise disparage any of the Company's Parties or their products, employees, services, work and/or employment.

The Company agrees that it will not make any derogatory statements, either oral or written, or otherwise disparage any of the Executive's Parties.

The Executive hereby acknowledges his understanding that under this Agreement he is releasing any known or unknown claims he may have.

The Executive expressly waives and relinquishes all rights and benefits under that section and any law of any jurisdiction of similar effect with respect to his release of claims.

[Signature Page Follows]

IN WITNESS WHEREOF I have hereunto set my hand this 16 day of February 2018.

SIGNED, SEALED and DELIVERED by Bruce Cousins in the presence of:	)	
Signature	)	
Name	)	
Address	)	
Occupation	)	/s/ Bruce Cousins

Executive Employment Agreement

February 16, 2018

Personal and Confidential

Koert VandenEnden
Vancouver, BC
Delivered by hand

Dear Koert:

Arbutus Biopharma Corporation ("Arbutus" or the "Company") is pleased to offer you employment with the Company on the terms described below.

1. **Position.** You will hold the position of Interim Chief Financial Officer, and you will report to the Company's President and CEO. Your duties and responsibilities will include (without limitation) those listed in Attachment A. By signing this letter agreement, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company.

2. **Effective Date of Agreement.** The terms and conditions of this Agreement will have effect as and from February 16, 2018 and the Executive's employment as Interim Chief Financial Officer will continue until terminated as provided for in this Agreement.

3. **Base Salary.** You will be paid a base salary at the rate of CDN $283,000 per year, which will be paid in accordance with the Company's standard payroll policies and subject to applicable withholdings and other required deductions.

4. **Target Bonus.** You will be eligible to be considered for an annual discretionary bonus of up to 30 percent of Base Salary (such bonus, the "Target Bonus"); which will be subject to the terms of the bonus plan and approval of the Company's Board of Directors (the "Board"), in its sole discretion, on an annual basis. Any bonus payable during a partial year of the employment will be pro-rated. Payment of a bonus in any one year will not indicate the payment of a bonus in any other year.

5. **Stock Option.** Subject to the approval of the Board of Directors (the "Board") or the Compensation Committee (the "Committee") of Arbutus Biopharma Corporation and following the commencement of your Interim Chief Financial Officer assignment, you will be granted the option to purchase 25,000 shares of the Company's Common Stock (the "Option") under the Arbutus Omnibus Share Compensation Plan or any other equity plan (the "Plan") as amended and approved by the Board from time to time. The Option will be subject to the terms and conditions set forth in the Plan and the Company's standard form of stock option agreement.

6. **Employee Benefits**. For the term of this agreement, you will be eligible to participate in the employee benefit plans, currently and hereafter maintained by the Company and generally available to similarly situated employees of the Company, subject in each case to

the terms and conditions of the plan in question, including any eligibility requirements set forth therein, and the determination of any person or committee administering the plan. You should note that the Company may modify or terminate benefits from time to time as it deems necessary or appropriate.

7. **Vacation.** You will be entitled to 20 business days of vacation time, in addition to public holidays and closures. Vacation entitlement, accrual and usage will be in accordance with Company policies and procedures, and are subject to change from time to time.

8. **Confidentiality and Assignment of Inventions Agreement.** You will be required, as a condition of your employment with the Company, to sign the Company's enclosed standard Confidentiality and Assignment of Inventions Agreement, a copy of which is attached hereto as Attachment B.

9. **Employment Term.** Your employment with the Company as Interim Chief Financial Officer will terminate on a date between September 30, 2018 and December 31, 2018, as mutually agreed between the Parties (the "Agreed Exit Date").

10. **Termination and Severance.** In the event that you (A) remain employed at Arbutus until the Agreed Exit Date or (B) the Company terminates your employment for a reason other than (i) Cause (as defined below), (ii) Disability (as defined below) or (iii) death, (collectively, an "Involuntary Termination"), you will receive (1) eight (8) weeks' of your then base salary plus (2) a portion of your Target Bonus for the year in which the termination occurs (the "Termination Year") as pro-rated for your days of employment with the Company during the Termination Year; (3) a lump sum bonus of 20% of your then annual base salary; and (4) accelerated vesting of all stock options such that they are all vested on the agreed exit date and an extension of the exercise period for all stock options to twelve (12) months following the agreed exit date (collectively, (1), (2), (3) and (4) are the "Severance"), subject to applicable tax withholding, provided that you satisfy the Conditions (as defined herein) within the Deadline (as defined herein). The Severance will be paid in a lump sum within ten (10) business days following the last day of the Deadline, assuming the Release (as defined herein) is in effect and no longer revocable. The "Conditions" include (i) signing (without revoking) an effective general release of claims in the form (the "Release") that will be provided to you by the Company within five (5) business days following your last day of employment with the Company and (ii) returning all Company property. The "Deadline" will be the date that is fourteen (14) days following the date that you receive the Release.

For purposes of this letter agreement, "Cause" will mean (a) your commission of a felony or any crime involving dishonesty, breach of trust or physical harm to any person; (b) your engagement in conduct that is in bad faith and materially injurious to the Company, including but not limited to, misappropriation of trade secrets, fraud or embezzlement; (c) your material breach of this letter agreement; (d) your willful refusal to implement or follow a lawful policy or directive of the Company; (e) your engagement in gross misconduct, including any pattern of failure to perform your job duties in a diligent and professional manner; or (f) your violation of any term in the Confidentiality and Assignment of Inventions Agreement or your

willful and unauthorized use or disclosure of the Company's Confidential Information (as defined in the Confidentiality and Assignment of Inventions Agreement) or trade secrets.

For purposes of this letter agreement, "Disability" means your inability to perform the essential functions of your position with or without reasonable accommodation for a period of one hundred twenty (120) consecutive days because of your physical or mental impairment. In the event there is a dispute as to whether or not you have a Disability, said determination will be made by a neutral individual, mutually acceptable to you and to Company, with the appropriate qualifications to make such a determination.

It is agreed that the terms of this letter agreement will satisfy any and all obligations the Company has to provide you with notice or pay in lieu of notice of termination of employment under the British Columbia *Employment Standards Act*.

11. **Outside Activities.** While you render services to the Company, you agree that you will not, without the written consent of the Company, engage in any business activity that would interfere with your duties to the Company or engage in any other employment or consulting activity. In addition, while you render services to the Company, you will not assist any person or entity in competing with the Company, in preparing to compete with the Company or in hiring any employees or consultants of the Company.

12. **Non-Solicitation Restrictions.** In consideration of your employment with the Company and your receipt of the compensation now and hereafter paid to you by the Company and your receipt of the Company's Confidential Information, you agree that during the term of your employment with the Company and for a period of six (6) months immediately following the termination of such employment for any reason, whether with or without Cause, you will not, directly or indirectly, (a) solicit, induce or entice or attempt to solicit, induce or entice any of the Company's employees or consultants to terminate their relationship with the Company; (b) solicit, induce or encourage any Contact (as defined below) to curtail or cease its relationship with the Company for any purpose that is competitive with the Company; (c) accept (or procure or assist the acceptance of) any business from a Contact if such business is competitive with the Company; or (d) supply (or procure or assist the supply of) any goods or services to any Contact for any purpose which you know or have reason to know is competitive with the Company. "Contact" will mean any person, firm, corporation or other entity that was a client, customer, supplier, principal, shareholder, investor, collaborator, strategic partner, licensee, contact or prospect of the Company (or of its partners, funders or affiliates) with whom you dealt or otherwise became aware of during the term of your employment in any capacity with the Company.

13. **Regulatory Compliance; Cooperation; Non-Disclosure**.

(a) Regulatory Compliance. You represent and warrant that you have never been (i) under investigation for debarment or debarred pursuant to the Generic Drug Enforcement Act of 1992, 21 U.S.C. §335(a), as amended, or any similar state law or regulation or (ii) disqualified or restricted by the FDA pursuant to 21 C.F.R. 312.70 or any other regulatory authority. During your employment, you represent and warrant that you will provide immediate written notice to

the Company regarding any notice or other information related to (i) a pending or prospective investigation of you for debarment or debarred pursuant to the Generic Drug Enforcement Act of 1992, 21 U.S.C. §335(a), as amended, or any similar state law or regulation or (ii) a pending or prospective disqualification or restriction of you by the FDA pursuant to 21 C.F.R. 312.70 or any other regulatory authority. Upon the delivery of such written notice, you will reasonably cooperate with the Company in connection with the foregoing.

(b) Litigation and Regulatory Cooperation. During and after your employment with the Company, you will reasonably cooperate with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that took place while you were employed by the Company. Your reasonable cooperation in connection with such claims or actions includes, but is not limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment with the Company, you will also reasonably cooperate with the Company in connection with any investigation or review of any federal, state, or local regulatory authority as any such investigation or review relates to events or occurrences that took place while you were employed by the Company. The Company will compensate you for your time spent, and reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 17(b).

(c) Non-Disclosure. You will use your reasonable efforts to maintain the confidentiality of the terms of this letter agreement, but you may disclose the terms of this letter agreement to your immediate family members and to your legal, tax and other advisors.

14. **Withholding and Required Deductions**. All forms of compensation referred to in this letter agreement are subject to all withholding and any other deductions required by applicable law.

15. **Entire Agreement and Governing Law.** With the exception of the March 5, 2018 letter from Arbutus to you, this letter agreement supersedes and replaces any prior or contemporaneous understandings or agreements, whether oral, written or implied, between you and the Company regarding the matters described in this letter agreement. This letter agreement will be governed by and construed according to the laws of the Province of British Columbia, Canada.

16. **Counterparts.** This letter agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Execution of a facsimile or scanned image will have the same force and effect as execution of an original, and an electronic or facsimile signature or scanned image will be deemed an original and valid signature.

17. **Electronic Delivery.** The Company may, in its sole discretion, decide to deliver any documents or notices related to this letter, securities of the Company or any of its affiliates or any other matter, including documents and/or notices required to be delivered to you by applicable securities law or any other law or the Company's Certificate of Incorporation or

Bylaws by email or any other electronic means. You hereby consent to (i) conduct business electronically (ii) receive such documents and notices by such electronic delivery and (iii) sign documents electronically and agree to participate through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

If you wish to accept this offer, please sign and date the enclosed duplicate original of this letter agreement and the enclosed Confidentiality and Assignment of Inventions Agreement and return them to me.

Very truly yours,

ARBUTUS BIOPHARMA, CORP.

/s/ Mark Murray

Mark J. Murray, President and CEO

ACCEPTED AND AGREED:

KOERT VandenEnden

/s/ Koert VandenEnden
(Signature)

March 6, 2018
Date

Enclosure:

Attachment A: Duties and Responsibilities

Attachment B: Confidentiality and Assignment of Inventions Agreement

ATTACHMENT A

DUTIES AND RESPONSIBILITIES

Responsibilities:

- Plan, develop, organize, implement, direct and evaluate the organization's fiscal function.
- Participate and contribute in the strategic planning, establishment of financial objectives.
- Assure that stable, well-developed and secure financial systems are in place.
- Participate in the development of the corporation's plans and programs as a strategic partner. Evaluate and advise on the impact of long range planning, introduce new programs/strategies and regulatory action.
- Enhance and/or develop, implement and enforce policies and procedures of the organization by way of systems that will improve the overall operation and effectiveness of the corporation.
- Establish credibility throughout the organization as an effective developer of solutions to business challenges. Must play a key role on the senior management team and serve as a business confidant and partner to the President and CEO.
- Manage all aspects of public company requirements, such as SEC reporting, Sarbanes-Oxley internal control assessment, stock exchange rules, board and committee activities, shareholder reporting, and annual meetings.

ATTACHMENT B

CONFIDENTIALITY

AND ASSIGNMENT OF INVENTIONS AGREEMENT

THIS AGREEMENT (this "**Agreement**") dated for reference the 16th day of February, 2018.

BETWEEN:

ARBUTUS BIOPHARMA CORPORATION

(the "**Company**"), a company incorporated under the laws of British Columbia with offices at 100 - 8900 Glenlyon Parkway, Burnaby, British Columbia fax: (604) 419-3201

AND:

Koert VandenEnden (the "**Executive**"), of **Vancouver, British Columbia, Canada**

WHEREAS:

A. The Company is in the business of acquiring, inventing, developing, discovering, adapting and commercializing inventions, methods, processes and products in the fields of chemistry, biochemistry, biotechnology and pharmaceuticals; and

B. In connection with the employment of the Executive by the Company, the parties desire to establish the terms and conditions under which the Executive will (i) receive from and disclose to the Company proprietary and confidential information; (ii) agree to keep the information confidential, to protect it from disclosure and to use it only in accordance with the terms of this Agreement; and (iii) assign to the Company all rights, including any ownership interest which may arise in all inventions and intellectual property developed or disclosed by the Executive over the course of his work during his employment with the Company, as set out in this Agreement.

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the employment of the Executive by the Company and the payment by the Company to the Executive of the sum of $10.00 and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **INTERPRETATION**

1.1 **Definitions.** In this Agreement:

(a) **"Affiliate"** means, in respect of the Company, a company or other entity which directly or indirectly controls, is controlled by, or is under common control with, the Company. For the purposes of this definition, **"control"** means direct or indirect beneficial ownership of a greater than 50% interest in the income of such company or entity or such other relationship as, in fact, constitutes actual control. For greater certainty, without limiting the generality of the foregoing, Protiva Biotherapeutics Inc., Protiva Biotherapeutics (USA) Inc. and Arbutus Biopharma Inc. are Affiliates of the Company.

(b) **"Business"** or **"Business of the Company"** means:

(i) researching, developing, producing and marketing any treatment for hepatitis B virus infection in humans; or

(ii) any other treatment area in which the Company has an active research and development program on the date the Executive's employment with the Company terminates and in connection with which the Executive directly provided service or had direct supervisory responsibilities.

(c) "Confidential Information" shall mean all information, knowledge, or data, whether in written, oral, electronic or other form, relating to the Business of the Company, whether or not conceived, originated, discovered or developed in whole or in part by the Executive, that is not generally known to the public or to other persons who are not bound by obligations of confidentiality and:

(i) from which the Company or its Affiliates derive economic value, actual or potential, from the information not being generally known; or

(ii) in respect of which the Company or its Affiliates otherwise have a legitimate interest in maintaining secrecy;

and which, without limiting the generality of the foregoing, shall include:

(iii) all proprietary information licensed to, acquired, used or developed by the Company and its Affiliates in its research and development activities (including but not restricted to the research and development of RNA interference drugs and delivery technology), other scientific strategies and concepts, designs, know-how, information, material, formulas, processes, research data and proprietary rights in the nature of copyrights, patents, trademarks, licenses and industrial designs;

(iv) all information relating to the Business of the Company, and to all other aspects of the structure, personnel and operations of the Company and its Affiliates, including financial, clinical, regulatory, marketing, advertising and commercial

information and strategies, customer lists, compilations, agreements and contractual records and correspondence; programs, devices, concepts, inventions, designs, methods, processes, data, know-how, unique combinations of separate items that is not generally known and items provided or disclosed to the Company or its Affiliates by third parties subject to restrictions on use or disclosure;

(v) all know-how relating to the Business of the Company, including all biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, clinical, safety, manufacturing and quality control data and information, and all applications, registrations, licenses, authorizations, approvals and correspondence submitted to regulatory authorities;

(vi) all information relating to the businesses of competitors of the Company or its Affiliates, including information relating to competitors' research and development, intellectual property, operations, financial, clinical, regulatory, marketing, advertising and commercial strategies, that is not generally known;

(vii) all information provided to the Company or its Affiliates by their agents, consultants, lawyers, contractors, licensors or licensees and relating to the Business of the Company; and

(viii) all information relating to the Executive's compensation and benefits, including his salary, vacation, stock options, rights to continuing education, perquisites, severance notice, rights on termination and all other compensation and benefits, except that he shall be entitled to disclose such information to his bankers, advisors, agents, consultants and other third parties who have a duty of confidence to him and who have a need to know such information in order to provide advice, products or services to him.

All Work Product shall be deemed to be the Company's Confidential Information.

(d) **"Effective Date"** means the 16th day of February, 2018 being the date that the Executive started working at the Company as Interim Chief Financial Officer, as indicated in his employment agreement with the Company.

(e) **"Intellectual Property"** is used in its broadest sense and means and includes any statutory, common law, equitable, contractual or proprietary rights or interests, recognized currently or in future, in and to any Inventions, including, without limitation, rights and interests in and to the following:

(i) knowledge, know-how and its embodiments, including trade secret information;

(ii) patents in inventions, and all applications therefor;

(iii) copyrights in artistic, literary, dramatic, musical, and neighbouring works, copyrightable works of authorship including technical descriptions for products, user guides, illustrations, advertising materials, computer programs, source code and object code, and all applications therefor;

(iv) trademarks, service marks, tradenames, business names and domain names and all applications therefor;

(v) industrial designs and all other industrial or intellectual property and all applications therefor; and

(vi) all goodwill connected with the foregoing.

(f) **"Inventions"** shall mean any and all inventions, discoveries, developments, enhancements, improvements, concepts, formulas, designs, processes, ideas, writings and other works, whether or not reduced to practice, and whether or not protectable under patent, copyright, trade secret or similar laws.

(g) **"Work Product"** shall mean any and all Inventions and possible Inventions relating to the Business of the Company and which the Executive may make or conceive, alone or jointly with others, during his involvement in any capacity with the Company, whether during or outside his regular working hours, except those Inventions made or conceived by the Executive entirely on his own time that do not relate to the Business of the Company and do not derive from any equipment, supplies, facilities, Confidential Information or other information, gained, directly or indirectly, from or through his involvement in any capacity with the Company.

2. CONFIDENTIALITY

2.1 **Prior Business Confidential Information.** The Executive represents and warrants to the Company that the Executive has not brought or used, and the Executive covenants and agrees that the Executive will not use or bring to the Company any confidential information of any kind whatsoever of any prior party (the "Prior Business") with whom the Executive was previously involved, whether such involvement was as an employee, director or officer of that Prior Business, an investor in that Prior Business, a partner in that Prior Business, a consultant to that Prior Business or other relationship to that Prior Business (the "Prior Involvement"). The Company and the Executive acknowledge and agree that the Company is not employing the Executive to obtain confidential information relating to any Prior Involvement and the Executive acknowledges that the Company has advised the Executive to comply with any and all legal obligations the Executive may have to such Prior Business. The Executive covenants and agrees to hold the Company harmless from any and all claims and damages of any kind whatsoever that the Company may suffer as a result of any breach by the Executive of his obligations to such Prior Business in that regard.

(a) **Basic Obligation of Confidentiality.** The Executive hereby acknowledges and agrees that in the course of his involvement with the Company, the Company may disclose to him or he may otherwise have access or be exposed to Confidential Information. The Company hereby agrees to provide such access to the Executive and the Executive hereby agrees to receive and

hold all Confidential Information on the terms and conditions set out in this Agreement. Except as otherwise set out in this Agreement, the Executive will keep strictly confidential all Confidential Information and all other information belonging to the Company that he acquires, observes or is informed of, directly or indirectly, in connection with his involvement, in any capacity, with the Company both during and after the term of his employment in any capacity with the Company.

2.3 **Fiduciary Capacity.** The Executive will be and act toward the Company and its Affiliates as a fiduciary in respect of the Confidential Information.

2.4 **Non-disclosure.** Except with the prior written consent of the Company, the Executive will not at any time, either during or after his involvement in any capacity with the Company;

(a) use or copy any Confidential Information or recollections thereof for any purpose other than the performance of his duties for the benefit of the Company and its Affiliates;

(b) publish or disclose any Confidential Information or recollections thereof to any person other than to employees of the Company and its Affiliates who have a need to know such Confidential Information in the performance of their duties for the Company or its Affiliates;

(c) permit or cause any Confidential Information to be used, copied, published, disclosed, translated or adapted except as otherwise expressly permitted by this Agreement; or

(d) permit or cause any Confidential Information to be stored off the premises of the Company, including permitting or causing such Confidential Information to be stored in electronic format on personal computers, except in accordance with written procedures of the Company, as amended from time to time in writing.

2.5 **Taking Precautions.** The Executive will take all reasonable precautions necessary or prudent to prevent material in his possession or control that contains or refers to Confidential Information from being discovered, used or copied by third parties.

2.6 **The Company's Ownership of Confidential Information.** As between the Executive and the Company, the Company shall own all right, title and interest in and to the Confidential Information, whether or not created or developed by the Executive.

2.7 **Control of Confidential Information and Return of Information.** All physical materials produced or prepared by the Executive containing Confidential Information, including, without limitation, records, devices, computer files, data, notes, reports, proposals, lists, correspondence, specifications, drawings, plans, materials, accounts, reports, financial statements, estimates and all other materials prepared in the course of his responsibilities to or for the benefit of the Company or its Affiliates, together with all copies thereof (in whatever medium recorded), shall belong to the Company, and the Executive will promptly turn over to the Company's possession every original and copy of any and all such items in his possession or control upon request by the Company. If the material is such that it cannot reasonably be delivered, upon request from the Company, the Executive will provide reasonable evidence that such materials have been destroyed, purged or erased.

2.8 **Purpose of Use.** The Executive agrees that he will use Confidential Information only for purposes authorized or directed by the Company.

2.9 **Exemptions.** The obligations of confidentiality set out in this Article 2 will not apply to any of the following:

(a) information that is already known to the Executive, though not due to a prior disclosure by the Company or its Affiliates or by a person who obtained knowledge of the information, directly or indirectly, from the Company or its Affiliates;

(b) information disclosed to the Executive by another person who is not obliged to maintain the confidentiality of that information and who did not obtain knowledge of the information, directly or indirectly, from the Company or its Affiliates;

(c) information that is developed by the Executive independently of Confidential Information received from the Company or its Affiliates and such independent development can be documented by the Executive;

(d) other particular information or material which the Company expressly exempts by written instrument signed by the Company;

(e) information or material that is in the public domain through no fault of the Executive; and

(f) information required by operation of law, court order or government agency to be disclosed, provided that:

(i) in the event that the Executive is required to disclose such information or material, upon becoming aware of the obligation to disclose, the Executive will provide to the Company prompt written notice so that the Company may seek a protective order or other appropriate remedy and/or waive compliance with the provisions of this Agreement;

(ii) if the Company agrees that the disclosure is required by law, it will give the Executive written authorization to disclose the information for the required purposes only;

(iii) if the Company does not agree that the disclosure is required by law, this Agreement will continue to apply, except to the extent that a Court of competent jurisdiction orders otherwise; and

(iv) if a protective order or other remedy is not obtained or if compliance with this Agreement is waived, the Executive will furnish only that portion of the Confidential Information that is legally required and will exercise all reasonable efforts to obtain confidential treatment of such Confidential Information.

3. ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS

3.1 **Notice of Invention.** The Executive agrees to promptly and fully inform the Company of all Work Product, whether or not patentable, throughout the course of his involvement, in any capacity, with the Company and from which there is a reasonable basis to believe that Intellectual Property may be derived therefrom, whether or not developed before or after execution of this Agreement. On his ceasing to be employed by the Company for any reason whatsoever, the Executive will immediately deliver up to the Company all Work Product.

3.2 **Assignment of Rights.** Subject only to the exceptions set out in Exhibit I attached to this Agreement, the Executive will assign, and does hereby assign, to the Company or, at the option of the Company and upon notice from the Company, to the Company's designee, all of his right, title and interest in and to all Work Product, including all Intellectual Property rights therein. To the extent that the Executive retains or acquires legal title to any such Intellectual Property rights and interests, the Executive hereby declares and confirms that such legal title is and will be held by him only as trustee and agent for the Company or the Company's designee. The Executive agrees that the Company's rights hereunder shall attach to all Intellectual Property rights in his Work Product, notwithstanding that it may be perfected or reduced to specific form after he has terminated his relationship with the Company. The Executive further agrees that the Company's rights hereunder are worldwide rights and are not limited to Canada, but shall extend to every country of the world.

3.3 **Moral Rights.** Without limiting the foregoing, the Executive hereby irrevocably waives any and all moral rights arising under the Copyright Act (Canada), as amended, or any successor legislation of similar force and effect or similar legislation in other applicable jurisdictions or at common law that he may have with respect to all Work Product, and agrees never to assert any moral rights which he may have in the Work Product, including, without limitation, the right to the integrity of the Work Product, the right to be associated with the Work Product, the right to restrain or claim damages for any distortion, mutilation or other modification or enhancement of the Work Product and the right to restrain the use or reproduction of the Work Product in any context and in connection with any product, service, cause or institution, and the Executive further confirms that the Company may use or alter any Work Product as the Company sees fits in its absolute discretion.

3.4 **Goodwill.** The Executive hereby agrees that all goodwill he has established or may establish with clients, customers, suppliers, principals, shareholders, investors, collaborators, strategic partners, licensees, contacts or prospects of the Company relating to the Business of the Company (or of its partners, subsidiaries or affiliates), both before and after the Effective Date, shall, as between the Executive and the Company, be and remain the property of the Company exclusively, for the Company to use, alter, vary, adapt and exploit as the Company shall determine in its discretion.

3.5 **Assistance.** The Executive hereby agrees to reasonably assist the Company, at the Company's request and expense, in:

(a) making patent applications for all Work Product, including instructions to lawyers and/or patent agents as to the characteristics of the Work Product in sufficient detail to enable the preparation of a suitable patent specification, to execute all formal documentation incidental to an application for letters patent and to execute assignment documents in favour of the Company for such applications;

(b) making applications for all other forms of Intellectual Property registration relating to all Work Product;

(c) prosecuting and maintaining the patent applications and other Intellectual Property relating to all Work Product; and

(d) registering, maintaining and enforcing the patents and other Intellectual Property registrations relating to all Work Product.

If the Company is unable for any reason to secure the Executive's signature with respect to any Work Product including, without limitation, to apply for or to pursue any application for any patents or copyright registrations covering such Work Product, then the Executive hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as his agent and attorney-in-fact, to act for and on his behalf and stead to execute and file any papers, oaths and to do all other lawfully permitted acts with respect to such Work Product with the same legal force and effect as if executed by him.

3.6 **Assistance with Proceedings.** The Executive further agrees to reasonably assist the Company, at the Company's request and expense, in connection with any defence to an allegation of infringement of another person's intellectual property rights, claim of invalidity of another person's intellectual property rights, opposition to, or intervention regarding, an application for letters patent, copyright or trademark or other proceedings relating to Intellectual Property or applications for registration thereof.

3.7 **Commercialization.** The Executive understands that the decision whether or not to commercialize or market any Work Product is within the Company's sole discretion and for the Company's sole benefit and that no royalty or other consideration will be due or payable to him as a result of the Company's efforts to commercialize or market any such Work Product.

3.8 **Prior Business Intellectual Property.** The Executive represents and warrants to the Company that he has not brought or used, and the Executive covenants and agrees that he will not use or bring to the Company any Intellectual Property of any kind whatsoever of any Prior Business with whom the Executive had a Prior Involvement or any Intellectual Property directly owned by the Executive. The Company and the Executive acknowledge and agree that the Company is not employing the Executive to obtain Intellectual Property relating to any Prior Involvement and the Executive acknowledges that the Company has advised the Executive to comply with any legal obligations the Executive may have to such Prior Business. The Executive covenants and agrees to hold the Company harmless from any and all claims and damages of any kind whatsoever that the Company may suffer as a result any breach by the Executive of his obligations to such Prior Business in that regard.

3.9 **Prior Inventions.** In order to have them excluded from this Agreement, the Executive has set forth on Exhibit I attached to this Agreement a complete list of all Inventions for which a patent application has not yet been filed that he has, alone or jointly with others, conceived, developed or reduced to practice prior to the execution of this Agreement to which he has any right, title or interest, and which relate to the Business of the Company. If such list is blank or no such list is attached, the Executive represents and warrants that there are no such prior Inventions.

4. GENERAL

4.1 **Term.** Subject to Section 4.10, the term of this Agreement is from the Effective Date and terminates on the date that the Executive is no longer working at or for the Company in any capacity.

4.2 **No Conflicting Obligations.** The Executive hereby represents and warrants that he has no agreements with or obligations to any other person with respect to the matters covered by this Agreement or concerning the Confidential Information that are in conflict with anything in this Agreement, except as disclosed in Exhibit I attached to this Agreement.

4.3 **Publicity.** The Executive shall not, without the prior written consent of the Company, make or give any public announcements, press releases or statements to the public or the press regarding any Work Product or any Confidential Information.

4.4 **Further Assurances.** The parties will execute and deliver to each other such further instruments and assurances and do such further acts as may be required to give effect to this Agreement.

4.5 **Notices.** All notices and other communications that are required or permitted by this Agreement must be in writing and shall be hand delivered or sent by express delivery service or certified or registered mail, postage prepaid, or by facsimile transmission (with receipt confirmed in writing) to the parties at the addresses on page 1 of this Agreement. Any such notice shall be deemed to have been received on the earlier of the date actually received or the date five (5) days after the same was posted or sent. Either party may change its address or its facsimile number by giving the other party written notice, delivered in accordance with this section.

4.6 **Equitable Remedies.** The Executive understands and acknowledges that if he breaches any of his obligations under this Agreement, that breach may give rise to irreparable injury to the Company for which damages are an inadequate remedy. In the event of any such breach by the Executive, in addition to all other remedies available to the Company at law or in equity, the Company will be entitled as a matter of right to apply to a court of competent jurisdiction for such relief by way of restraining order, injunction, decree or otherwise, as may be appropriate to ensure compliance with the provisions of this Agreement.

4.7 **Non-Waiver.** Failure on the part of either party to complain of any act or failure to act of the other of them or to declare the other party in default of this Agreement, irrespective of how long such failure continues, will not constitute a waiver by such party of their rights hereunder or of the right to then or subsequently declare a default.

4.8 **Severability.** In the event that any provision or part of this Agreement is determined to be void or unenforceable in whole or in part, the remaining provisions, or parts thereof, will be and remain in full force and effect.

4.9 **Entire Agreement.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes any and all agreements, understandings, warranties or representations of any kind, written or oral, express or implied, including any relating to the nature of the position or its duration, and each of the parties releases and forever discharges the other of and from all manner of actions, causes of action, claim or demands whatsoever under or in respect of any agreement.

4.10 **Survival.** Notwithstanding the expiration or early termination of this Agreement, the provisions of Article 1, Article 2 (including the obligations of confidentiality and to return Confidential Information, which shall endure, with respect to each item of Confidential Information, for so long as those items fall within the definition of Confidential Information), Sections 3.2, 3.3, 3.4, 3.5, 3.6 and 3.8 and Article 4 shall survive any expiration or early termination of this Agreement.

4.11 **Modification of Agreement.** Any modification of this Agreement must be in writing and signed by both the Company and the Executive or it will have no effect and will be void.

4.12 **Governing Law.** This Agreement will be governed by and construed according to the laws of the Province of British Columbia, Canada.

4.13 **Independent Legal Advice.** The Executive agrees that he has obtained or has had an opportunity to obtain independent legal advice in connection with this Agreement, and further acknowledge that he has read, understands, and agrees to be bound by all of the terms and conditions contained herein.

IN WITNESS WHEREOF this Agreement has been executed by the parties hereto as of the date and year first above written.

SIGNED, SEALED AND DELIVERED by **Koert VandenEnden** in the presence of: /s/ Koert VandenEnden

/s/ Victoria Currie

Witness Signature

Victoria Currie

Witness Name

8900 Glenlyon Parkway, Burnaby BC

Witness Address

Manager, Human Resources Operations

Witness Occupation

/s/ Koert VandenEnden

Koert VandenEnden

ARBUTUS BIOPHARMA CORPORATION

Per: **/s/ Mark Murray**

Mark J. Murray

EXHIBIT I
to Confidentiality and Assignment of Inventions Agreement
EXCLUSIONS FROM WORK PRODUCT

[To be completed as applicable]

INDEMNITY AGREEMENT

THIS AGREEMENT has been entered into as of the 16th day of February, 2018.

BETWEEN:

ARBUTUS BIOPHARMA CORPORATION, a company duly incorporated under the laws of the Province of British Columbia, and having an office at #200, 8900 Glenlyon Parkway, Burnaby, British Columbia, V5J 5J8

(the "**Indemnitor**")

AND:

Koert VandenEnden ***

(the "**Indemnitee**")

WHEREAS:

(A) the Indemnitor has requested the Indemnitee to act as a director or officer of the Indemnitor and may ask the Indemnitee to act in a similar capacity with affiliates of the Indemnitor; and

(B) the Indemnitee has agreed, subject to the granting of the indemnities and releases herein provided for, to act as a director or officer of the Indemnitor and act in a similar capacity with affiliates of the Indemnitor if requested;

NOW THEREFORE in consideration of these premises, the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the parties hereto, the parties hereto covenant and agree as set forth below.

1. INDEMNITY

1.1 Subject to §1.2, and §2.6(b) below the Indemnitor shall indemnify and save harmless the Indemnitee, and the Indemnitee's successors, heirs and personal representatives (together with the Indemnitee, the "Indemnified Parties") against and from:

(a) any and all actions and claims, whether current, threatened, pending or completed, whether civil, criminal, quasi-criminal or administrative, of every nature and kind whatsoever which may be brought or made by any person, firm, corporation or

government, or by any governmental department, body, commission, board, bureau, agency or instrumentality against the Indemnified Parties in connection with the Indemnitee's execution of the duties of his office held as a director or officer with the Indemnitor or any affiliate of the Indemnitor from time to time;

(b) any and all costs, damages, charges, expenses (including legal fees and disbursements, on a full indemnity basis), fines, liabilities (statutory or otherwise), losses and penalties which the Indemnitee may sustain, incur or be liable for in consequence of his acting as a director or officer of the Indemnitor or any affiliate of the Indemnitor from time to time, whether sustained or incurred by reason of the Indemnitee's negligence, default, breach of duty, breach of trust, failure to exercise due diligence or otherwise in relation to the Indemnitor or any of its affiliates from time to time, or any of their respective affairs;

(c) without in any way limiting the generality of the foregoing, any and all costs, damages, charges, expenses (including legal fees and disbursements on a full indemnity basis), fines, liabilities, losses and penalties which the Indemnified Parties may sustain, incur or be liable for as a result of or arising by operation of statute and incurred by or imposed upon the Indemnified Parties in relation to the affairs of the Company in the Indemnitee's capacity as director or officer, including but not limited to, all statutory obligations to creditors, employees, suppliers, contractors, subcontractors and any government or agency or division of any government, whether federal, provincial, state, regional or municipal whether existing at the date hereof or incurred hereafter; and

(d) without in any way limiting the generality of the foregoing, the Indemnitor agrees that should any payment or reimbursement made pursuant to this Agreement, including without limitation the payment of insurance premiums or any payment made by an insurer under an insurance policy, be deemed to constitute a taxable benefit or otherwise be or become subject to any tax or levy upon the Indemnified Parties, then the Indemnitor shall pay such amount as may be necessary to ensure that the amount received by or on behalf of the Indemnified Parties, after the payment of or withholding for such tax, fully reimburses the Indemnified Parties for the actual cost, expense or liability incurred by or on his or her behalf.

1.2 Notwithstanding the provisions of §1.1, the Indemnitor shall not be obligated to indemnify or save harmless the Indemnified Parties against and from any action, claim, cost, damage, charge, expense, fine, liability, loss or penalty:

(a) if in respect thereof the Indemnitee failed to act honestly and in good faith with a view to the best interests of the Indemnitor or its affiliate as the case may be ;

(b) in the case of a criminal or administrative action or proceeding, if the Indemnitee did not have reasonable grounds for believing that his conduct was lawful;

(c) arising out of any act, error or omission of the Indemnitee that is fraudulent or malicious and that is committed by the Indemnitee with actual fraudulent or malicious purpose or intent; or

(d) for which he is entitled to indemnity pursuant to any valid and collectible policy of insurance, to the extent of such insurance. Where partial indemnity is provided by such policy of insurance, the obligation of the Indemnitor under §1.1 shall continue in effect but be limited to that portion of the liability for which indemnity is not provided by such policy.

1.3 The determination of any claim by judgment, order, settlement or conviction, or upon a plea of "nolo contendere" or its equivalent, will not, of itself, create any presumption for the purposes of this Agreement that the Indemnitee did not act honestly and in good faith with a view to the best interests of the Indemnitor or with the care, diligence, and skill of a reasonably prudent person or, in the case of a criminal or administrative action or proceeding, that he or she did not have reasonable grounds for believing that his conduct was lawful (unless the judgment or order of a court specifically finds otherwise) or that the Indemnitee had committed wilful neglect or gross default.

2. DEFENSE

2.1 For the purposes of this section 2:

"**Action**" means any action, inquiry, investigation, suit or other proceeding before a court or other tribunal in which a Claim is brought, made or advanced by or against the Indemnitee;

"**Claim**" means any allegation of charge, claim, cost, damage, expense, fine, liability, loss or penalty contemplated by §1.1;

"**Judgment**" means an award of damages or other monetary compensation made in an Action or any amounts the Indemnitee is ordered to pay by any court or other tribunal or any government, governmental department, body, commission, board, bureau, agency or instrumentality having proper jurisdiction as a result of any Claim brought, made or advanced of or against the Indemnitee; and

"**Settlement**" means an agreement to compromise a Claim or an Action.

2.2 Upon the Indemnitee becoming aware of any pending or threatened Claim or Action, the Indemnitee must provide written notice of it to the Indemnitor as soon as is reasonably practicable.

2.3 The Indemnitor shall have full power and authority to conduct such investigation of each Claim as is reasonably necessary in the circumstances and shall pay all costs of such investigation.

2.4 Subject to this subsection and §2.6(b), the Indemnitor shall defend, on behalf of the Indemnitee, any Claim or Action, even if the basis for the Claim or Action is groundless, false or fraudulent. If the Indemnitor has reasonable grounds for believing that any of the circumstances described in §1.2 apply to the Claim or Action, then the Indemnitor, upon giving the Indemnitee written notice of its belief and the grounds therefore, may refuse to so defend the Claim or Action, but such refusal shall not relieve the Indemnitor from any of its obligations of

indemnity hereunder if it has determined that none of the provisions of §1.2 apply to the Claim or Action.

2.5 The Indemnitor shall consult with and pay reasonable heed to the Indemnitee concerning the appointment of any defence counsel to be engaged by the Indemnitor in fulfillment of its obligation to defend a Claim or Action, pursuant to §2.4.

2.6 With respect to a Claim or Action for which the Indemnitor is obliged to indemnify the Indemnitee hereunder:

(a) the Indemnitor may conduct negotiations towards a Settlement and, with the written consent of the Indemnitee (which the Indemnitee agrees not to unreasonably withhold), the Indemnitor may make such Settlement as it (in its sole judgment) deems appropriate or expedient in the circumstances, provided, however, that the Indemnitee shall not be required, as part of any proposed Settlement, to admit liability or agree to indemnify the Indemnitor in respect of, or make contribution to, any compensation or other payment for which provision is made by such Settlement; and

(b) if the Indemnitee fails to give his consent to the terms of a proposed Settlement which is otherwise acceptable to the Indemnitor and the claimant, the Indemnitor may require the Indemnitee to negotiate or defend the Claim or Action independently of the Indemnitor and in such event any amount recovered by such claimant in excess of the amount for which Settlement could have been made by the Indemnitor, shall not be recoverable under this Indemnity, it being further agreed by the parties that the Indemnitor shall only be responsible for legal fees and costs up to the time at which such Settlement could have been made.

2.7 The Indemnitor shall have the right to negotiate a Settlement in respect of any Claim or Action which is founded upon any of the acts specified in §1.2. In the event that the Indemnitor negotiates a Settlement in respect of any of the acts specified in §1.2, the Indemnitee shall pay any compensation or other payment for which provision is made under the Settlement and shall not seek indemnity or contribution from the Indemnitor, within 60 days of the Indemnitor making demand therefor, all fees, costs and expenses (including legal fees and disbursements on a full indemnity basis) which result from the defence of the Claim or the Action in respect of which the Settlement was made, including the cost of any investigation undertaken by the Indemnitor in connection therewith, to the date the Settlement was made.

2.8 The Indemnitor shall pay any Judgment which may be given against the Indemnitee unless any of the circumstances set out in §1.2 applies to the Action in respect of which the Judgment is given or unless and to the extent the Indemnitee is otherwise entitled to indemnity under the policy of insurance as contemplated by §1.2(d) in either case, the Indemnitee shall pay to the Indemnitor, within 60 days of the Indemnitor making demand therefore, all, fees, costs and expenses (including legal fees and disbursements on a full indemnity basis) which result from the defence and appeal of the Action, including the costs of any investigation undertaken by the Indemnitor in connection with the Action.

2.9 Upon the request of the Indemnitee and subject to the restrictions set out in the *Business Corporations Act* (British Columbia), the Indemnitor shall pay the expenses of the Indemnitee incurred in relation to a Claim or an Action indemnified hereunder, provided the Indemnitee hereby gives an undertaking to repay such expenses if it is finally determined that such payments are not indemnifiable under this agreement or prohibited by the *Business Corporations Act* (British Columbia).

3. GENERAL

3.1 Nothing herein contained shall in any way affect the Indemnitee's right to resign from his position as director or officer of the Indemnitor at any time.

3.2 The indemnity and release herein provided for shall survive the termination of the Indemnitee's position as director or officer of the Indemnitor, the termination of this Agreement, and shall continue in full force and effect thereafter.

3.3 This Agreement supersedes all prior agreements between the parties with respect to its subject matter. Notwithstanding the forgoing, nothing in this Agreement shall be deemed to diminish or otherwise restrict an Indemnified Party's right to indemnification under any provision of the Indemnitor's articles or under applicable corporate law.

3.4 Unless stated otherwise, all monies to be paid hereunder shall be paid within 10 days of becoming payable.

3.5 The Indemnitee acknowledges that he or she has been advised to obtain independent legal advice with respect to entering into this Agreement, that he or she has obtained such independent legal advice or has expressly waived such advice, and that he or she is entering into this Agreement with full knowledge of the contents hereof, of his own free will and with full capacity and authority to do so.

3.6 If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision or part thereof and the remaining part of such provision and all other provisions hereof shall continue in full force and effect. The parties hereto agree to negotiate in good faith to agree to a substitute provision which shall be as close as possible to the intention of any invalid or unenforceable provision as may be valid or enforceable. The invalidity or unenforceability of any provision in any particular jurisdiction shall not affect its validity or enforceability in any other jurisdiction where it is valid or enforceable.

3.7 Each party hereto agrees to do all such things and take all such actions as may be necessary or desirable to give full force and effect to the matters contemplated by this Agreement.

3.8 This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, legal representatives, successors and permitted assigns.

3.9 Time shall be of the essence of this Agreement.

3.10 This Agreement and the application or interpretation hereof shall be governed exclusively by its terms and by the laws of the Province of British Columbia and the laws of Canada applicable therein and the parties hereto hereby irrevocably attorn to the jurisdiction of the courts of the Province of British Columbia.

IN WITNESS WHEREOF parties hereto have duly executed this Agreement as of the date first written above.

ARBUTUS BIOPHARMA CORPORATION

Per: /s/ Mark Murray
Authorized Signatory

SIGNED, SEALED AND DELIVERED by **Koert VandenEnden** in the presence of:	)	/s/ Koert VandenEnden
/s/ Koert VandenEnden	)	
	)	**Koert VandenEnden**
/s/ Victoria Currie	)	
Witness Signature		
Victoria Currie	)	
	)	
Witness Name		
	)	
8900 Glenlyon Parkway, Burnaby BC	)	
Witness Address		
	)	
Manager, Human Resources Operations	)	
Witness Occupation		

Exhibit 21.1

Arbutus Biopharma Corporation

List of Subsidiaries

Name	Date on which the entity became Arbutus' wholly owned sub	Jurisdiction
Protiva Biotherapeutics Inc.	May 30, 2008	British Columbia, Canada
Arbutus Biopharma Inc.	Mar. 4, 2015	Delaware, United States of America

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors

Arbutus Biopharma Corporation

We consent to the incorporation by reference in the registration statement (No. 333-215290) on Form S-3/A and registration statements (No. 333-202762 and No. 333-186185) on Form S-8 of Arbutus Biopharma Corporation of our reports dated March 14, 2018 with respect to the consolidated balance sheets of Arbutus Biopharma Corporation as at December 31, 2017 and December 31, 2016 and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the effectiveness of internal control over financial reporting as of December 31, 2017, which reports appear in the December 31, 2017 annual report on Form 10-K of Arbutus Biopharama Corporation.

/s/ KPMG LLP

Chartered Professional Accountants

Vancouver, Canada

March 14, 2018

Exhibit 31.1

CERTIFICATION PURSUANT TO RULE 13a-14 OR 15d-14 OF THE SECURITIES

EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE

SARBANES-OXLEY ACT OF 2002

I, Mark J. Murray, certify that:

1. I have reviewed this Form 10-K Arbutus Biopharma Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2018

/s/ Mark J. Murray

Name: Mark J. Murray

Title: President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO RULE 13a-14 OR 15d-14 OF THE SECURITIES

EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE

SARBANES-OXLEY ACT OF 2002

I, Koert VandenEnden, certify that:

1. I have reviewed this Form 10-K of Arbutus Biopharma Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

Date: March 15, 2018

/s/ Koert VandenEnden

Name: Koert VandenEnden

Title: Interim Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO SECTION 906

OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Arbutus Biopharma Corporation (the "Company") on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I Mark J. Murray, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly represents, in all material respects, the financial condition and results of the operations of the Company.

Date: March 15, 2018

/s/ Mark J. Murray

Name: Mark J. Murray

Title: President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO SECTION 906

OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Arbutus Biopharma Corporation (the "Company") on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I Koert VandenEnden, Interim Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly represents, in all material respects, the financial condition and results of the operations of the Company.

Date: March 15, 2018

/s/ Koert VandenEnden

Name: Koert VandenEnden

Title: Interim Chief Financial Officer