

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-Q**

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2017

OR

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**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**98-0597776**  
(I.R.S. Employer  
Identification No.)

**100-8900 Glenlyon Parkway, Burnaby, BC, Canada V5J 5J8**

(Address of Principal Executive Offices)

**604-419-3200**

(Registrant's Telephone Number, Including Area Code)

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  No

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  No

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

As of October 31, 2017, the registrant had 55,051,995 common shares, no par value, outstanding. In addition, the Company had outstanding 500,000 convertible preferred shares, which will be mandatorily convertible into 7,037,839 common shares on October 16, 2021. Assuming the convertible preferred shares were converted as of October 31, 2017, the Company would have had 62,089,834 common shares outstanding at October 31, 2017.

ARBUTUS BIOPHARMA CORP.

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**PART I. FINANCIAL INFORMATION**

**ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)**

**ARBUTUS BIOPHARMA CORPORATION**

**Condensed Consolidated Balance Sheets**  
(Unaudited)

(Expressed in thousands of U.S. dollars, except share and per share amounts)  
(Prepared in accordance with US GAAP)

	September 30, 2017	December 31, 2016
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 15,225	\$ 23,413
Short-term investments (note 2)	72,954	107,146
Accounts receivable	846	273
Accrued revenue	128	128
Investment tax credits receivable	160	293
Prepaid expenses and other assets	1,500	1,311
<b>Total current assets</b>	<b>90,813</b>	<b>132,564</b>
Restricted investment (note 2)	12,601	12,601
Property and equipment	24,747	17,683
Less accumulated depreciation	(12,125)	(10,738)
Property and equipment, net of accumulated depreciation	12,622	6,945
Intangible assets (note 3)	99,445	99,445
Goodwill (note 3)	24,364	24,364
<b>Total assets</b>	<b>\$ 239,845</b>	<b>\$ 275,919</b>
<b>Liabilities and stockholders' equity</b>		
Current liabilities:		
Accounts payable and accrued liabilities (note 5)	\$ 6,403	\$ 9,910
Deferred revenue (note 4)	15	15
Liability-classified options (note 2)	1,817	553
Warrants	—	107
<b>Total current liabilities</b>	<b>8,235</b>	<b>10,585</b>
Deferred lease incentives, net of current portion	744	—
Loan payable	12,001	12,001
Contingent consideration (notes 2 and 6)	10,211	9,065
Deferred tax liability	41,263	41,263
<b>Total liabilities</b>	<b>72,454</b>	<b>72,914</b>
<b>Stockholders' equity:</b>		
Common shares		
Authorized - unlimited number with no par value		
Issued and outstanding: 55,051,983 (December 31, 2016 - 54,841,494)	876,049	867,393
Additional paid-in capital	40,755	36,543
Deficit	(699,631)	(651,149)
Accumulated other comprehensive loss	(49,782)	(49,782)
<b>Total stockholders' equity</b>	<b>167,391</b>	<b>203,005</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 239,845</b>	<b>\$ 275,919</b>

Nature of business and future operations (note 1)

Contingencies and commitments (note 6)

Subsequent events (note 8)

See accompanying notes to the condensed consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

**Condensed Consolidated Statements of Operations and Comprehensive Loss**  
(Unaudited)

(Expressed in thousands of U.S. dollars, except share and per share amounts)  
(Prepared in accordance with US GAAP)

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2017	2016	2017	2016
<b>Revenue (note 4)</b>	<b>6,892</b>	774	<b>8,166</b>	1,686
<b>Expenses</b>				
Research, development, collaborations and contracts	15,537	15,738	44,854	44,097
General and administrative	3,659	3,720	12,586	34,705
Depreciation of property and equipment	593	291	1,407	760
Impairment of intangible assets (note 3)	—	—	—	156,324
<b>Total expenses</b>	<b>19,789</b>	19,749	<b>58,847</b>	235,886
<b>Loss from operations</b>	<b>(12,897)</b>	(18,975)	<b>(50,681)</b>	(234,200)
<b>Other income (losses)</b>				
Interest income	337	425	1,095	1,104
Interest expense	(76)	—	(186)	—
Foreign exchange gain (loss)	1,233	(795)	2,458	2,180
Gain on disposition of financial instrument	—	—	—	1,000
Decrease (increase) in fair value of warrant liability (note 2)	—	10	(22)	339
Increase in fair value of contingent consideration (note 6)	(197)	(260)	(1,146)	(756)
<b>Total other income (losses)</b>	<b>1,297</b>	(620)	<b>2,199</b>	3,867
Loss before income taxes	(11,600)	(19,595)	(48,482)	(230,333)
Income tax benefit	—	—	—	64,864
<b>Net and comprehensive loss</b>	<b>\$ (11,600)</b>	\$ (19,595)	<b>\$ (48,482)</b>	\$ (165,469)
Loss per common share				
Basic and diluted	\$ (0.21)	\$ (0.37)	\$ (0.89)	\$ (3.15)
Weighted average number of common shares				
Basic and diluted	54,877,103	53,652,007	54,612,081	52,588,505

See accompanying notes to the condensed consolidated financial statements.

**ARBUTUS BIOPHARMA CORPORATION**

**Condensed Consolidated Statement of Stockholders' Equity**  
(Unaudited)

(Expressed in thousands of U.S. dollars, except share and per share amounts)  
(Prepared in accordance with US GAAP)

	Number of shares	Share capital	Additional paid-in capital	Deficit	Accumulated other comprehensive loss	Total stockholders' equity
<b>December 31, 2016</b>	<b>54,841,494</b>	<b>\$ 867,393</b>	<b>\$ 36,543</b>	<b>\$ (651,149)</b>	<b>\$ (49,782)</b>	<b>\$ 203,005</b>
Stock-based compensation	—	7,972	5,198	—	—	13,170
Certain fair value adjustments to liability stock option awards	—	—	(962)	—	—	(962)
Issuance of common shares pursuant to exercise of options	31,489	203	(24)	—	—	179
Issuance of common shares pursuant to exercise of warrants	179,000	481	—	—	—	481
Net loss	—	—	—	(48,482)	—	(48,482)
<b>Balance, September 30, 2017</b>	<b>55,051,983</b>	<b>\$ 876,049</b>	<b>\$ 40,755</b>	<b>\$ (699,631)</b>	<b>\$ (49,782)</b>	<b>\$ 167,391</b>

See accompanying notes to the condensed consolidated financial statements.

**ARBUTUS BIOPHARMA CORPORATION**
**Condensed Consolidated Statements of Cash Flow**  
(Unaudited)

(Expressed in thousands of U.S. dollars)  
(Prepared in accordance with US GAAP)

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2017	2016	2017	2016
<b>OPERATING ACTIVITIES</b>				
Net loss for the period	\$ (11,600)	\$ (19,595)	\$ (48,482)	\$ (165,469)
Items not involving cash:				
Deferred income taxes	—	—	—	(64,864)
Depreciation of property and equipment	593	291	1,407	760
Stock-based compensation - research, development, collaborations and contract expenses	2,468	2,759	8,145	8,225
Stock-based compensation - general and administrative expenses	1,511	1,695	5,440	26,253
Unrealized foreign exchange (gains) losses	(1,328)	826	(2,578)	(2,130)
Change in fair value of warrant liability	—	(10)	22	(339)
Change in fair value of contingent consideration	197	260	1,146	756
Impairment of intangible assets (note 3)	—	—	—	156,324
Net change in non-cash operating items:				
Accounts receivable	196	61	(573)	613
Investment tax credits receivable	—	—	133	98
Prepaid expenses and other assets	83	584	(189)	(263)
Accounts payable and accrued liabilities	(1,805)	(887)	(3,513)	(1,961)
Deferred revenue	(6,739)	(696)	—	(1,066)
Deferred lease incentives	744	—	744	—
<b>Net cash used in operating activities</b>	<b>(15,680)</b>	<b>(14,712)</b>	<b>(38,298)</b>	<b>(43,063)</b>
<b>INVESTING ACTIVITIES</b>				
Disposition (acquisition) of short and long-term investments, net	5,843	(712)	34,192	(98,457)
Acquisition of property and equipment	(538)	(168)	(7,076)	(1,397)
<b>Net cash provided by (used) in investing activities</b>	<b>5,305</b>	<b>(880)</b>	<b>27,116</b>	<b>(99,854)</b>
<b>FINANCING ACTIVITIES</b>				
Issuance of common shares pursuant to exercise of options	61	76	66	192
Issuance of common shares pursuant to exercise of warrants	—	—	353	445
<b>Net cash provided by financing activities</b>	<b>61</b>	<b>76</b>	<b>419</b>	<b>637</b>
Effect of foreign exchange rate changes on cash and cash equivalents	1,327	(824)	2,575	2,131
<b>(Decrease) Increase in cash and cash equivalents</b>	<b>(8,987)</b>	<b>(16,340)</b>	<b>(8,188)</b>	<b>(140,149)</b>
Cash and cash equivalents, beginning of period	24,212	42,970	23,413	166,779
<b>Cash and cash equivalents, end of period</b>	<b>\$ 15,225</b>	<b>\$ 26,630</b>	<b>\$ 15,225</b>	<b>\$ 26,630</b>
<b>Supplemental cash flow information</b>				
Non-cash transactions:				
Investment tax credit received	108	\$ —	108	—
Acquired property and equipment in trade payables	—	(266)	6	(266)

See accompanying notes to the condensed consolidated financial statements.



## ARBUTUS BIOPHARMA CORPORATION

### Notes to Condensed 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"). The Company's portfolio of assets includes a broad pipeline of drug candidates to develop a cure for HBV and leverages the Company's expertise in Lipid Nanoparticle ("LNP") technology.

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*

These unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles of the United States of America ("U.S. GAAP") for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto for the year ended December 31, 2016 and included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The unaudited condensed consolidated financial statements reflect, in the opinion of management, all adjustments and reclassifications necessary to present fairly the financial position, results of operations and cash flows at September 30, 2017 and for all periods presented. The results of operations for the three and nine months ended September 30, 2017 and September 30, 2016 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2016, except as described below.

##### *Principles of Consolidation*

These unaudited condensed consolidated financial statements include the accounts of the Company and its two wholly-owned subsidiaries, Arbutus Biopharma Inc. ("Arbutus Inc.") and Protiva Biotherapeutics Inc. ("Protiva"). All intercompany transactions and balances have been eliminated on consolidation.

##### *Income or loss per share*

Income or loss per share is calculated based on the weighted average number of common shares outstanding. Diluted loss per share does not differ from basic loss per share since the effect of the Company's stock options, liability-classified stock option awards, and warrants are anti-dilutive. During the nine months ended September 30, 2017, potential common shares of 5,339,714 (September 30, 2016 – 4,978,101) were excluded from the calculation of loss per common share because their inclusion would be anti-dilutive.

##### *Fair value of financial instruments*

The Company measures certain financial instruments and other items at fair value.

To determine the fair value, the Company uses 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.

The following table presents 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	September 30, 2017
<b>Assets</b>				
Cash and cash equivalents	\$ 15,225	—	—	\$ 15,225
Short-term investments	72,954	—	—	72,954
Restricted investment	12,601	—	—	12,601
<b>Total</b>	<b>\$ 100,780</b>	<b>—</b>	<b>—</b>	<b>\$ 100,780</b>
<b>Liabilities</b>				
Liability-classified options	—	—	\$ 1,817	\$ 1,817
Contingent consideration	—	—	10,211	10,211
<b>Total</b>	<b>—</b>	<b>—</b>	<b>\$ 12,028</b>	<b>\$ 12,028</b>

	Level 1	Level 2	Level 3	December 31, 2016
<b>Assets</b>				
Cash and cash equivalents	\$ 23,413	—	—	\$ 23,413
Short-term investments	107,146	—	—	107,146
Restricted investment	12,601	—	—	12,601
<b>Total</b>	<b>\$ 143,160</b>	<b>—</b>	<b>—</b>	<b>\$ 143,160</b>
<b>Liabilities</b>				
Warrants	—	—	\$ 107	\$ 107
Liability-classified options	—	—	553	553
Contingent consideration	—	—	9,065	9,065
<b>Total</b>	<b>—</b>	<b>—</b>	<b>\$ 9,725</b>	<b>\$ 9,725</b>

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	Liability at end of the period
Nine months ended September 30, 2016	\$ 883	\$ (247)	\$ (339)	\$ 297
Nine months ended September 30, 2017	\$ 107	\$ (129)	\$ 22	\$ —

On March 1, 2017, the remaining balance of the Company's warrants of 22,000 expired, resulting in a nil liability balance for the period-ended September 30, 2017. The change in fair value of warrant liability for the nine months ended September 30, 2017 is recorded in the statement of operations and comprehensive loss.

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

	Liability at beginning of the period	Fair value of liability-classified options exercised in the period	Increase (decrease) in fair value of liability	Liability at end of the period
Nine months ended September 30, 2016	\$ 1,909	\$ (54)	\$ (907)	\$ 948
Nine months ended September 30, 2017	\$ 553	\$ (103)	\$ 1,367	\$ 1,817

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

	Liability at beginning of the period	Increase in fair value of Contingent Consideration	Liability at end of the period
Nine months ended September 30, 2016	\$ 7,497	\$ 756	\$ 8,253
Nine months ended September 30, 2017	\$ 9,065	\$ 1,146	\$ 10,211

#### ***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.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (ASC 606). The standard, as subsequently amended, 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 ("modified retrospective method"). The new guidance would be effective for fiscal years beginning after December 15, 2017, which for the Company means January 1, 2018. The Company anticipates applying the modified retrospective method for its implementation, and continues to evaluate the expected impact that the standard could have on its consolidated financial statements and related disclosures, which the Company believes most materially relates to the timing and recognition of its 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. The Company currently has no assets that meet the definition of restricted cash.

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 is currently evaluating the extent of the impact of this adoption.

In January 2017, the FASB issued ASU 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. The update simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under the existing standard, an entity had to perform procedures to determine the fair value at impairment testing date of its assets and liabilities following the procedure that would be required in determining the fair value of assets required and liabilities assumed in a business combination. Instead, under the amendments in this update, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. The amendments in this update are effective for public business entities should be adopted for its annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019, which for the Company means January 1, 2020. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is currently evaluating the extent of the impact of this adoption.

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 an effect in the Company's statement of operations and comprehensive loss for the period beginning on the adoption date, to the period ended September 30, 2017, as no award modifications occurred.

### 3. 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 impairment, in which case earlier testing is performed.

The following table summarizes the carrying values of the intangible assets as at September 30, 2017:

	September 30, 2017		December 31, 2016	
IPR&D – Immune Modulators	\$	40,798	\$	40,798
IPR&D – Antigen Inhibitors		14,811		14,811
IPR&D – cccDNA Sterilizers		43,836		43,836
<b>Total Intangible Assets</b>	<b>\$</b>	<b>99,445</b>	<b>\$</b>	<b>99,445</b>

#### *Impairment evaluation of goodwill*

At September 30, 2017, the Company did not identify any new indicators of impairment. No impairment charge on intangible assets or goodwill was recorded for the period ended September 30, 2017 (three months ended September 30, 2016 - nil; nine months ended September 30, 2016 - \$156,324,000).

### 4. Collaborations, contracts and licensing agreements

The following table set forth revenue recognized under collaborations, contracts and licensing agreements, in thousands:

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Alexion (a)	\$ 6,859	\$ —	\$ 7,956	\$ —
Dicema (b)	—	727	—	1,292
Other milestone and royalty payments (c)	33	47	210	394
<b>Total revenue</b>	<b>\$ 6,892</b>	<b>\$ 774</b>	<b>\$ 8,166</b>	<b>\$ 1,686</b>

**(a) License Agreement with Alexion Pharmaceuticals, Inc. ("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 lipid nanoparticle ("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 remaining deferred revenue balance of \$6,739,000, as well as any revenue and costs related to closeout procedures in the statement of operations and comprehensive loss for the period ended September 30, 2017.

**(b) License and Development and Supply Agreement with Dicerna Pharmaceuticals, Inc. ("Dicerna")**

On November 16, 2014, the Company signed a License Agreement and a Development and Supply Agreement (together, the "Agreements") with Dicerna to develop, manufacture, and commercialize products directed to the treatment of Primary Hyperoxaluria 1 ("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 estimated 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 year ended December 31, 2016 and no revenue thereafter.

**(c) 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 does 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. For the three and nine months ended September 30, 2017, the Company recorded \$33,000 and \$156,000 in Marqibo royalty revenue (three and nine months ended September 30, 2016 - \$50,000 and \$136,000 respectively). For the nine months ended September 30, 2017, the Company accrued 2.5% in royalties due to TPC in respect of the Marqibo royalty earned by the Company – see note 6, contingencies and commitments.

**5. Accounts payable and accrued liabilities**

Accounts payable and accrued liabilities are comprised of the following, in thousands:

	September 30, 2017	December 31, 2016
Trade accounts payable	\$ 2,291	\$ 3,215
Research and development accruals	2,955	3,131
Professional fee accruals	226	498
Deferred lease inducements	38	350
Payroll accruals	189	2,178
Other accrued liabilities	704	538
	\$ 6,403	\$ 9,910

## 6. Contingencies and commitments

### 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\$9,323,000). As at September 30, 2017, a cumulative contribution of \$2,966,000 (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 three and nine months ended September 30, 2017, the Company earned royalties on Marqibo sales in the amount of \$33,000 and \$156,000 respectively (three and nine months ended September 30, 2016 – \$50,000 and \$136,000, respectively) (see note 4(c)), resulting in \$4,000 being recorded by the Company as royalty payable to TPC (September 30, 2016 -\$3,000). The cumulative amount paid or accrued up to September 30, 2017 was \$21,000, therefore the remaining contingent amount due to TPC is \$2,945,000 (C\$3,675,000).

### Arbitration with the University of British Columbia ("UBC")

Certain early work on lipid nanoparticle delivery systems and related inventions was undertaken at the Company and assigned to the University of British Columbia (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 notice of 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 Arbutus alleges UBC wrongly licensed to a third party rather than to Arbutus. The proceedings have 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. 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. The Company continues to dispute UBC's allegations, and seeks license payments for said application, and an exclusive worldwide license to said application. 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 are recorded by the Company as incurred.

### **Arbitration with Acuitas Therapeutics (“Acuitas”)**

In August 2017, Arbutus provided Acuitas with notice that Arbutus 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 Arbutus perform its obligations under the Cross License Agreement, for damages ancillary to specific performance, injunctive relief, interest and costs. The Company disputes 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. On September 29, 2017, the injunction order was extended by consent to March 2, 2018. The contractual issues concerning the Cross License Agreement (excluding the claims for damages) are set for trial for 10 days commencing on February 19, 2018.

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 contingency asset was recorded by the Company for the period ended September 30, 2017, as the damages, interest and costs are not determined until following the trial.

### **Contingent consideration from Arbutus Inc. acquisition of Enantigen and License Agreements between Enantigen and the Baruch S. Blumberg Institute (“Blumberg”) and Drexel University (“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 the Company, 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 Enantigen’s two programs in pre-clinical development related to HBV therapies. The first triggering event is the 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 initial estimated fair value of approximately \$6,727,000 as at the date of acquisition of Arbutus Inc., and have been treated as contingent consideration payable in the purchase price allocation, 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 comparative data.

Contingent consideration is recorded as a financial liability, and measured at its fair value at each reporting date, based on an updated consideration of the probability-weighted assessment of expected milestone timing, with any changes in fair value from the previous reporting date 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 is required to pay up to \$1,200,000 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 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.

#### **7. Concentrations of 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 on a timely basis. 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 September 30, 2017 was the accounts receivable balance of \$846,000 (December 31, 2016 - \$273,000).

All accounts receivable balances were current at September 30, 2017 and at December 31, 2016.

## **8. Subsequent events**

### **Investment from Roivant Sciences Ltd ("Roivant")**

On October 2, 2017, the Company announced that it entered into a subscription agreement with Roivant for the sale of Series A participating convertible preferred shares ("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 16, 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 is expected to close by the end of the year upon satisfaction of customary closing conditions including regulatory and shareholder approvals, as applicable, under Canadian securities law.

### **License agreement with Gritstone Oncology, Inc. ("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 total potential payments under this arrangement include upfront, development and commercial milestone payments and royalty payments on future product sales.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*You should read the following discussion and analysis by our management of our financial position and results of operations in conjunction with our audited consolidated financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended December 31, 2016 and our unaudited condensed consolidated financial statements for the three and nine month periods ended September 30, 2017. Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and are presented in U.S. dollars.*

### FORWARD-LOOKING STATEMENTS

The information in this report 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 report include statements about our strategy, future operations, clinical trials, prospects and the plans of management; the discovery, development and commercialization of a cure for HBV; our beliefs and development path and strategy to achieve a cure for HBV; obtaining necessary regulatory approvals; obtaining adequate financing through a combination of financing activities and operations; the possibility of receiving total milestone payments of up to \$18,000,000 on Alocrest and Brakiva; an additional investment of \$66,400,000 from Roivant and the expected timing thereof; the filing of a proxy statement by the Company with respect to the additional investment from Roivant; potential payments from the Gritstone license agreement; evaluating different treatment durations to determine the optimal finite duration of therapy; selecting combination therapy regimens and treatment durations to conduct Phase III clinical trials intended to ultimately support regulatory filings for marketing approval; approval for a single product from our pipeline by combining with available agents to improve upon the cure rate with the current standard of care; expanding our HBV drug candidate pipeline through internal development, acquisitions and in-licenses; initiating a 30-week Phase II study of ARB-1467 in combination with tenofovir and pegylated interferon in 4Q17, with interim results from this study expected in the second half of 2018, followed by final results in 2019; initiating an AB-423 Phase II multi ascending dose (MAD) study in HBV patients in 1Q18; an IND (or equivalent) filing for AB-506 in mid-2018; an IND (or equivalent) filing for AB-452 in mid-2018; nominating a clinical development candidate in early 2018; possible low to mid-single-digit royalty payments escalating based on sales performance as Alnylam's LNP-enabled products are commercialized; payments from the Gritstone licensing agreement; the belief that current legal proceedings will not have a material adverse effect on our consolidated results of operations, cash flows, or financial condition; the expected return from strategic alliances, licensing agreements, and research collaborations; statements with respect to revenue and expense fluctuation and guidance; having sufficient cash resources to fund our operations for at least the next 12 months; and the quantum and timing of potential funding.

With respect to the forward-looking statements contained in this report, we have made numerous assumptions regarding, among other things: meeting the conditions to close the additional investment of \$66,400,000 from Roivant (including shareholder approval) LNP's status as a leading RNAi delivery technology; our research and development capabilities and resources; the effectiveness of our products as a treatment for chronic HBV infection or other diseases; continued positive results from pre-clinical and clinical trials; the timing and quantum of payments to be received under contracts with our partners; assumptions related to our share price volatility, expected lives of warrants, and warrant issuances and/or exercises; and our financial position and its ability to execute our business strategy. While we consider 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 risk factors discussed in this report and the risk factors discussed in our Annual Report on Form 10-K under the heading "Risk Factors," and the risks discussed in our other filings with the Securities and Exchange Commission and Canadian Securities Regulators. In addition, a further discussion with respect to the risks and uncertainties related to the additional investment of \$66,400,000 from Roivant will appear in the Company's Management Proxy Circular and Proxy Statement on Form 14A, which will be available at [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov) once filed. 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. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and we explicitly disclaim any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

**OVERVIEW**

Arbutus Biopharma Corporation ("Arbutus", the "Company", "we", "us", and "our") is a publicly traded industry-leading Hepatitis B Virus (HBV) therapeutic solutions company. HBV represents a significant, global unmet medical need. Our goal is to develop curative treatment regimens of finite dosing duration. We believe that development can be accelerated when multiple components of a combination therapy regimen are controlled by the same company, therefore we have assembled a HBV pipeline consisting of multiple drug candidates with complementary mechanisms of action, each of which have the potential to improve upon the standard of care and contribute to curative combination treatment regimen. In addition to our HBV pipeline, our lipid nanoparticle (LNP) delivery technology is a key asset that has the potential to generate significant value through both new and existing partnerships and licenses.

**HBV Product Pipeline**

Our HBV product pipeline consists of multiple programs, with different mechanisms of action that have the objective of intervening at different points in the viral life cycle and reactivating the host immune system. For each program, we begin clinical development by evaluating the safety and activity of each drug individually in patients with chronic HBV infection. We will then study these new product candidates in combination with other treatments. While we will initially evaluate combinations with approved therapies, we also intend to study combinations of multiple complementary development stage agents that are proprietary to Arbutus. Once we have established a curative regimen with finite dosing duration, we will seek to improve that regimen in terms of efficacy, tolerability, duration, and convenience.



We intend to continue to expand our HBV pipeline through internal development, 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.

**RNAi (ARB-1467)**

Our lead RNA interference (RNAi) HBV candidate, ARB-1467 (formerly TKM-HBV), is designed to reduce Hepatitis B surface antigen (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 a multi-component 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 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 results 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 of the product in healthy adult subjects. In the Phase I SAD study, healthy volunteer subjects were dosed up to a dose of 0.4 mg/kg but a defined maximum tolerated dose was not reached.

The Phase II trial is a multi-dose study in chronic HBV patients who are also receiving nucleot(s)ide analog (NA) therapy. The trial consists of four cohorts. The first three cohorts each enrolled eight subjects; six receiving three monthly doses of ARB-1467, and two receiving placebo. Cohort 4 enrolled twelve patients, all receiving five bi-weekly doses of ARB-1467, followed by monthly dosing for the remainder of a year for patients who meet a predefined response criteria. Cohorts 1, 2, and 4 enrolled HBeAg- patients and Cohort 3 enrolled HBeAg+ patients. ARB-1467 is administered at 0.2 mg/kg in Cohort 1 and 0.4 mg/kg in Cohorts 2, 3, and 4. Results from this trial based on multiple dose administration of ARB-1467 in Cohorts 1, 2 and 3 demonstrated significant reductions in serum HBsAg levels and showed 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. There were 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. Initial results from the first three months demonstrated that all twelve patients had reductions in serum HBsAg levels with an average reduction of 1.4 log<sub>10</sub>, which was greater than that observed with monthly dosing in Cohorts 1-3. Seven of the twelve patients met the predefined response criteria at or before day 71 and five of the seven patients who met the response criteria had their serum HBsAg reduced to low absolute levels (below 50 IU/mL) during the bi-weekly dosing period. Initial results for the monthly dosing extension suggest that monthly dosing is not sufficient to maintain or improve upon these reductions in HBsAg levels. As a result, we have discontinued the monthly extension and new studies will utilize bi-weekly dosing. Overall treatment was well tolerated in all four cohorts (Cohorts 1, 2, 3, and 4).

We are initiating a triple combination study of our RNAi agent, ARB-1467, with current standard of care NAs and interferon (IFN) therapies, to evaluate the opportunity to improve current cure rates with a finite dosing period. 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 NA doses for 30 weeks. Predefined treatment responders at 6 weeks will qualify for the addition of weekly pegylated interferon treatment, while continuing to receive bi-weekly doses of ARB-1467 and daily doses of tenofovir 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. Combination treatment has the potential to result in sustained HBV DNA and HBsAg loss in patients. Achieving this in a significant proportion of patients would put this Arbutus therapeutic on a potential late stage development and approval pathway.

#### ***Capsid Inhibitor (AB-423 & AB-506)***

HBV core protein, or capsid, is required for viral replication and core protein may have additional roles in cccDNA function. 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 which will effectively 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. By inhibiting assembly of the viral capsid, the ability of HBV to replicate is impaired, resulting in reduced cccDNA.

AB-423 was evaluated in a Phase I Single Ascending Dose (SAD) and Multiple Ascending Dose (MAD) trial designed to assess the safety, tolerability, and pharmacokinetics (PK) of oral administration of the product in healthy volunteers. AB-423 has been generally well-tolerated in this trial, with no serious adverse events following single doses up to 800mg and multiple doses up to 400mg twice daily. AB-423's favorable safety and PK profile following single and multiple doses in healthy volunteers supports further evaluation of multiple-dose administration of AB-423 in patients with chronic HBV, which is expected to begin in HBV patients in the first quarter of 2018. Following initial studies of AB-423 in patients we will consider inclusion in a combination study with our other proprietary HBV assets, NAs, and IFN.

We recently nominated AB-506, a next-generation capsid inhibitor, for Investigational New Drug (IND)-enabling studies. In preclinical studies, this new capsid inhibitor has shown to have improved PK and potency through increased binding

interaction with its target when compared to AB-423. Pending successful IND-enabling studies, this product candidate could be the subject of an IND (or equivalent) filing in 2018.

#### ***HBV RNA Destabilizer (AB-452)***

In addition to our clinical candidates, we have a number of research programs aimed at the discovery and development of proprietary HBV candidates with different and complementary mechanisms of action. One of our most advanced preclinical programs, AB-452, a HBV RNA Destabilizer (formerly known as our oral surface antigen (HBsAg) inhibitor program) has novel activity in destabilizing HBV RNA, broad activity against HBV RNAs, and reduces HBsAg. In preclinical studies, 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<sub>10</sub> reduction of serum HBsAg in a dose dependent manner and correlated well with liver HBV RNA levels as well. This molecule has the potential for once daily oral dosing. Pending successful IND-enabling studies, this product candidate could be the subject of an IND (or equivalent) filing in 2018.

#### **Additional Research Programs**

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.

#### **Our Proprietary 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 LNP platform. 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, which can then successfully mediate RNAi.

#### **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. We continue to explore opportunities to generate value from our LNP platform technology, which is well suited to deliver therapies based on RNAi, mRNA, and gene editing constructs. We have also made progress in developing a proprietary GalNAc conjugate technology to enable subcutaneous delivery of an RNAi therapeutic targeting HBsAg and/or other HBV targets.

## **Partner Programs**

### ***Patisiran (ALN-TTR02)***

Alnylam 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 multi-dosing with our LNP has been well-tolerated with treatments out to 25 months. In September 2017, Alnylam announced that its Phase III study of patisiran met its primary efficacy endpoint and all secondary endpoints. Alnylam announced its intention to file a New Drug Application (NDA) in late 2017 and a Marketing Authorisation Application (MAA) in early 2018 for patisiran. We are entitled to single-digit royalty payments escalating based on sales performance as Alnylam's LNP-enabled products are commercialized.

### ***Gritstone Oncology***

In October 2017, we entered into a license agreement with Gritstone Oncology (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 will pay us an upfront payment, 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. (Spectrum), launched Marqibo through its existing hematology sales force in the United States. Spectrum has ongoing trials evaluating Marqibo in three additional indications, which are: first line use in patients with Philadelphia Negative Acute Lymphoblastic Leukemia (Ph-ALL), Pediatric ALL and Non-Hodgkin's lymphoma. We are receiving mid-single digit royalty payments on sales of Marqibo.

## **Recent Developments**

### ***Acuitas Therapeutics Inc.***

In December 2013, we entered into a cross-license agreement with Acuitas Therapeutics Inc., or Acuitas. The terms of the cross-license agreement provided Acuitas with access to certain of our earlier intellectual property (IP) generated prior to April 2010 for a specific field. On August 29, 2016, we provided Acuitas with notice that Arbutus considered Acuitas to be in material breach of the cross-license agreement. On October 25, 2016, Acuitas filed a Notice of Civil Claim in the Supreme Court of British Columbia seeking an order that we perform our 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 a declaration that Acuitas is in breach of the cross-license agreement, and claiming injunctive relief, damages, interest and costs. 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. On February 8, 2017, Arbutus announced that the Supreme Court of British Columbia granted Arbutus' request for a pre-trial injunction against Acuitas, preventing Acuitas from further sublicensing of Arbutus' LNP technology until the end of October 2017, 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 Arbutus' LNP. On March 7, 2017, Acuitas sought leave to appeal from the injunction decision and on April 3, 2017, the application for leave to appeal was denied. On September 29, 2017, the injunction order was extended by consent to March 2, 2018. The contractual issues concerning the cross-license agreement (excluding the claims for damages) are set for trial for 10 days commencing on February 19, 2018.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There are no changes to our critical accounting policies and estimates from those disclosed in our annual MD&A contained in our Annual Report Form 10-K for the year ended December 31, 2016.

## RECENT ACCOUNTING PRONOUNCEMENTS

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board or other standard setting bodies that are adopted by us 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 I, Item 1, "Financial Statements (Unaudited)" of this Quarterly Report on Form 10-Q for a description of recent accounting pronouncements applicable to our business.

## 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

	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015
<b>Total revenue</b>	<b>6.8</b>	<b>1.0</b>	<b>0.2</b>	<b>(0.2)</b>	<b>0.7</b>	<b>0.3</b>	<b>0.6</b>	<b>12.7</b>
Expenses	(19.8)	(20.5)	(18.5)	(257.2)	(19.7)	(195.6)	(20.6)	(24.4)
Other income (losses)	1.3	1.2	(0.3)	(1.4)	(0.6)	0.4	4.1	5.5
<b>Loss before income taxes</b>	<b>(11.7)</b>	<b>(18.3)</b>	<b>(18.6)</b>	<b>(258.8)</b>	<b>(19.6)</b>	<b>(194.9)</b>	<b>(15.9)</b>	<b>(6.2)</b>
Income tax benefit	—	—	—	40.1	—	64.9	—	1.0
<b>Net loss</b>	<b>(11.7)</b>	<b>(18.3)</b>	<b>(18.6)</b>	<b>(218.7)</b>	<b>(19.6)</b>	<b>(130.0)</b>	<b>(15.9)</b>	<b>(5.2)</b>
<b>Basic and diluted net loss per share</b>	<b>\$ (0.21)</b>	<b>\$ (0.33)</b>	<b>\$ (0.34)</b>	<b>\$ (4.05)</b>	<b>\$ (0.37)</b>	<b>\$ (2.47)</b>	<b>\$ (0.31)</b>	<b>\$ (0.10)</b>

### Quarterly Trends

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

In January 2014, we signed an Option Agreement and a Services Agreement with Monsanto for the use of our proprietary delivery technology and related intellectual property in agriculture. In Q4 2015, we recognized the remaining deferred revenue balance of \$11.8 million as the estimated option period ended. In March 2016, Monsanto exercised its option to acquire 100% of the outstanding shares of Protiva Agricultural Development Company Inc. (PADCo), for which Monsanto paid us an exercise fee of \$1.0 million in Q1 2016. We recorded this receipt in Q1 2016 as Other income (losses).

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 Q3 2016, Dicerna announced the discontinuation of their DCR-PH1 program using our technology, and we recognized the remaining balance of Dicerna license fee revenue of \$0.6 million, as well as other Dicerna collaboration revenue for the provision of development services.



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.

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 and royalties from Alnylam for the use of our LNP technology.

In 2013, we began to earn royalties from Spectrum with respect to the commercial sales of Marqibo.

**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 Q4 2015, 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 in Q4 2016 to Q3 2017 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 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.

Following the merger with Arbutus Inc., we have recorded, to date, non-cash compensation expense of \$57.1 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 there won't be any further expense to record in this regard.

**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 U.S. 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 relates to the decrease in deferred tax liability associated with impairment charges recorded on acquired intangible assets as discussed above.

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

## RESULTS OF OPERATIONS

The following summarizes the results of our operations for the periods shown, in thousands (except for per share figures):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Total revenue	\$ 6,892	\$ 774	\$ 8,166	\$ 1,686
Operating expenses	19,789	19,749	58,847	235,886
Loss from operations	(12,897)	(18,975)	(50,681)	(234,200)
Net loss	\$ (11,600)	\$ (19,595)	\$ (48,482)	\$ (165,469)
Basic and diluted loss per share	(0.21)	(0.37)	(0.89)	(3.15)

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

	Three months ended September 30,			
	2017	% of Total	2016	% of Total
Alexion	\$ 6,859	100%	\$ —	—%
Dicerna	—	—%	\$ 727	94%
Other milestone and royalty payments	33	—%	47	6%
<b>Total revenue</b>	<b>\$ 6,892</b>		<b>\$ 774</b>	

	Nine months ended September 30,			
	2017	% of Total	2016	% of Total
Alexion	\$ 7,956	97%	\$ —	—%
Dicerna	—	—%	\$ 1,292	77%
Other milestone and royalty payments	210	3%	394	23%
<b>Total revenue</b>	<b>\$ 8,166</b>		<b>\$ 1,686</b>	

Revenue contracts are addressed in detail in the Overview section of Item 2 above.

#### 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 in the three and nine months ended September 30, 2016 relates to the earned portion of the upfront payment of \$2.5 million for the use of our technology, which was being recognized over the period 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 to September 30, 2016, at which time we had no further remaining performance obligations.

#### 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. Licensing fee revenue recognized in the three and nine months ended September 30, 2017 relates to the non-refundable upfront payment of \$7.5 million for the use of our technology. In addition, we recognized collaboration revenue on the services provided to Alexion related to technology development, manufacturing and regulatory support for the advancement of Alexion's mRNA product candidate.

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. We recorded the remaining deferred revenue for the non-refundable upfront payment, as well as revenue for any work done related to closeout procedures in the three and nine months ended September 30, 2017.

#### 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 thousands:

	<b>Three months ended September 30,</b>			
	<b>2017</b>	<b>% of Total</b>	2016	<b>% of Total</b>
Research, development, collaborations and contracts	\$ 15,537	79%	\$ 15,738	80%
General and administrative	3,659	18%	3,720	19%
Depreciation	593	3%	291	1%
<b>Total operating expenses</b>	<b>\$ 19,789</b>		<b>\$ 19,749</b>	

	<b>Nine months ended September 30,</b>			
	<b>2017</b>	<b>% of Total</b>	2016	<b>% of Total</b>
Research, development, collaborations and contracts	\$ 44,854	76%	\$ 44,097	19%
General and administrative	12,586	21%	34,705	15%
Depreciation	1,407	2%	760	—%
Impairment of intangible assets	—	—%	\$ 156,324	66%
<b>Total operating expenses</b>	<b>\$ 58,847</b>		<b>\$ 235,886</b>	

#### ***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 in the three months and nine months ended September 30, 2017 and September 30, 2016. In all periods presented, our R&D expense relates to our HBV programs. During the first nine months of 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 continue to incur costs related to research and preclinical activities for our other HBV programs.

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 the nine months ended September 30, 2017 compared to the nine months ended September 30, 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. We recorded \$4.0 million in the first nine months of 2017 compared to \$24.5 million in the first nine months of 2016. The following table summarizes the non-cash compensation expense recorded related to the expiry of repurchase rights since the Arbutus Inc. acquisition in March 2015:

	Q3 2017	Q2 2017	Q1 2017	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	\$ 1.5	\$ 1.5	\$ 1.5	\$ 1.4	\$ 1.0	\$ 0.3
General and administrative	1.0	1.5	1.5	1.5	1.5	18.5	4.5	4.5	4.3	3.1	0.9
<b>Total non-cash compensation for repurchase rights expiration</b>	<b>\$ 2.5</b>	<b>\$ 3.0</b>	<b>\$ 3.0</b>	<b>\$ 3.0</b>	<b>\$ 3.0</b>	<b>\$ 20.0</b>	<b>\$ 6.0</b>	<b>\$ 6.0</b>	<b>\$ 5.7</b>	<b>\$ 4.1</b>	<b>\$ 1.2</b>

#### ***Impairment of intangible assets***

For the nine months ended September 30, 2016, we recorded an impairment charge of \$156.3 million 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 ccdDNA Sterilizer drug class. No impairment has been recognized in 2017.

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

	<b>Three Months Ended September 30,</b>		<b>Nine Months Ended September 30,</b>	
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
Interest income	\$ 337	\$ 425	\$ 1,095	\$ 1,104
Interest expense	(76)	—	(186)	—
Foreign exchange gains (losses)	1,233	(795)	2,458	2,180
Gain on disposition of financial instrument	—	—	—	1,000
Decrease (increase) in fair value of warrant liability	—	10	(22)	339
Increase in fair value of contingent consideration	(197)	(260)	(1,146)	(756)
<b>Total other income (losses)</b>	<b>\$ 1,297</b>	<b>\$ (620)</b>	<b>\$ 2,199</b>	<b>\$ 3,867</b>

#### ***Foreign exchange gains (losses)***

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 three and nine months ended September 30, 2017, we recorded a foreign exchange gain of \$1.2 million and \$2.5 million, respectively, 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 above, 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. The increase in the fair value of warrants in the first nine months of 2017 relates to warrants exercised offset by reducing our warrant liability balance to nil as at September 30, 2017.

#### ***Increase in fair value of contingent consideration***

Contingent consideration is a liability assumed by the Company 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.

#### ***Income tax benefit***

During the nine months ended September 30, 2016, we recorded an income tax benefit of \$64.9 million due to the decrease in deferred tax liability resulting from the impairment charge we recorded, as discussed above.

## LIQUIDITY AND CAPITAL RESOURCES

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

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Net loss for the period	\$ (11,600)	\$ (19,595)	\$ (48,482)	\$ (165,469)
Adjustments to reconcile net loss to net cash provided by operating activities	3,441	5,821	13,582	124,985
Changes in operating assets and liabilities	(7,521)	(938)	(3,398)	(2,579)
Net cash used in operating activities	(15,680)	(14,712)	(38,298)	(43,063)
Net cash provided by (used in) investing activities	5,305	(880)	27,116	(99,854)
Net cash provided by financing activities	61	76	419	637
Effect of foreign exchange rate changes on cash & cash equivalents	1,327	(824)	2,575	2,131
Net decrease in cash and cash equivalents	(8,987)	(16,340)	(8,188)	(140,149)
Cash and cash equivalents, beginning of period	24,212	42,970	23,413	166,779
<b>Cash and cash equivalents, end of period</b>	<b>15,225</b>	<b>26,630</b>	<b>15,225</b>	<b>26,630</b>

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.

At September 30, 2017, we had an aggregate of \$100.8 million in cash and cash equivalents, short-term investments, and restricted investments as compared to an aggregate of \$143.2 million in cash and cash equivalents, short-term investments, and restricted investments at December 31, 2016.

For the nine months ended September 30, 2017, operating activities used \$38.3 million in cash as compared to \$43.1 million of cash used in the nine months ended September 30, 2016. The decrease in net cash used from operating activities is largely related to the \$7.5 million license payment we received from Alexion during the nine months ended September 30, 2017.

For the nine months ended September 30, 2017, investing activities increased cash by \$27.1 million primarily due to the maturation of investments, offset by acquisition of capital assets for our new U.S. facility in Warminster. For the nine months ended September 30, 2016, investing activities used \$100.0 million in cash as we acquired short-term investments.

For the nine months ended September 30, 2017, financing activities increased cash by \$0.4 million due to options and warrants exercised during the period. All unexercised outstanding warrants expired on March 1, 2017.

**Cash requirements** / At September 30, 2017 we held an aggregate of \$100.8 million in cash, comprised of \$15.2 million in cash and cash equivalents, \$73.0 million in short-term investments, and \$12.6 million in restricted investments. In October 2017, we announced that entered into a subscription agreement with Roivant Sciences Ltd. ("Roivant") for the sale of Series A participating convertible preferred shares ("Preferred Shares") to Roivant for gross proceeds of \$116.4 million. The initial investment of \$50,000,000 closed on October 16, 2017, and the remaining amount of \$66,400,000 is expected to close by the end of the year upon satisfaction of customary closing conditions including regulatory and shareholder approvals, as applicable, under Canadian securities law. For further details with respect to the Preferred Shares, please refer to our Form 8-K filed with the U.S. Securities and Exchange Commission on October 3, 2017 or our material change report filed with the Canadian securities regulatory authorities on SEDAR on October 5, 2017.

We believe we have sufficient cash resources to fund our operations 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;
- revenue earned from our legacy collaborative partnerships and licensing agreements, including royalty payments from Alnylam and royalties from sales of Marqibo from Spectrum;
- revenue earned from ongoing collaborative partnerships, including milestone and royalty payments;
- 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 therapeutics programs;
- 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; 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 intend to 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.

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.

#### 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 is material to investors.

#### CONTRACTUAL OBLIGATIONS

The following table summarizes our contractual obligations as at September 30, 2017:

(in millions)	Payments Due by Period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	More than 5 years
<b>Contractual Obligations</b>					
Facility leases	\$ 8.4	\$ 1.6	\$ 2.1	\$ 1.4	\$ 3.3
Loan payable	\$ 12.0	\$ —	\$ 12.0	\$ —	\$ —
<b>Total</b>	<b>\$ 20.4</b>	<b>\$ 1.6</b>	<b>\$ 14.1</b>	<b>\$ 1.4</b>	<b>\$ 3.3</b>

#### IMPACT OF INFLATION

Inflation has not had a material impact on our operations.

#### RELATED PARTY TRANSACTIONS

We have not entered into any related party transactions in the periods covered by this discussion.

## **OUTSTANDING SHARE DATA**

As of October 31, 2017, we had 55,051,995 common shares, no par value, outstanding. In addition, we had outstanding 500,000 Series A participating convertible preferred shares, which will be mandatorily convertible into 7,037,839 common shares on October 16, 2021. Assuming the convertible preferred shares were converted as of October 31, 2017, we would have had 62,089,834 common shares outstanding at October 31, 2017.

## **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

There have been no material changes in our quantitative and qualitative disclosures about market risk from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

## **ITEM 4. CONTROLS AND PROCEDURES**

As of September 30, 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 this evaluation, the CEO and CFO have concluded that as of September 30, 2017, 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 and 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 be noted that while the CEO and CFO believe that our disclosure controls and procedures provide a reasonable level of 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.

During management's year-end assessment process for the period-ended December 31, 2016, a material weakness was identified over management's review of the annual impairment evaluation of intangible assets and goodwill; specifically the judgments made with respect to the estimated discount rate and the mathematical accuracy of the impairment calculation. Management did not perform a quantitative calculation of impairment at September 30, 2017 (refer to Note 3 of the condensed consolidated interim financial statements), and therefore, no application of the controls to which this material weakness related occurred during the period ended September 30, 2017. Management intends to continue to evaluate and, to the extent possible, remediate this material weakness throughout 2017.

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II. OTHER INFORMATION

### ITEM 1. 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.

#### UBC Arbitration

Certain early work on liposomal delivery systems and related inventions was undertaken by us and assigned to the University of British Columbia (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 siRNA products. Certain sublicenses to other parties were also granted.

On November 10, 2014, UBC filed a demand for arbitration against us, 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 C\$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 three phases, beginning with a first liability phase, addressing UBC's Claims and Arbutus' Counterclaim that was the subject of a hearing that took place June 19-30, 2017. The first phase was the subject of a hearing from June 19-30, 2017. The arbitrator delivered his Partial Award regarding the first phase on 28 August 2017. The Partial Award determined which agreements are sublicense agreements within the scope of UBC's claim, and which are not. No finding was made as to whether any licensing fees are due UBC under these agreements; this will be the subject of the second phase of the 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.

#### Acuitas Therapeutics

On August 29, 2016, Arbutus provided Acuitas with notice that Arbutus 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. 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. Arbutus disputes 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 within the time frame prescribed by the Court. On January 10, 2017, we 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. On February 8, 2017, Arbutus announced that the Supreme Court of British Columbia granted Arbutus' request for a pre-trial injunction against Acuitas, preventing Acuitas from further sublicensing of Arbutus' 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 Arbutus' LNP. On March 7, 2017, Acuitas sought leave to appeal from the injunction decision and on April 3, 2017, the application for leave to appeal was denied. On September 29, 2017, the injunction order was extended by consent to March 2, 2018. The contractual issues concerning the cross-license agreement (excluding the claims for damages) are set for trial for 10 days commencing on February 19, 2018.



**ITEM 1A. RISK FACTORS**

There have been no material changes in our risk factors from those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016. However, a further discussion with respect to the risks and uncertainties related to the additional investment of \$66,400,000 by Roivant will appear in Arbutus Management Proxy Circular and Proxy Statement on Form 14A, which will be available at [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov) once filed.

**ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

None.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

**ITEM 5. OTHER INFORMATION**

None.

**ITEM 6. EXHIBITS**

See the Exhibit Index hereto.

**SIGNATURES**

Pursuant to the requirements 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 November 2, 2017.

**ARBUTUS BIOPHARMA CORPORATION**

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

## EXHIBIT INDEX

Number	Description
<a href="#"><u>10.1 *</u></a>	<a href="#"><u>Roivant Sciences Ltd. Subscription Agreement for Preferred Shares</u></a>
<a href="#"><u>31.1*</u></a>	<a href="#"><u>Certification of Chief Executive Officer pursuant to Rule 13a14 or 15d14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the SarbanesOxley Act of 2002</u></a>
<a href="#"><u>31.2*</u></a>	<a href="#"><u>Certification of Chief Financial Officer pursuant to Rule 13a14 or 15d14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the SarbanesOxley Act of 2002</u></a>
<a href="#"><u>32.1*</u></a>	<a href="#"><u>Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the SarbanesOxley Act of 2002</u></a>
<a href="#"><u>32.2*</u></a>	<a href="#"><u>Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the SarbanesOxley Act of 2002</u></a>
101	Interactive Data Files

\* Filed herewith.

**ARBUTUS BIOPHARMA CORPORATION**

**SUBSCRIPTION AGREEMENT FOR PREFERRED SHARES**

**TO: ARBUTUS BIOPHARMA CORPORATION**

The undersigned (the **Subscriber**) hereby irrevocably subscribes for and agrees to purchase from Arbutus Biopharma Corporation (the **Company**) that number of preferred shares in the capital of the Company (the **Preferred Shares**) set out below for the aggregate subscription amount set out below, representing a subscription price per Preferred Share of \$100.00 (the **Subscription Price**), on the terms and subject to the conditions set out in this Subscription Agreement (as defined below). The Subscriber agrees to be bound by the terms and conditions set forth in the attached "Terms and Conditions of Subscription for Preferred Shares".

**SUBSCRIPTION AND SUBSCRIBER INFORMATION**

**Please print all information (other than signatures), as applicable, in the space provided below**

<b>Roivant Sciences Ltd.</b>
(Name of Subscriber)
Account Reference (if applicable): _____
By: /s/Marianne L. Romeo
Authorized Signature
Head, Global Transactions & Risk Management
(Official Capacity or Title - if the Subscriber is not an individual)
(Name of individual whose signature appears above if different than the name of the subscriber printed above.)
Suite 1, 3rd Floor, 11-12 St. James Square
(Subscriber's Address, including Municipality and State)
London, SW1Y 4LB, United Kingdom
info@roivant.com
(Telephone Number) (Email Address)

<b>Number of Tier 1 Preferred Shares: 500,000</b>
<b>Tier 1 Subscription Amount: \$50,000,000</b> <i>(calculated as number of Tier 1 Preferred Shares divided by Subscription Price)</i>
<b>Number of Tier 2 Preferred Shares: 664,000</b>
<b>Tier 2 Subscription Amount: \$66,400,000</b> <i>(calculated as number of Tier 2 Preferred Shares divided by Subscription Price)</i>

<b>Account Registration Information:</b>
(Name)
(Account Reference, if applicable)
(Address, including Postal Code)

<b>Delivery Instructions as set forth below:</b>
(Name)
(Account Reference, if applicable) (Address)
(Contact Name)(Telephone Number)
Number and kind of securities of the Company held, directly or indirectly, if any: 16,013,540 Common Shares

## TERMS AND CONDITIONS OF SUBSCRIPTION FOR PREFERRED SHARES

### ARTICLE 1 - INTERPRETATION

#### 1.1 Definitions

Whenever used in this Subscription Agreement, unless there is something in the subject matter or context inconsistent therewith, the following words and phrases shall have the respective meanings ascribed to them as follows:

**Amending Agreements** means, collectively, the Governance Agreement Amending Agreement, the Lock-Up Amending Agreement, the Registration Rights Amending Agreement and the Standstill Amending Agreement.

**Arbutus Inc.** means Arbutus Biopharma, Inc., a company incorporated pursuant to the laws of Delaware.

**Articles of Amendment** means the amendment of the articles of the Company to reflect, *inter alia*, the Subscriber Board Designation Right.

**Business Day** means a day other than a Saturday, Sunday or any other day on which the principal chartered banks located in Vancouver, British Columbia are not open for business.

**Code** means the Internal Revenue Code of 1986, as amended.

**Common Shares** means the common shares in the capital of the Company.

**Company** shall have the meaning ascribed to such term on the face page of this Subscription Agreement and includes any successor corporation to or of the Company.

**Company Board** means the board of directors of the Company as the same is constituted from time to time.

**Company Circular** means the notice of the Company Meeting to be sent to Shareholders and the management information circular to be prepared in connection with the Company Meeting together with any amendments thereto or supplements thereof, and any other information circular or proxy statement which may be prepared in connection with the Company Meeting.

**Company IP** means the Proprietary Rights owned by the Company disclosed by the Company in writing to the Subscriber concurrently herewith and identified as "Company IP".

**Company Meeting** means the special meeting of Shareholders to be held as soon as reasonably practicable to consider and seek, among other things, the Company Shareholder Approval, and any adjournment or postponements thereof held in accordance with the Company's constating documents and Securities Laws.

**Company Options** means, at any time, stock options to acquire Common Shares granted under the Company's Share and Omnibus Incentive Plans and similar plans, or otherwise, which are, at such time, outstanding and unexercised, whether or not vested.

**Company Shareholder Approval** means: (i) a special resolution of Shareholders approving the Articles of Amendment; (ii) the "minority approval" of the MI 61-101 Resolution, in accordance with MI 61-101; and (iii) if required by NASDAQ, the approval by the holders of Common Shares to the issuance by the Company of the Tier 2 Preferred Shares under the applicable NASDAQ rules, in each case to be sought at the Company Meeting.

**Employee Benefit Plan** has the meaning ascribed thereto in Section 5.1(iii).

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**Environmental Approvals** means all permits, certificates, authorizations, approvals, orders, consents, instructions, registrations, directions, decisions, decrees, conditions, notifications, demands, filings, licenses or permits whether or not having the force of Law, issued by any Governmental Entity pursuant to any Environmental Laws.

**Environmental Laws** means all applicable Laws whether foreign or domestic, including applicable common law, relating to the protection of the environment and employee and public health and safety, and for the regulation of contaminants, pollutants, waste, toxic and hazardous substances and includes Environmental Approvals.

**ERISA** has the meaning ascribed thereto in Section 5.1(iii).

**ERISA Affiliate** has the meaning ascribed thereto in Section 5.1(iii).

**Evaluation Date** has the meaning ascribed thereto in Section 5.1(w).

**Fundamental Company Representations and Warranties** means those representations and warranties of the Company in Sections 5.1(a), 5.1(b), 5.1(c), 5.1(d), 5.1(e), 5.1(f), 5.1(g), 5.1(h), 5.1(j), 5.1(q), 5.1(z), 5.1(aa), 5.1(dd), 5.1(oo), 5.1(qq), 5.1(ss), 5.1(xx), 5.1(yy) and 5.1(ccc).

**Fundamental Subscriber Representations and Warranties** means those representations and warranties of the Purchaser in Sections 6.1(a), 6.1(b), 6.1(e), 6.1(g), 6.1(h) and 6.1(k).

**GAAP** has the meaning ascribed thereto in Section 5.1(r).

**Governance Agreement** means that certain Governance Agreement, dated as of January 11, 2015, by and between the Company and the Subscriber.

**Governance Agreement Amendment** has the meaning ascribed thereto in Section 5.4(g)(ii), as affected by the Governance Agreement Amending Agreement.

**Governance Agreement Amending Agreement** means the amending agreement dated effective as of the Tier 1 Closing Date, in substantially the form attached hereto as Schedule "D".

**Governmental Entity** means any applicable: (i) multinational, federal, provincial, state, regional, municipal, local or other government, governmental or public department, central bank, court, tribunal, arbitral body, commission, board, bureau, stock exchange or agency, whether domestic or foreign, (ii) any subdivision, agency, commission, board or authority of any of the foregoing, or (iii) any quasi governmental or private body exercising any regulatory, expropriation or taxing authority under or for the account of any of the foregoing.

**Independence Standards** means the standards set forth in NASDAQ Marketplace Rule 4200(a)(15) or any successor rule thereto, but not including the requirements for audit committee members set forth in NASDAQ Marketplace Rule 4350(d).

**Laws** means all laws, by-laws, rules, regulations, orders, ordinances, protocols, codes, guidelines, instruments, policies, notices, directions and judgments or other requirements of any Governmental Entity whether foreign or domestic.

**Licensed IP** means the Proprietary Rights wholly-owned or co-owned by any person other than the Company as disclosed by the Company in writing to the Subscriber concurrently herewith and identified as "Licensed IP".

**Licenses** has the meaning ascribed thereto in Section 5.1(gg).

**Lien** means any encumbrance or title defect of whatever kind or nature, regardless of form, whether or not registered or registerable and whether or not consensual or arising by law (statutory or otherwise), including any

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mortgage, lien, charge, pledge or security interest, whether fixed or floating, or any assignment, lease, option, right of pre-emption, privilege, encumbrance, easement, servitude, right of way, restrictive covenant, right of use or any other right or claim of any kind or nature whatever which affects ownership or possession of, or title to, any interest in, or the right to use or occupy such property or assets.

**Lock-Up Amending Agreement** means amended and restated lock-up agreement dated effective as of the Tier 1 Closing Date, in substantially the form attached hereto as Schedule “E”.

**Material Adverse Effect** means, with respect to any entity, any event, circumstance, development, change or effect on the business, operations or capital of such entity that would reasonably be expected to be materially adverse to the condition (financial or otherwise), assets, properties, capital, liabilities (contingent or otherwise), business or operations of such entity and its subsidiaries, on a consolidated basis, except to the extent that such event, circumstance, development, change or effect results from or is caused by: (i) worldwide, national or local conditions or circumstances whether they are economic, political, regulatory or otherwise, including war, armed hostilities, acts of terrorism, emergencies, crises and natural disasters, (ii) changes affecting the worldwide biopharmaceutical industry in general and which does not have a disproportionate effect on such entity as compared to other industry participants, (iii) the announcement of this Subscription Agreement and the Offering contemplated by it, or (iv) any act or omission of such entity taken with the prior consent or at the request of the Subscriber.

**MI 61-101** means Multilateral Instrument 61-101 - *Protection of Minority Security Holders in Special Transactions*.

**MI 61-101 Resolution** means the resolution in respect of (i) the issuance by the Company of the Tier 2 Preferred Shares to be considered at the Company Meeting and (ii) the Articles of Amendment, in substantially the form attached hereto as Schedule “A”.

**NASDAQ** means the NASDAQ Global Market (or its successor); provided, that if the Company moves the principal listing of its Common Shares to the NASDAQ Global Select Market, NASDAQ Capital Market or The New York Stock Exchange (or any of their respective successors), “NASDAQ” shall be deemed to refer to such exchange.

**Offered Shares** means the Preferred Shares offered to the Subscriber under the Offering pursuant to this Subscription Agreement.

**Offering** means the private placement of the Offered Shares.

**Order** means any order, decision, judgment, writ, injunction, decree, award or other determination of any Governmental Entity whether foreign or domestic.

**Parties** mean the Company and the Subscriber, and **Party** means either of them, as the context requires.

**person** means any individual (whether acting as an executor, trustee administrator, legal representative or otherwise), corporation, firm, partnership, sole proprietorship, syndicate, joint venture, trustee, trust, unincorporated organization or association, and pronouns have a similar extended meaning.

**Preferred Shares** shall have the meaning ascribed to such term on the face page of this Subscription Agreement, having such rights and restrictions substantially as set out in Schedule “B” hereto.

**Proprietary Rights** means any intellectual property and the technology used in the course of the Company’s business and which is material to the Company’s business, taken as a whole, including; (i) all inventions (whether patentable or unpatentable and whether or not reduced to practice), all improvements thereto, and all patents and published patent applications, together with all reissue, divisional, continuation or continuation-in-part applications, revisions, extensions and re-examinations thereof, (ii) all trademarks, trade

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dress, logos, trade-names, business names, corporate names and domain names together with all translations, adaptations, derivations and combinations thereof and including all goodwill associated therewith; (iii) all copyrightable works, all copyrights, and all applications, registrations and renewals associated therewith; (iv) all proprietary or confidential information and trade-secrets and know-how, (v) all software; (vi) any copies and tangible embodiments of the foregoing (in whatever form or medium);(vii) all registrations, applications and renewals for any of the intellectual property and the technology referred to above; and (viii) all common law statutory and contractual rights to the intellectual property and the technology referred to above.

**Protiva** means Protiva Biotherapeutics Inc., a company incorporated pursuant to the laws of British Columbia.

**Public Record** means all press releases, forms, reports, schedules, financial statements, management's discussions and analysis of financial conditions and operations, certifications, annual information forms, management information circulars, material change reports and other documents required to be filed by the Company since December 31, 2016 (such forms, reports, schedules, statements, certifications and other documents to include any financial statements or other documents, including any schedules included therein).

**Registration Rights Agreement** means that certain Registration Rights Agreement, dated as of January 11, 2015, by and among the Company and the Shareholders party thereto, as amended on November 2, 2015.

**Registration Rights Amending Agreement** means the amending agreement dated effective as of the Tier 1 Closing Date, in substantially the form attached hereto as Schedule "F".

**Registration Rights Amendment** has the meaning ascribed thereto in Section 5.4(g)(i), as affected by the Registration Rights Amending Agreement.

**Regulation D** means Regulation D promulgated under the U.S. Securities Act.

**SEC** means the United States Securities and Exchange Commission.

**SEC Reports** has the meaning ascribed thereto in Section 5.1(eee).

**Securities Laws** means, as applicable, the securities Laws, regulations, rules, rulings and Orders in each of the provinces of Canada and the federal and state securities laws of the United States, all written instruments, rules, regulations and Orders and applicable policy statements having the force of law of the applicable securities regulatory authorities including, without limitation, the SEC, as well as the policies and rules of NASDAQ.

**Shareholders** means the holders from time to time of Common Shares or Preferred Shares, collectively or individually, as the context requires.

**Standstill Agreement** means the standstill agreement between the Company and the Subscriber dated January 11, 2015.

**Standstill Amending Agreement** means the amending agreement dated effective as of the Tier 1 Closing Date, in substantially the form attached hereto as Schedule "G".

**Subscriber** means the subscriber for the Offered Shares as set out on the face page of this Subscription Agreement.

**Subscriber Board Designation Right** means the right of the Subscriber to nominate (and nominate any replacement should any of its nominees not be able to serve as a director for any reason) (i) three (3) out of seven (7) individuals for election to the Company Board, one (1) of whom shall satisfy the Independence Standards, at each meeting of Shareholders for so long as the Subscriber has a beneficial ownership equal to at least 30% of the outstanding Common Shares; (ii) two (2) out of seven (7) individuals for election to the Company Board at each meeting of Shareholders for so long as the Subscriber has a beneficial ownership equal to at least 20% of the outstanding Common Shares; and (iii) one (1) out of seven (7) individuals for election to

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the Company Board at each meeting of Shareholders for so long as the Subscriber has a beneficial ownership equal to at least 10% of the outstanding Common Shares; provided that the Subscriber's percentage beneficial ownership of Common Shares shall be determined based on the sum of (i) the total number of Common Shares beneficially owned by the Subscriber in the form of Common Shares and (ii) the total number of Common Shares into which the Preferred Shares beneficially owned by the Purchaser are convertible, and outstanding Common Shares shall be determined based on the sum of (x) the number of outstanding Common Shares as of the date of determination and (y) the Underlying Common Shares.

**Subscription Agreement** means this subscription agreement (including any schedules hereto) and any instrument amending this Subscription Agreement.

**Subscription Price** shall have the meaning ascribed to such term on the face page of this Subscription Agreement, being \$100.00 per Preferred Share.

**Subsidiaries** means the Company's wholly-owned subsidiaries as of the date hereof, being Arbutus Inc. and Protiva.

**Tax and Taxes** means all taxes, assessments, charges, dues, duties, rates, fees, imposts, levies and similar charges of any kind lawfully levied, assessed or imposed by any Governmental Entity, including any estimated taxes, deficiency assessments, additions to tax, penalties and interest.

**Tax Returns** means all returns, schedules, elections, declarations, reports, information returns, notices, forms, statements and other documents made, prepared or filed with any taxing authority or required to be made, prepared or filed with any taxing authority relating to Taxes, including any amendments, attachments and schedules with respect to any of the foregoing.

**Tier 1 Closing** shall have the meaning ascribed to such term in Section 4.1.

**Tier 2 Closing** shall have the meaning ascribed to such term in Section 4.4.

**Tier 1 Closing Date** shall have the meaning ascribed to such term in Section 4.1. **Tier 2 Closing Date** shall have the meaning ascribed to such term in Section 4.4. **Tier 1 Closing Time** shall have the meaning ascribed to such term in Section 4.1. **Tier 2 Closing Time** shall have the meaning ascribed to such term in Section 4.4.

**Tier 1 Preferred Shares** has the meaning ascribed to such term on the face page of this Subscription Agreement, being 500,000 Preferred Shares.

**Tier 2 Preferred Shares** has the meaning ascribed to such term on the face page of this Subscription Agreement, being up to a maximum in the aggregate of 664,000 Preferred Shares.

**Tier 1 Subscription Amount** has the meaning ascribed to such term on the face page of this Subscription Agreement.

**Tier 2 Subscription Amount** has the meaning ascribed to such term on the face page of this Subscription Agreement.

**Underlying Common Shares** means the Common Shares that are issuable upon conversion of the Offered Shares.

**United States** means the United States of America, its territories and possessions, any State of the United States and the District of Columbia.

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**U.S. Exchange Act** means the United States Securities Exchange Act of 1934, as amended.

**U.S. Securities Act** means the United States Securities Act of 1933, as amended.

## **1.2 Gender and Number**

Words importing the singular number only shall include the plural and vice versa, words importing the masculine gender shall include the feminine gender and words importing persons shall include firms and corporations and *vice versa*.

## **1.3 Currency**

The symbol “\$” is expressed in United States dollars.

## **1.4 Subdivisions and Headings**

The division of this Subscription Agreement into Articles, Sections, Schedules and other subdivisions and the inclusion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Subscription Agreement. The headings in this Subscription Agreement are not intended to be full or precise descriptions of the text to which they refer. Unless something in the subject matter or context is inconsistent therewith, references herein to an Article, Section, Subsection, paragraph, clause or Schedule are to the applicable article, section, subsection, paragraph, clause or schedule of this Subscription Agreement.

## **ARTICLE 2 - SCHEDULES**

### **2.1 Description of Schedules**

The following are the Schedules attached to and incorporated in this Subscription Agreement by reference and deemed to be a part hereof:

- Schedule “A” - Form of MI 61-101 Resolution
- Schedule “B” - Preferred Share Rights and Restrictions Schedule
- “C” - Opinions of Company’s Counsel
- Schedule “D” - Governance Agreement Amending Agreement
- Schedule “E” - Lock-Up Amending Agreement
- Schedule “F” - Registration Rights Amending Agreement
- Schedule “G” - Standstill Amending Agreement

## **ARTICLE 3- SUBSCRIPTION**

### **3.1 Subscription for Tier 1 Preferred Shares**

- (a) The Subscriber hereby commits, subject only to the satisfaction or written waiver by the Subscriber of the conditions precedent set forth in Section 4.2, to subscribe for and purchase the Tier 1 Preferred Shares from the Company for the Tier 1 Subscription Amount payable as described in Section 3.3(a), which, upon acceptance by the Company, will constitute a binding commitment by the Company, subject only to the satisfaction or written waiver by the Company of the conditions precedent set forth in Section 4.3, to issue to the Subscriber the Tier 1 Preferred Shares, all on the terms and subject to the conditions set out in this Subscription Agreement.
  - (b) The Tier 1 Preferred Shares will be issued and registered in the name of the Subscriber as per the instructions on page 1 of this Subscription Agreement without registration of the Tier 1 Preferred Shares under the U.S. Securities Act or qualified by prospectus under any Securities Law.
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### 3.2 Subscription for Tier 2 Preferred Shares

- (a) The Subscriber hereby commits, subject only to the satisfaction or written waiver by the Subscriber of the conditions precedent set forth in Section 4.5, to subscribe for and purchase the Tier 2 Preferred Shares from the Company for the Tier 2 Subscription Amount payable as described in Section 3.3(b), which, upon acceptance by the Company, will constitute a binding commitment by the Company, subject only to the satisfaction or written waiver by the Company of the conditions precedent set forth in Section 4.6, to issue to the Subscriber the Tier 2 Preferred Shares, all on the terms and subject to the conditions set out in this Subscription Agreement.
- (b) If the conditions for the purchase and sale of the Tier 2 Preferred Shares are satisfied (or waived by the Party entitled to do so), the Tier 2 Preferred Shares will be issued and registered in the name of the Subscriber as per the instructions on page 1 of this Subscription Agreement without registration of the Tier 1 Preferred Shares under the U.S. Securities Act or qualified by prospectus under any Securities Law.

### 3.3 Payment for Preferred Shares

- (a) The Tier 1 Subscription Amount shall be paid at the Tier 1 Closing Time by a direct funds transfer or a wire transfer to the Company arranged with the Company in advance.
- (b) The Tier 2 Subscription Amount shall be paid at the Tier 2 Closing Time by a direct funds transfer or a wire transfer to the Company arranged with the Company in advance.

## ARTICLE 4 - CLOSINGS

### 4.1 Tier 1 Closing

Subject to the receipt of all completed documentation in accordance with Sections 4.2 and 4.3, the delivery and sale of the Tier 1 Preferred Shares will be completed (the **Tier 1 Closing**) at the offices of the Company's counsel, Farris, Vaughn, Wills & Murphy LLP, in Vancouver, British Columbia at 6:30 a.m. (Vancouver time) (the **Tier 1 Closing Time**) on the second (2<sup>nd</sup>) Business Day following the performance and satisfaction of the terms and conditions contained in Sections 4.2 and 4.3 of this Subscription Agreement (the date of such closing, the **Tier 1 Closing Date**), or such other place, date or time as the Company and the Subscriber may agree.

If, prior to or at the Tier 1 Closing Time, the terms and conditions contained in Sections 4.2 and 4.3 of this Subscription Agreement have been complied with to the satisfaction of the Subscriber and the Company, respectively, each acting reasonably, or waived by the Subscriber and the Company, as the case may be, the Subscriber shall deliver to the Company at the Tier 1 Closing Time (i) a direct funds transfer or wire transfer in satisfaction of the Tier 1 Subscription Amount for the Tier 1 Preferred Shares, against delivery by the Company of one or more certificates representing the Tier 1 Preferred Shares registered in the name of the Subscriber and bearing an appropriate legend (as set forth herein) referring to the fact that the Tier 1 Preferred Shares were sold in reliance upon an exemption from (x) registration under the U.S. Securities Act and (y) the prospectus requirement of applicable Securities Law in British Columbia, but otherwise free and clear of all restrictive or other legends or statements or, if the Tier 1 Preferred Shares are entered in a direct registration system, the written notice of such entry; (ii) executed counterparts to the Amending Agreements; and (iv) such other documentation as may be required pursuant to this Subscription Agreement. For certainty, any certificate or notice of entry into a direct registration system shall bear any legends required by the U.S. Securities Act or other Securities Laws, including the legend set forth in Section 6.2(g) hereof.

### 4.2 Subscriber's Conditions to Tier 1 Closing

The Company acknowledges and agrees that the obligations of the Subscriber hereunder are conditional on the accuracy in all material respects of the representations and warranties of the Company contained in this

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Subscription Agreement as of the date of this Subscription Agreement, and as of the Tier 1 Closing Time as if made at and as of the Tier 1 Closing Time (except with respect to representations and warranties which relate to a specific date, in which case such representations and warranties shall be materially accurate as of such date), and the fulfillment of the following additional conditions as soon as reasonably practicable and in any event not later than the Tier 1 Closing Time:

- (a) the Subscriber shall have received a written waiver from the Company of the provisions of the Standstill Agreement that would otherwise prohibit the execution of this Subscription Agreement or the consummation of the transactions contemplated hereby, including the Subscriber's acquisition of the Tier 1 Preferred Shares;
  - (b) the Subscriber having received evidence, in a form satisfactory to the Subscriber and its legal counsel, acting reasonably, of the alteration to the Company's constating documents to reflect the Preferred Shares rights and restrictions substantially as set out in Schedule "B";
  - (c) the Subscriber having received an opinion from the Company's counsel as to the matters set out in Schedule "C";
  - (d) the Subscriber and its legal counsel receiving a certificate from the Company, in form and substance acceptable to the Subscriber and its legal counsel, acting reasonably, dated the Tier 1 Closing Date signed by the Chief Executive Officer or Chief Financial Officer (or such other officer(s) acceptable to the Subscriber) certifying:
    - (i) the constating documents of the Company;
    - (ii) the resolutions of the Company Board and the *ad hoc* independent committee of the Company Board (comprised of all of the members of the Audit Committee of the Company) and any other corporation authorization related to the Offering, the allotment and sale of the Tier 1 Preferred Shares, the reservation of the Underlying Common Shares, the authorization of this Subscription Agreement, the Amending Agreements and the other agreements and transactions contemplated by this Subscription Agreement; and
    - (iii) the incumbency and signatures of signing officers of the Company;
  - (e) the Subscriber and its legal counsel receiving certificates of good standing and/or compliance (or the equivalent) from the Company with respect to the Company and each Subsidiary, in each case dated no earlier than two (2) Business Days prior to the Tier 1 Closing Date;
  - (f) the Subscriber and its legal counsel receiving confirmation from the Company's duly appointed registrar and transfer agent for the Common Shares dated no earlier than two (2) Business Days prior to the Tier 1 Closing Date as to the issued and outstanding Common Shares;
  - (g) all covenants, agreements and conditions contained in this Subscription Agreement to be performed by the Company on or prior to the Tier 1 Closing Date shall have been performed or complied with in all material respects, and the Subscriber and its legal counsel shall have received a certificate from the Company in form and substance acceptable to the Subscriber and its legal counsel, acting reasonably, dated the applicable date signed by the Chief Executive Officer and the Chief Financial Officer of the Company in each case certifying for and on behalf of the Company, as the case may be, and not in their personal capacities, after having made due inquiries, with respect to the following matters:
    - (i) the Company having complied with all the covenants in all material respects (or, if qualified by materiality, in all respects) and satisfied all the terms and conditions of this Subscription Agreement on its part to be complied with and satisfied at or prior to the Tier 1 Closing Time;
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- (ii) there being no Order having the effect of prohibiting the sale of the Tier 1 Preferred Shares or any of the Company's issued securities, and no proceeding for such purpose being pending or, to the Company's knowledge, threatened under any applicable Securities Laws; and
- (iii) the representations and warranties of the Company contained in this Subscription Agreement and in any certificates of the Company delivered pursuant to or in connection with this Subscription Agreement being true and correct in all material respects (or, if qualified by materiality, in all respects) at the Tier 1 Closing Time, with the force and effect as if made on and as at such Tier 1 Closing Time, except for such representations and warranties which are in respect of a specific date in which case such representations and warranties shall be true and correct, in all material respects (or, if qualified by materiality, in all respects), as of such date;
- (h) the Subscriber not having exercised any rights of termination set forth in Sections 8.1 or 8.3 hereof;
- (i) there being no Order having the effect of prohibiting the sale of the Tier 1 Preferred Shares or any of the Company's issued securities, and no proceeding for such purpose being pending or, to the Company's knowledge, threatened under any applicable Securities Laws; and
- (j) the Company having obtained all necessary approvals and consents required for the Company to consummate the transactions contemplated herein to be consummated at the Tier 1 Closing, including from NASDAQ with respect to the listing of the Underlying Common Shares on such exchange, all of which shall be and remain so long as necessary in full force and effect.

#### **4.3 Company's Conditions to Tier 1 Closing**

The Subscriber acknowledges and agrees that the obligations of the Company hereunder are conditional on the accuracy in all material respects of the representations and warranties of the Subscriber contained in this Subscription Agreement as of the date of this Subscription Agreement, and as of the Tier 1 Closing Time as if made at and as of the Tier 1 Closing Time (except with respect to representations and warranties which relate to a specific date, in which case such representations and warranties shall be materially accurate as of such date), and the fulfillment of the following additional conditions as soon as reasonably practicable and in any event not later than the Tier 1 Closing Time:

- (a) the (i) sale of the Tier 1 Preferred Shares by the Company to the Subscriber being exempt from the requirements as to the filing of a prospectus and as to the preparation of an offering memorandum or similar document contained in any applicable Securities Laws or upon the issuance of such Orders, consents or approvals as may be required to permit such sale without the requirement of filing a prospectus or delivering an offering memorandum or similar document and (ii) offer and sale of the Tier 1 Preferred Shares being exempt from the registration requirements of the U.S. Securities Act and applicable Securities Laws;
  - (b) the sale of the Tier 1 Preferred Shares by the Company to the Subscriber being exempt from the formal valuation and minority approval requirements set out in MI 61-101;
  - (c) there being no Order having the effect of prohibiting the sale of the Tier 1 Preferred Shares or any of the Company's issued securities, and no proceeding for such purpose being pending or, to the Company's knowledge, threatened under any applicable Securities Laws;
  - (d) all covenants, agreements and conditions contained in this Subscription Agreement to be performed by the Subscriber on or prior to the Tier 1 Closing Date shall have been performed or complied with in all material respects;
  - (e) the Company not having exercised any rights of termination set forth in Sections 8.2 or 8.3 hereof;
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- (f) the Subscriber having delivered to the Company payment by direct funds transfer or wire transfer in satisfaction of the Tier 1 Subscription Amount for the Tier 1 Preferred Shares and having properly completed, signed and delivered any further documentation as required under the Securities Laws, which the Subscriber covenants and agrees to do on or prior to the Tier 1 Closing Time on the Tier 1 Closing Date upon the prior written request by the Company; and
- (g) the Company having obtained all necessary approvals and consents required for the Company to consummate the transactions contemplated herein to be consummated at the Tier 1 Closing, including from NASDAQ to the extent required with respect to the listing of the Underlying Common Shares on such exchange, all of which shall be and remain so long as necessary in full force and effect.

#### 4.4 Tier 2 Closing

Subject to the receipt of all completed documentation in accordance with Sections 4.5 and 4.6, the delivery and sale of the Tier 2 Preferred Shares will be completed (the **Tier 2 Closing**) at the offices of the Company's counsel, Farris, Vaughn, Wills & Murphy LLP, in Vancouver, British Columbia at 6:30 a.m. (Vancouver time) (the **Tier 2 Closing Time**) on the second (2<sup>nd</sup>) Business Day following the performance and satisfaction of the terms and conditions contained in Sections 4.5 and 4.6 of this Subscription Agreement (the date of such closing, the **Tier 2 Closing Date**), or such other place, date or time as the Company and the Subscriber may agree.

If, prior to or at the Tier 2 Closing Time, the terms and conditions contained in Sections 4.5 and 4.6 of this Subscription Agreement have been complied with to the satisfaction of the Subscriber and the Company, respectively, each acting reasonably, or waived by the Subscriber and the Company, as the case may be, the Subscriber shall deliver to the Company at the Tier 2 Closing Time (i) a direct funds transfer or wire transfer in satisfaction of the Tier 2 Subscription Amount for the Tier 2 Preferred Shares against delivery by the Company of one or more certificates representing the Tier 2 Preferred Shares registered in the name of the Subscriber and bearing an appropriate legend (as set forth herein) referring to the fact that the Tier 2 Preferred Shares were sold in reliance upon an exemption from (x) registration under the U.S. Securities Act and (y) the prospectus requirement of applicable Securities Law in British Columbia, but otherwise free and clear of all restrictive or other legends or statements or, if the Tier 2 Preferred Shares are entered in a direct registration system, the written notice of such entry; and (ii) such other documentation as may be required pursuant to the Subscription Agreement. For certainty, any certificate or notice of entry into a direct registration system shall bear any legends required by the U.S. Securities Act or other Securities Laws, including the legend set forth in Section 6.2(g) hereof.

#### 4.5 Subscriber's Conditions to Tier 2 Closing

The Company acknowledges and agrees that the obligations of the Subscriber hereunder are conditional on the accuracy in all material respects of the Fundamental Company Representations and Warranties as of the date of this Subscription Agreement, and as of the Tier 2 Closing Time as if made at and as of the Tier 2 Closing Time (except with respect to such representations and warranties which relate to a specific date, in which case such representations and warranties shall be materially accurate as of such date), except for any inaccuracy, individually or in the aggregate, that would not result in a Material Adverse Effect on the Company, and the fulfillment of the following additional conditions as soon as reasonably practicable and in any event not later than the Tier 2 Closing Time:

- (a) the Subscriber receiving a written waiver from the Company of the provisions of the Standstill Agreement that would otherwise prohibit the execution of this Subscription Agreement or the consummation of the transactions contemplated hereby, including the Subscriber's acquisition of the Tier 2 Preferred Shares;
  - (b) the Company obtaining the Company Shareholder Approval at the Company Meeting;
  - (c) the Company adopting and filing the Articles of Amendment with the applicable Governmental Entity;
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- (d) the Subscriber receiving an opinion from the Company's counsel as to the matters set out in Schedule "C";
  - (e) the Subscriber and its legal counsel receiving a certificate from the Company, in form and substance acceptable to the Subscriber and its legal counsel, acting reasonably, dated the Tier 2 Closing Date signed by the Chief Executive Officer or Chief Financial Officer (or such other officer(s) acceptable to the Subscriber) certifying:
    - (i) the constating documents of the Company;
    - (ii) the resolutions of the Company Board and the *ad hoc* independent committee of the Company Board (comprised of all of the members of the Audit Committee of the Company) and any other corporation authorization related to the Offering, the allotment and sale of the Tier 2 Preferred Shares, the reservation of the Underlying Common Shares, the authorization of this Subscription Agreement, and the other agreements and transactions contemplated by this Subscription Agreement; and
    - (iii) the incumbency and signatures of signing officers of the Company;
  - (f) the Subscriber and its legal counsel receiving certificates of good standing and/or compliance (or the equivalent) from the Company with respect to the Company and each Subsidiary, in each case dated no earlier than two (2) Business Days prior to the Tier 2 Closing Date;
  - (g) the Subscriber and its legal counsel receiving confirmation from the Company's duly appointed registrar and transfer agent for the Common Shares and Preferred Shares dated no earlier than two (2) Business Days prior to the Tier 2 Closing Date as to the issued and outstanding Common Shares and Preferred Shares;
  - (h) all covenants, agreements and conditions contained in this Subscription Agreement to be performed by the Company on or prior to the Tier 2 Closing Date shall have been performed or complied with in all material respects, and the Subscriber and its legal counsel shall have received a certificate from the Company in form and substance acceptable to the Subscriber and its legal counsel, acting reasonably, dated the applicable date signed by the Chief Executive Officer and the Chief Financial Officer of the Company in each case certifying for and on behalf of the Company, as the case may be, and not in their personal capacities, after having made due inquiries, with respect to the following matters:
    - (i) the Company having complied with all the covenants in all material respects (or, if qualified by materiality, in all respects) and satisfied all the terms and conditions of this Subscription Agreement on its part to be complied with and satisfied at or prior to the Tier 2 Closing Time;
    - (ii) there being no Order having the effect of prohibiting the sale of the Tier 2 Preferred Shares or any of the Company's issued securities, and no proceeding for such purpose being pending or, to the Company's knowledge, threatened under any applicable Securities Laws; and
    - (iii) the Fundamental Company Representations and Warranties contained in this Subscription Agreement and in any certificates of the Company delivered pursuant to or in connection with this Subscription Agreement being true and correct in all material respects (or, if qualified by materiality, in all respects) at the Tier 2 Closing Time, with the force and effect as if made on and as at such Tier 2 Closing Time, except for such representations and warranties which are in respect of a specific date in which case such representations and warranties shall be true and correct, in all material respects (or, if qualified by materiality, in all respects), as of such date, except for any inaccuracy, individually or in the aggregate, that would not result in a Material Adverse Effect on the Company;
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- (i) the Subscriber not having exercised any rights of termination set forth in Sections 8.1 or 8.3 hereof;
- (j) there being no Order having the effect of prohibiting the sale of the Tier 2 Preferred Shares or any of the Company's issued securities, and no proceeding for such purpose being pending or, to the Company's knowledge, threatened under any applicable Securities Laws; and
- (k) the Company having obtained all necessary approvals and consents required for the Company to consummate the transactions contemplated herein to be consummated at the Tier 2 Closing, including from NASDAQ to the extent required with respect to the listing of the Underlying Common Shares on such exchange.

#### **4.6 Company's Conditions to Tier 2 Closing**

The Subscriber acknowledges and agrees that the obligations of the Company hereunder are conditional on the accuracy in all material respects of the Fundamental Subscriber Representations and Warranties as of the date of this Subscription Agreement, and as of the Tier 2 Closing Time as if made at and as of the Tier 2 Closing Time (except with respect to such representations and warranties which relate to a specific date, in which case such representations and warranties shall be materially accurate as of such date), and the fulfillment of the following additional conditions as soon as reasonably practicable and in any event not later than the Tier 2 Closing Time:

- (a) the Company obtaining the Company Shareholder Approval at the Company Meeting;
  - (b) the (i) sale of the Tier 2 Preferred Shares by the Company to the Subscriber being exempt from the requirements as to the filing of a prospectus and as to the preparation of an offering memorandum or similar document contained in any applicable Securities Laws or upon the issuance of such Orders, consents or approvals as may be required to permit such sale without the requirement of filing a prospectus or delivering an offering memorandum or similar document and (ii) offer and sale of the Tier 2 Preferred Shares being exempt from the registration requirements of the U.S. Securities Act and applicable Securities Laws;
  - (c) the Company having obtained all necessary approvals and consents required for the Company to consummate the transactions contemplated herein to be consummated at the Tier 2 Closing, including from NASDAQ to the extent required with respect to the listing of the Underlying Common Shares on such exchange;
  - (d) there being no Order having the effect of prohibiting the sale of the Tier 2 Preferred Shares or any of the Company's issued securities, and no proceeding for such purpose being pending or, to the Company's knowledge, threatened under any applicable Securities Laws
  - (e) all covenants, agreements and conditions contained in this Subscription Agreement to be performed by the Parties on or prior to the Tier 2 Closing Date shall have been performed or complied with in all material respects;
  - (f) the Company not having exercised any rights of termination set forth in Sections 8.2 or 8.3 hereof; and
  - (g) the Subscriber having delivered to the Company payment by direct funds transfer or wire transfer in satisfaction of the Tier 2 Subscription Amount for the Tier 2 Preferred Shares and having properly completed, signed and delivered any further documentation as required under the Securities Laws, which the Subscriber covenants and agrees to do on or prior to the Tier 2 Closing Time on the Tier 2 Closing Date upon the prior written request by the Company.
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## ARTICLE 5 - ACKNOWLEDGEMENTS, REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY

### 5.1 Representations and Warranties of the Company

The Company hereby represents and warrants to the Subscriber as follows, with effect as of the date hereof and as of the Tier 1 Closing Time and, if applicable and only with respect to the Fundamental Company Representations and Warranties, the Tier 2 Closing, and acknowledges that the Subscriber is relying on such representations and warranties in connection with the transactions contemplated herein:

- (a) the Company and each Subsidiary is duly organized and validly existing under the Laws of their respective jurisdictions of incorporation, amalgamation, arrangement or continuance, and the Company and the Subsidiaries are in good standing with the corporate governmental authorities of such jurisdictions with respect to the filing of annual returns and such other filings as are necessary to maintain their corporate existence and that each of the Company and the Subsidiaries has full corporate power to conduct its business as such business is now being conducted;
  - (b) the securities of the Subsidiaries are held directly by the Company as set out in the Company's Public Record, free and clear of all Liens and the Company is entitled to the full beneficial ownership of all such shares in the Subsidiaries. All of such shares in the capital of the Subsidiaries have been duly authorized and validly issued and are outstanding as fully paid shares and no person, other than the Company has any right, agreement or option, present or future, contingent or absolute, or any right capable of becoming a right, agreement or option, for the purchase from the Company of any interest in any of such shares or for the issue or allotment of any unissued shares in the capital of the Subsidiaries or any other security convertible into or exchangeable for any such shares;
  - (c) the Company and each of the Subsidiaries is, in all material respects, conducting its business in compliance with all applicable Laws, rules and regulations of each jurisdiction in which its business is carried on and each is licensed, registered or qualified in all jurisdictions in which it is required to be licensed, registered or qualified and all such licenses, registrations and qualifications are valid, subsisting and in good standing and neither the Company nor any of the Subsidiaries has received a notice of non-compliance, or knows of, or has reasonable grounds to know of, any facts that could give rise to a notice of non-compliance with any such Laws, rules, regulations, licenses, registrations and qualifications which could have a Material Adverse Effect on the Company or any of the Subsidiaries;
  - (d) the Company has the requisite power and authority to enter into and perform its obligations under the Subscription Agreement and to issue the Offered Shares in accordance with the terms hereof, and the execution and delivery of this Subscription Agreement and the performance by the Company of its obligations hereunder and the transactions contemplated hereby, including the issuance of the Offered Shares, have been duly authorized by all necessary corporate action of the Company (except that the consummation of the Tier 2 Closing requires receipt of the Company Shareholder Approval at the Company Meeting) and this Subscription Agreement has been duly executed and delivered by the Company and constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, provided that enforcement thereof may be limited by Laws affecting creditors' rights generally;
  - (e) other than the Company Shareholder Approval, no vote or consent of the holders of any class or series of capital stock of the Company or any of its affiliates is necessary to approve this Subscription Agreement or the transactions contemplated hereby and shareholder approval is not required under NASDAQ Listing Rule 5635;
  - (f) the execution and delivery of this Subscription Agreement and the fulfillment of the terms hereof by the Company and the issuance, sale and delivery of the Offered Shares do not and will not require the consent, approval, authorization, registration or qualification of or with any Governmental Entity, stock
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exchange, securities regulatory authority, or other third party, except: (i) such as will have been timely obtained prior to the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time; or (ii) in the case of post-closing filings, as will be made or obtained within the times prescribed by applicable Securities Laws;

- (g) neither the Company nor any of the Subsidiaries is in default or breach of, and the execution and delivery of this Subscription Agreement, the fulfillment of the terms hereof by the Company and the issuance, sale and delivery of the Offered Shares, do not and will not result in a breach of or constitute a default under, and do not and will not create a state of facts which, after notice or lapse of time or both, will result in a breach of or constitute a default under, and do not and will not conflict with the notice of articles or articles (or equivalent documents) of the Company or its Subsidiaries, any resolutions of the shareholders or directors of the Company or its Subsidiaries, the terms of any material agreement, or any Order, statute, rule or regulation applicable to any of them including applicable Securities Laws, which breach or default has had or would reasonably be expected to have a Material Adverse Effect on the Company;
  - (h) all necessary corporate action will have been taken to validly create, authorize, reserve and issue the Offered Shares and, upon payment by the Subscriber of the aggregate Subscription Amount, will, when issued, be validly issued as fully paid and non-assessable Preferred Shares in the capital of the Company and free of any Liens, rights of first refusal or any kind of transfer restrictions other than as required by applicable Securities Laws and the holder of such Offered Shares shall be entitled to all rights afforded to a holder of Preferred Shares;
  - (i) the authorized capital of the Company consists of an unlimited number of Common Shares and an unlimited number of Preferred Shares, of which, as of the close of business on September 29, 2017, 55,026,995 Common Shares and no Preferred Shares were outstanding as fully paid and non-assessable shares of the Company;
  - (j) other than as disclosed in the Company's Public Record, there are no outstanding options, warrants, rights (including conversion or pre-emptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from the Company any Common Shares or Preferred Shares, or any securities convertible into or exchangeable for Common Shares, Preferred Shares or any other equity interests;
  - (k) CST Trust Company, at its principal office in Vancouver, British Columbia, is the duly appointed registrar and transfer agent for the Common Shares and Preferred Shares of the Company;
  - (l) the Common Shares are registered pursuant to Section 12(b) of the U.S. Exchange Act and listed for trading on NASDAQ, and, except for such listing, no securities of the Company are listed on any other stock or securities exchange or market or registered under any Securities Laws. No delisting, suspension of trading or cease trading order with respect to any securities of the Company is pending or, to the knowledge of the Company, threatened in writing;
  - (m) to the knowledge of the Company, as of the date of this Subscription Agreement, no inquiry, review or investigation (formal or informal) of the Company by any securities commission or similar regulatory authority under applicable Securities Laws, or NASDAQ is in effect or ongoing or reasonably expected to be implemented or undertaken;
  - (n) the Company is a "reporting issuer" in each of the provinces of Canada;
  - (o) no order ceasing or suspending trading in the securities of the Company or prohibiting the sale of the Offered Shares has been issued by any regulatory authority and is continuing in effect and no proceedings for that purpose have been instituted or are pending or, to the knowledge of Company, contemplated or threatened by any regulatory authority;
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- (p) other than as disclosed in the Company's Public Record, no person now has any agreement or option or right or privilege (whether at Law, pre-emptive or contractual) capable of becoming an agreement for the purchase, subscription or issuance of, or conversion into, any unissued shares, securities, warrants or convertible obligations of any nature of the Company or any of the Subsidiaries;
  - (q) since December 31, 2016, other than as disclosed in the Public Record or by the Company in writing to the Subscriber:
    - (i) there has not been any material change in the assets, liabilities, obligations (absolute, accrued, contingent or otherwise), business, condition (financial or otherwise) or results of operations of the Company and the Subsidiaries, on a consolidated basis;
    - (ii) there has not been any material change in the capital stock or long-term debt of the Company and the Subsidiaries, on a consolidated basis; and
    - (iii) the Company and the Subsidiaries have carried on their respective businesses in the ordinary course;
  - (r) as of their respective dates, the financial statements of the Company included in the SEC Reports (as defined below) complied in all material respects with applicable accounting requirements and the published rules and regulations of the SEC or other applicable rules and regulations with respect thereto. Such financial statements have been prepared in accordance with United States generally accepted accounting principles (**GAAP**) applied on a consistent basis during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes or may be condensed or summary statements), and fairly present in all material respects the consolidated financial position of the Company as of the dates thereof and the results of operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments);
  - (s) there are no material off-balance sheet transactions, arrangements or obligations (including contingent obligations) of the Company or the Subsidiaries with unconsolidated entities or other persons that have had or would reasonably be expected to have a Material Adverse Effect on the Company;
  - (t) the Company and each Subsidiary maintains a system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the U.S. Exchange Act) which is designed to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences;
  - (u) to the knowledge of the Company, neither the Company nor any of the Subsidiaries nor the Company's independent registered accountant has identified or been made aware of: (i) any significant deficiency or material weakness in the design or operation of internal control over financial reporting utilized by the Company; (ii) any material illegal act or fraud related to the business of the Company that involves the Company's management or other employees; or (iii) any material claim or allegation regarding any of the foregoing;
  - (v) the Company has established disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the U.S. Exchange Act) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the U.S. Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC rules and forms;
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- (w) the Company's certifying officers have evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by the Company's most recently filed periodic report under the U.S. Exchange Act (such date, the **Evaluation Date**);
  - (x) the Company presented in its most recently filed annual report on Form 10-K or quarterly report on Form 10-Q, as applicable, under the U.S. Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date;
  - (y) since the Evaluation Date, there have been no changes in the Company's internal control over financial reporting (as such term is defined in the U.S. Exchange Act) that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting;
  - (z) neither the Company nor any Subsidiary is insolvent and is able to meet all of its financial liabilities as they become due and no winding-up, liquidation, dissolution or bankruptcy proceedings have been commenced or are being commenced or contemplated by the Company or any Subsidiary, and no merger, consolidation, amalgamation, sale of all or substantially all of the assets or sale of the business of the Company or any of its Subsidiaries have been commenced or are being commenced or contemplated by the Company or any of its Subsidiaries and neither the Company nor any Subsidiary has knowledge of any such proceedings or transactions having been commenced or being contemplated in respect of the Company or any of its Subsidiaries by any other party;
- (aa) other than as disclosed in the Company's Public Record, there are no actions, suits, proceedings, inquiries or investigations existing, or to the best of the Company's knowledge, pending or threatened against or adversely affecting the Company or its Subsidiaries or any predecessor company or to which any of the property or assets thereof is subject, at Law or equity, or before or by any court, federal, provincial, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, which may in any way materially adversely affect the condition (financial or otherwise), property, assets, operations or business of the Company or its Subsidiaries or their ability to perform the obligations thereof and neither the Company nor any of its Subsidiaries is subject to any Order, rule, policy or regulation of any Governmental Entity, which, either separately or in the aggregate, have had or would reasonably be expected to have a Material Adverse Effect on the Company, or the ability of the Company to perform its obligations pursuant hereto;
- (bb) neither the Company nor any of the Subsidiaries, nor to the best of the Company's knowledge, any other person, is in default in the observance or performance of any term, covenant or obligation to be performed by the Company or the Subsidiaries or such other person, as applicable, under any material agreement to which the Company or a Subsidiary is a party or otherwise bound, and all such material agreements are in good standing, and no event has occurred which with notice or lapse of time or both would constitute such a default thereunder by the Company, any Subsidiary or any other party;
- (cc) there is no person acting or purporting to act at the request of the Company who is entitled to any brokerage, agency or other fiscal advisory or similar fee in connection with the Offering, other than as disclosed concurrently herewith by the Company in writing to the Subscriber;
- (dd) the information and statements set forth in the Company's Public Record were, as of the date filed, in compliance in all material respects with the Securities Laws and did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading;
- (ee) there is no "material change" (as defined in applicable Securities Laws) relating to the Company which has occurred and with respect to which the requisite material change report has not been filed with the applicable securities regulatory authority, nor has the Company filed any confidential material change reports with any securities regulatory authority that are still maintained on a confidential basis;
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- (ff) except as qualified in the Company's Public Record, the Company and the Subsidiaries are the absolute legal and beneficial owners of and have good and marketable title to, all of the material property or assets thereof as described in the Company's Public Record, such material properties and assets are free of all Liens and no other property rights are necessary for the conduct of the business of the Company and the Subsidiaries as currently conducted or currently contemplated to be conducted; the Company knows of no claim or basis for any claim that might or could materially adversely affect the right of the Company or the Subsidiaries to use, transfer or otherwise exploit such property rights; and, except as disclosed in the Company's Public Record, neither the Company nor any Subsidiary has any responsibility or obligation to pay any commission, royalty, license fee or similar payment to any person with respect to the property rights thereof;
- (gg) the Company holds all requisite licences, registrations, qualifications, permits and consents necessary or appropriate for carrying on its respective business as currently carried on (collectively, the **Licenses**), except where the failure to hold such Licenses would not be reasonably expected to have a Material Adverse Effect on the Company, and (A) all such Licenses are valid and subsisting and in good standing in all material respects and (B) each of the Company and the Subsidiaries are in compliance with all terms of such Licenses and have not received a notice of non-compliance, or know of, or have reasonable grounds to know of, any facts that would give rise to a notice of non-compliance with any such Licenses, other than as disclosed by the Company in writing to the Subscriber concurrently herewith;
- (hh) neither the Company nor any Subsidiary is a party to or bound by any non-competition agreement or any other agreement, obligation or Order that purports to (A) limit the manner or the localities in which all or any material portion of the business of the Company or such Subsidiary is conducted, (B) limit any business practice of the Company or the Subsidiary in any material respect, or (C) restrict any acquisition or disposition of any property by the Company or the Subsidiary in any material respect;
- (ii) to the knowledge of the Company, it is not aware of any legislation, or proposed legislation published by a Governmental Entity, which it anticipates will materially and adversely affect the business, affairs, operations, assets, liabilities (contingent otherwise) or prospects of the Company or any Subsidiary;
- (jj) except as would not reasonably be expected to have a Material Adverse Effect on the Company or a Subsidiary, all rentals, payments and obligations, and other payments due or payable on or prior to the date hereof under or with respect to the assets of the Company and the Subsidiary have been properly and timely paid;
- (kk) the Company's disclosure concurrently herewith of Proprietary Rights identified as "Company IP" contains a true and complete list of all the patents owned by the Company, to the Company's knowledge. The Company has the right to use and exploit the Company IP, except as disclosed by the Company in writing to the Subscriber concurrently herewith, as such Company IP is used as of the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time or will be used in the conduct of Company's business, and each contract with respect to the Company IP is valid and subsisting and in good standing and there is no default thereunder by the Company, or to the Company's knowledge by any seller or grantor;
- (ll) the Company is the sole legal and beneficial owner of, has good and marketable title to, and owns all right, title and interest in all the Company IP free and clear of all Liens. The Company has not assigned, licensed or otherwise conveyed any of the Company IP to any third party, except as disclosed by the Company in writing to the Subscriber concurrently herewith;
- (mm) the Company's disclosure concurrently herewith of Proprietary Rights identified "Licensed IP" contains a true and complete list of all Licensed IP licensed to the Company. The Company has the right to use and exploit the Licensed IP, as such Licensed IP is used in the conduct of the Company's business as of the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time, and each contract with respect to the
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Licensed IP is valid and subsisting and in good standing and there is no default thereunder by the Company or, to the Company's knowledge, by any licensor;

- (nn) the Proprietary Rights used by the Company in its business are in full force and effect and have not been used, enforced or not enforced in a manner that would result in their abandonment, cancellation or unenforceability. There is no claim existing or, to the Company's knowledge threatened alleging adverse ownership, invalidity or other opposition to, or any conflict with, any of the Proprietary Rights;
  - (oo) to the Company's knowledge, (A) the Company has not received any notice or claim (whether written, oral or otherwise) challenging the Company's ownership of or right to use any Proprietary Rights or suggesting that any other person has any claim of legal or beneficial ownership or other claim or interest with respect thereto and (B) there is no reasonable basis for any claim that any person other than the Company has any claim of legal or beneficial ownership or other claim or interest in any of the Proprietary Rights;
  - (pp) other than as disclosed by the Company in writing to the Subscriber concurrently herewith, the Proprietary Rights of the Company and the Subsidiaries and the Proprietary Rights used by the Company are sufficient to conduct its business as presently conducted or anticipated to be conducted. No consent of any person is necessary to make, use, reproduce, license, sell, modify, update, enhance or otherwise exploit any Company IP, other than Company IP licensed on a non-exclusive basis, and none of the Company IP comprises an improvement to any Licensed IP that would give any person any rights to the Company IP, including, without limitation, rights to license the Company IP;
  - (qq) to the Company's knowledge, no third party has misappropriated, or is misappropriating, or is threatening to misappropriate, any rights of the Company in or to any Proprietary Rights and no third party's commercialized product infringes any rights of the Company in or to any Proprietary Rights;
  - (rr) the Company and each of its Subsidiaries has used commercially reasonable efforts (including measures to protect secrecy and confidentiality, where appropriate) to protect its Proprietary Rights and confidential information. Without limiting the generality of the foregoing, to the extent that any of the Company IP is licensed or disclosed to a third party or any third party has access to such the Company IP (including but not limited to any employee, officer, shareholder, consultant, systems-integrator, distributor or other customer of the Company), the Company has entered into a valid and enforceable written agreement which contains terms and conditions prohibiting the unauthorized use, disclosure, reverse engineering or transfer of such the Company IP by such third party. All such agreements are in full force and effect and no such third party, to the Company's knowledge, is in default of its obligations thereunder;
  - (ss) the Company has taken or will take all commercially reasonable steps to obtain the approval of NASDAQ to the extent required to list the Offered Shares and has complied with all other requirements of NASDAQ and requirements of the Securities Laws applicable to the offer and sale of the Offered Shares as contemplated herein required to be taken or complied with by it prior to the Tier 1 Closing Date and, if applicable, the Tier 2 Closing Date, as the case may be;
  - (tt) the Company has not received any notice of or been prosecuted for an offence alleging violation of or non-compliance with any Environmental Law, and has not settled any allegation of violation or non-compliance short of prosecution. The Company is not aware of any Orders relating to environmental matters requiring any work, repairs, construction or capital expenditures to be made with respect to the business or any property, facilities or assets (whether currently owned, leased, occupied, controlled or licensed or owned, leased, occupied, controlled or licensed at any time prior to the date hereof) of the Company;
  - (uu) the Company, its Subsidiaries and, to the knowledge of the Company, if applicable, any predecessor company to the Company or its Subsidiaries, have not received any notice from a Governmental Entity
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relating to environmental matters that the Company's business or that the operation of any of the Company's property, facilities or other assets is in violation of any Environmental Law or any Environmental Approval or that the Company is responsible (or potentially responsible) for the clean up of any hazardous substances at, on or beneath any of its property, facilities or other assets (whether currently owned, leased, occupied, managed, controlled or licensed, or owned, leased, occupied, managed, controlled or licensed at any time prior to the date hereof), or at, on or beneath any other land or in connection with any waste or contamination migration to or from any of the Company's property, facilities or other assets;

- (vv) the Company and each of its Subsidiaries has complied in all material respects and will comply in all material respects with the requirements of all applicable corporate Laws (including the provisions of the Sarbanes-Oxley Act of 2002 which are applicable to it) and Securities Laws, including without limitation, the Securities Laws in relation to the distribution of its securities and in all matters relating to the Offering;
  - (ww) the Company and its Subsidiaries, as applicable, have filed all federal, provincial, local and non-U.S. Tax Returns that are required to be filed, or have requested extensions thereof, and have paid all Taxes required to be paid by each of them and any other assessment, fine or penalty levied against each of them, to the extent that any of the foregoing is due and payable, except for such assessments, fines and penalties which are currently being contested in good faith and for which adequate reserves have been established in accordance with GAAP. Such Tax Returns are true, correct and complete in all material respects, and accurately reflect all material liability for Taxes of the Company and its Subsidiaries for the periods covered thereby;
  - (xx) the Company and its Subsidiaries, if applicable, have established on their books and records reserves which are adequate for the payment of all Taxes not yet due and payable, and there are no Liens for Taxes on the assets of the Company except for Taxes not yet due;
  - (yy) no claim has ever been made by a Governmental Entity in a jurisdiction where neither the Company nor any of its Subsidiaries files Tax Returns that the Company or any of its Subsidiaries is or may be subject to Tax by, or may be required to file any Tax Returns in, that jurisdiction that has not been resolved;
  - (zz) other than as disclosed by the Company in writing to the Subscriber, there are no pending audits or examinations against the Company or any of its Subsidiaries by any Governmental Entity with respect to Taxes, and there are no claims that have been asserted against the Company or any of its Subsidiaries which, if determined adversely, would result in the assertion by a Governmental Entity of any deficiency that have had or would reasonably be expected to have an adverse effect on the Tax liabilities of the Company or any of its Subsidiaries;
  - (aaa) neither the Company nor any of its Subsidiaries was a passive foreign investment company within the meaning of Section 1297 of the Code in respect of the taxation year ended December 31, 2016;
  - (bbb) the corporate records and minute books of the Company contain copies of all material proceedings of the shareholders, the Company Board and all committees of the Company Board and there have been no other meetings, resolutions or proceedings of the shareholders, the Company Board or any committees of the Company Board not reflected in such minute books and other records. The corporate records and minute books of the Company have been maintained in accordance with all applicable Laws and are complete and accurate in all material respects, except where such incompleteness or inaccuracy would not reasonably be expected to have a Material Adverse Effect on the Company. Financial books and records and accounts of the Company: (i) have been maintained in accordance with good business practices on a basis consistent with prior years and past practice; (ii) stated in reasonable detail and accurately and fairly reflect in all material respects the Offering; and (iii) accurately and fairly reflect in all material respects the basis for the consolidated financial statements of the Company;
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- (ccc) the Company and each of its Subsidiaries has conducted and is conducting its business in compliance with all, and is not in violation of any, applicable Laws of each jurisdiction in which it carries on business or holds assets, other than such non-compliance or violations that would not, individually or in the aggregate, be reasonably expected to have a Material Adverse Effect on the Company;
- (ddd) the Company is not registered or required to be registered as an "investment company" under the U.S. Investment Company Act of 1940, as amended;
- (eee) the Company has filed all reports required to be filed by it under the U.S. Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the twelve months preceding the date hereof (the foregoing materials (together with any materials filed by the Company under the U.S. Exchange Act, whether or not required), collectively referred to herein as the **SEC Reports**) and the SEC Reports did not contain any untrue statement of a material fact or omit to state any material fact required to be stated there in or necessary in order to make the statements made therein, in light of the circumstances in which they were made, not misleading;
- (fff) neither the Company or any of its affiliates, nor any person acting on its or their behalf has engaged or will engage in any form of "general solicitation" or "general advertising" (as such terms are defined in Rule 503(c) of Regulation D) in the United States in connection with the offer and sale of the Offered Shares;
- (ggg) the Company has not for a period of six months prior to the date hereof sold, offered for sale or solicited any offer to buy any of its securities in a manner that would be integrated with the offer and sale of the Offered Shares and would cause the exemption from registration set forth in Section 4(a) (2) of the U.S. Securities Act to become unavailable for the offer and sale of the Offered Shares pursuant hereto;
- (hhh) the Company is eligible to register the resale of the Offered Shares by the Subscriber using Form S-3 promulgated under the U.S. Securities Act, or any similar short-form registration statement that may be available at such time under the U.S. Securities Act;
- (iii) with respect to each "employee benefit plan" (as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (**ERISA**)), whether or not subject to ERISA, maintained or contributed to by the Company or its Subsidiaries or pursuant to which the Company or any such Subsidiary or any organization (an **ERISA Affiliate**) which, together with the Company and/or any such Subsidiary, would be treated as a "single employer" within the meaning of the Code, may have a liability (each, an **Employee Benefit Plan**), (i) each Employee Benefit Plan has been established and maintained in compliance with its terms and the requirements of all applicable Laws (including, without limitation, ERISA and the Code), except for any noncompliance that does not and would not result, individually or in the aggregate, in a material liability of the Company or its Subsidiaries, and all contributions and payments required to be made under any Employee Plan or related agreement have been made in a timely fashion or has been reflected on the most recent balance sheet filed prior to the date hereof or accrued in the accounting records of the Company and its Subsidiaries; (ii) there are no unfunded obligations of the Company or any of its Subsidiaries under any Employee Benefit Plan; and (iii) each Employee Benefit Plan which is intended to be "qualified" within the meaning of Section 401(a) of the Code has received a favorable determination letter from the Internal Revenue Service covering all tax law changes or is comprised of a master or prototype plan that has received a favorable opinion letter from the Internal Revenue Service, and, to the Company's knowledge, no event has occurred and no condition exists which could reasonably be expected to result in the revocation of any such determination letter or opinion letter. None of the Company, any Subsidiary of the Company or any ERISA Affiliate currently maintains or contributes to, or has at any time maintained or contributed to or been obligated to contribute to, any plan, program or arrangement covered by Title IV of ERISA or subject to Section 412 of the Code or Section 302 of ERISA;
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- (jjj) neither the Company nor any of its Subsidiaries is a party to, bound by, negotiating or required to negotiate any collective bargaining agreement or other agreement with a labor union or other labor organization. No employees of the Company or any of its Subsidiaries are represented by any labor union or other labor organization. There are no activities or proceedings of any labor union or other labor organization to organize any employees of the Company or any of its Subsidiaries and no demand for recognition or certification as the exclusive bargaining representative of any employees has been made by or on behalf of any labor union or other labor organization. There are no pending or, to the knowledge of the Company, threatened, and, in the three year period prior to the date hereof, there have been no, strikes, lockouts, union organization activities (including, but not limited to, union organization campaigns or requests for representation), pickets, slowdowns, stoppages, material grievances or collective labor disputes or similar activity in respect of the business of the Company or its Subsidiaries that may, individually or in the aggregate, interfere in any material respect with the respective business activities of the Company or any of its Subsidiaries. The Company and each of its Subsidiaries are not engaged in and, in the three year period prior to the date hereof, have not engaged in any unfair labor practice that has resulted or could reasonably be expected to result, individually or in the aggregate, in any material liability to the Company or any of its Subsidiaries;
- (kkk) the Company and each of its Subsidiaries is, and, in the three years prior to the date hereof has been, in compliance in all material respects with all applicable Laws respecting labor, employment, fair employment practices (including equal employment opportunity laws), terms and conditions of employment, classification of employees, workers' compensation, occupational safety and health, immigration, affirmative action, employee and data privacy, plant closings, and wages and hours. There is no pending or, to the knowledge of the Company, threatened charge, complaint, arbitration, audit or investigation brought by or on behalf of, or otherwise involving, any current or former employee, any person alleged to be a current or former employee, any applicant for employment, or any class of the foregoing, or any Governmental Entity, that involve the labor or employment relations and practices of the Company or any of its Subsidiaries that could reasonably be expected to result, individually or in the aggregate, in any material liability to the Company or any of its Subsidiaries;
- (lll) neither the execution and delivery of this Subscription Agreement, shareholder (at the Company Meeting or otherwise) or other approval of this Subscription Agreement nor the consummation of the transactions contemplated hereby could, either alone or in combination with another event, (i) entitle any employee, director, officer or independent contractor of the Company or any of its Subsidiaries to severance pay or any material increase in severance pay, (ii) accelerate the time of payment or vesting, or materially increase the amount of compensation due to any such employee, director, officer or independent contractor, (iii) directly or indirectly cause the Company to transfer or set aside any assets to fund any material benefits under any Employee Benefit Plan, (iv) otherwise give rise to any material liability under any Employee Benefit Plan, (v) limit or restrict the right to merge, materially amend, terminate or transfer the assets of any Employee Benefit Plan on or following the later to occur of the Tier 1 Closing and the Tier 2 Closing, (vi) require a "gross-up," indemnification for, or payment to any individual for any taxes imposed under Section 409A or Section 4999 of the Code or any other tax, or (vii) result in the payment of any amount that could, individually or in combination with any other such payment, constitute an "excess parachute payment" as defined in Section 280G(b)(1) of the Code;
- (mmm) the Company is a "foreign issuer" as defined in 16 C.F.R. §801.1(e)(2)(ii); and
- (nnn) the Company and the Subsidiaries (i) do not have assets located in the United States having an aggregate total value of over \$80.8 million; and (ii) did not make aggregate sales in or into the United States of over \$80.8 million in their most recent fiscal year.

## 5.2 Covenants of the Company Relating to the Company Meeting

The Company hereby covenants and agrees with the Subscriber as follows:

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- (a) the Company agrees to convene and conduct the Company Meeting for the purpose of obtaining approval of the Company Shareholder Approval and shall not, except as required for quorum purposes, as required by Securities Law, or otherwise as permitted under this Subscription Agreement, adjourn, postpone or cancel (or propose or permit the adjournment, postponement or cancellation of) the Company Meeting without the Subscriber's prior written consent, such consent not to be unreasonably withheld or delayed;
  - (b) as promptly as reasonably practicable following execution of this Subscription Agreement, the Company shall prepare the Company Circular, together with any other documents required by applicable Securities Laws, and cause it to be filed in all jurisdictions where the same is required to be filed, in each case, in accordance with all applicable Securities Laws, including, without limitation, Section 14 of the U.S. Exchange Act and Regulation 14A promulgated thereunder. To the extent the SEC reviews the Company Circular, the Company shall each use commercially reasonable efforts to respond as promptly as reasonably practicable to, and resolve all comments received from, the SEC (or its staff) concerning the Company Circular, and to have the Company Circular cleared by the SEC as promptly as reasonably practicable after such filing;
  - (c) as promptly as reasonably practicable after the tenth calendar day following the Company's filing of the preliminary Company Circular with the SEC (if the SEC does not review the Company Circular) or after the preliminary Company Circular is cleared by the SEC (if the SEC reviews the Company Circular), the Company shall cause the definitive Company Circular to be mailed or otherwise delivered to Shareholders and otherwise filed in all jurisdictions where the same is required to be filed, in each case, in accordance with all applicable Securities Laws, including, without limitation, Section 14 of the U.S. Exchange Act and Regulation 14A promulgated thereunder;
  - (d) the Company shall ensure that the Company Circular complies in all material respects with all applicable Securities Laws, including, without limitation, the rules applicable to proxy statements on Schedule 14A promulgated under Regulation 14A under the U.S. Exchange Act, and without limiting the generality of the foregoing, that the Company Circular contains sufficient detail to permit the Shareholders to form a reasoned judgement concerning the matters to be placed before them at the Company Meeting. The Company shall ensure that all proxies solicited by it and any of its representatives in connection with the Company Meeting are solicited in compliance with all applicable Securities Laws, including, without limitation, Section 14 of the U.S. Exchange Act and Regulation 14A promulgated thereunder;
  - (e) the Company shall give the Subscriber and its legal counsel a reasonable opportunity to review and comment on the Company Circular and, in the case of review by the SEC, responses to SEC comments. The Company Circular shall be reasonably satisfactory to the Subscriber, acting reasonably, before it is printed, or distributed to Shareholders or filed with any Governmental Entity, subject to any disclosure obligations imposed on the Company by any Governmental Entity;
  - (f) the Company shall disclose in the Company Circular that the Company Board has determined, after receiving financial and legal advice, that the Offering is in the best interests of Company, and the Company Board recommends that the Shareholders vote in favour of the Company Shareholder Approval;
  - (g) from the date of this Subscription Agreement until the Company Meeting, the Company shall use commercially reasonable efforts to take or otherwise cause to be taken, all actions and to do or otherwise cause to be done, all things necessary to complete as promptly as is practicable the Offering and the other transactions contemplated in this Agreement, and, without limiting the generality of the foregoing, shall publically affirm the recommendation of the Company Board that Shareholders vote in favour of the Company Shareholder Approval (by the prompt issuance of a press release, in form and content satisfactory to the Subscriber, acting reasonably, to that effect) and, when requested by the Subscriber, acting reasonably, publically reaffirm (by the prompt issuance of a press release, in form
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and content satisfactory to the Subscriber, acting reasonably, to that effect) the recommendation of the Company Board that the Shareholders vote in favour of the Company Shareholder Approval;

- (h) the Company shall solicit proxies from Shareholders in favour of the Company Shareholder Approval and against any resolution submitted by any person that is inconsistent with, or which seeks to hinder or delay the Company Shareholder Approval and the completion of the transactions contemplated hereby, including, if so requested by the Purchaser, acting reasonably, using the services of dealers and proxy solicitation services, and take all other actions that are reasonably necessary or desirable to seek the approval of the Company Shareholder Approval;
- (i) the Company will advise the Subscriber from time to time as the Subscriber may reasonably request, and at least on a daily basis on each of the last ten (10) Business Days prior to the date of the Company Meeting, as to the aggregate tally of the proxies received by the Company in respect of the Company Shareholder Approval;
- (j) the Company shall keep the Subscriber informed of any material requests or comments made by any Governmental Entity to the Company in connection with the Company Circular and promptly provide the Subscriber with copies of any correspondence received by the Company from, or sent by the Company to, any Governmental Entity in connection with the Company Circular;
- (k) the Company agrees that no matters shall be brought before the Company Meeting other than the adoption of this Subscription Agreement and any related and customary procedural matters (including a proposal to adjourn the meeting to allow additional solicitation of votes);
- (l) none of the information contained or incorporated by reference in the Company Circular, as of the date it is first mailed to the Shareholders, and at the time of the Company Meeting, will contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not misleading; and
- (m) if at any time any information relating to the Company, its Subsidiaries or any of its or their respective affiliates, directors or officers, is discovered or otherwise learned by the Company, which should be set forth in an amendment or supplement to the Company Circular so that the Company Circular would not include any misstatement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, the Party which discovers such information shall promptly notify the other Party and an appropriate amendment or supplement describing such information shall be promptly filed with the SEC and any other required Governmental Entity and, to the extent required by the Securities Laws, disseminated to the Shareholders.

### **5.3 Covenants of the Company Relating to the Conduct of Business**

The Company hereby covenants and agrees with the Subscriber that at all times from the date of this Subscription Agreement until (i) the Tier 1 Closing Date, (ii) if the Tier 1 Closing has occurred, the Company Meeting or (iii) if the MI 61-101 Resolution is passed, the Tier 2 Closing Date, unless the Subscriber shall otherwise agree in writing or as otherwise expressly (A) contemplated or permitted by this Subscription Agreement, or (B) unanimously approved by the Company Board, it shall and shall cause each of its Subsidiaries to:

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- (a) conduct its business and affairs and maintain its assets, and not take any action except, in the usual, ordinary and regular course of business consistent with past practice and in compliance with applicable Laws;
  - (b) use commercially reasonable efforts to preserve intact its present business organization, assets (including intellectual property) and goodwill, maintain its real property interests (including title to, and leasehold interests in respect of, any real property) in good standing, keep available the services of its directors, officers and senior employees and preserve the current material relationships with suppliers, senior employees, consultants, customers and others having business relationships with it, in each case except in accordance with the usual, ordinary course of business consistent with past practices;
  - (c) duly and timely file all Tax Returns required to be filed by it or any Subsidiaries on or after the date hereof and all such Tax Returns will be true, complete and correct in all respects;
  - (d) timely withhold, collect, remit and pay all Taxes which are to be withheld, collected, remitted or paid by it or any Subsidiaries to the extent due and payable; and
  - (e) not:
    - (i) issue, sell, pledge, lease, dispose of or encumber, or agree to issue, sell, pledge, lease, dispose of or encumber, any Common Shares, Preferred Shares or any securities convertible into Common Shares or Preferred Shares (other than in connection with the exercise, in accordance with their respective terms, of outstanding Company Options) or, except as provided for in this Subscription Agreement, amend, extend or terminate, or agree to amend, extend or terminate, any of the terms of, or agreements governing, any of the outstanding Company Options or other convertible securities;
    - (ii) declare, pay or set aside any dividend or make any distribution (other than dividends or distributions by any Subsidiary to the Company or any other Subsidiary) with respect to the Company or any of its Subsidiaries;
    - (iii) amend or propose to amend its articles or by-laws or other constating documents; or, split, consolidate or reclassify, or propose to split, consolidate or reclassify, any of the Common Shares or Preferred Shares, or undertake or propose to undertake any other capital reorganization or change in the capital structure of the Company or any of its Subsidiaries;
    - (iv) sell, pledge, lease, dispose of, abandon, cancel or encumber any assets, rights or properties, except in the ordinary course of business consistent with past practice;
    - (v) except as contemplated by this Subscription Agreement, acquire or agree to acquire (by merger, amalgamation, acquisition of shares or assets or otherwise) any company, partnership or other business organization or division, or incorporate or form, or agree to incorporate or form, any company, partnership or other business organization or make or agree to make any investment either by purchase of shares or securities, contributions of capital, property transfer or purchase of, any property or assets of any other person, company, partnership or other business organization;
    - (vi) enter into or agree to the terms of any material joint venture or similar agreement, arrangement or relationship;
    - (vii) incur, create, assume, modify or otherwise become liable for, any indebtedness for borrowed money or any other liability or obligation, permit any of the properties or assets of the Company or any of its Subsidiaries to be subject to any Lien or issue any debt securities or assume, guarantee, endorse or otherwise as an accommodation become responsible for the obligation of
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any other person or make any loans, capital contribution, investments or advances except in the ordinary course of business;

- (viii) pay, discharge or satisfy any material claims, liabilities or obligations other than the payment, discharge or satisfaction, in the ordinary course of business consistent with past practice, of liabilities incurred in the ordinary course of business consistent with past practice or of fees, expenses and other charges of the Company Board, advisors and service providers which are or become payable in connection with the Offering;
- (ix) take any action or fail to take any action which action or failure to act would result in the material loss, expiration or surrender of, or the loss of any material benefit under, or reasonably be expected to cause any Governmental Entities to institute proceedings for the suspension, revocation or limitation of rights under, any material authorizations; or fail to prosecute with commercially reasonable due diligence any pending applications to any Governmental Entities;
- (x) take any action that could reasonably be expected to interfere with or be inconsistent with the completion of the Offering or the transactions contemplated in this Subscription Agreement or which would render, or which may reasonably be expected to render, untrue or inaccurate (without giving effect to, applying or taking into consideration any materiality or Material Adverse Effect qualification already contained within such representation or warranty) in any material respect any of the representations and warranties of Company set forth in this Subscription Agreement;
- (xi) except as required by GAAP, make any change in any method of accounting or auditing practice;
- (xii) make, change or revoke any Tax election or settle and/or compromise any Tax liability; prepare any Tax Returns in a manner which is inconsistent with the past practices of the Company or any of its Subsidiaries, as applicable, with respect to the treatment of items on such Tax Returns; adopt or change any Tax accounting method or Tax accounting period; enter into, cancel or modify any agreement with a Governmental Entity with respect to Taxes; incur any material liability for Taxes other than in the ordinary course of business, or file an amended Tax Return or a claim for refund of taxes with respect to the income, operations or property of the Company or its Subsidiaries;
- (xiii) other than in the ordinary course of business or as required by Law, enter into, terminate, modify or amend in any material respect any contract or agreement that is material to the Company and/or any of its Subsidiaries; or
- (xiv) announce an intention, enter into any formal or informal agreement, or otherwise make a commitment to do any of the things prohibited by any of the foregoing subsections; and
- (xv) use commercially reasonable efforts to avoid, in respect of the taxation year ending December 31, 2017, being treated as a passive foreign investment company within the meaning of Section 1297 of the Code.

#### **5.4 Acknowledgements and Additional Covenants of the Company**

The Company hereby acknowledges, covenants and agrees with the Subscriber as follows:

- (a) the Company shall maintain its status as a “reporting issuer” in, and not in default of any requirement of the Securities Laws of, each of the Provinces of Canada until the later to occur of the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time;
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- (b) until the later to occur of the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time, the Company shall remain a corporation validly subsisting under the Laws of its jurisdiction of incorporation, licensed, registered or qualified as an extra-provincial or foreign corporation in all jurisdiction where the character of its properties owned or leased or the nature of the activities conducted by it make such licensing, registration or qualification necessary;
  - (c) for a period of one year after the date of this Subscription Agreement, the Company shall file all reports required to be filed by the Company after the date hereof pursuant to the U.S. Exchange Act. During this one-year period, if the Company is not required to file reports pursuant to the U.S. Exchange Act, it will prepare and furnish to the Subscriber and make publicly available in accordance with Rule 144 under the U.S. Securities Act such information as is required for the Subscriber to sell the Securities under Rule 144 under the U.S. Securities Act;
  - (d) the Company shall timely file such forms and documents as may be required to be filed by the Company under the Securities Laws, including the policies of NASDAQ relating to the Offering and will take all commercially reasonable steps to obtain the listing approval of NASDAQ to the extent required in respect of the Underlying Common Shares and will comply with all other requirements of NASDAQ and requirements of the Securities Laws applicable to the offer and sale of the Offered Shares as contemplated herein required to be taken or complied with by it; provided that the Company will discuss in good faith with the Subscriber, and agree to make, any adjustments required to the terms of the Preferred Shares that are required by NASDAQ and that are not materially adverse to the Company;
  - (e) the Company shall perform and carry out all of the acts and things to be completed by it as provided in this Subscription Agreement;
  - (f) the Company shall use the proceeds of this Offering to further develop and continue to advance its clinical and preclinical hepatitis B virus pipeline, and for general corporate purposes, including working capital;
  - (g) the Company shall take all actions as are necessary to cause the following to be effective as of the Tier 1 Closing:
    - (i) the Registration Rights Agreement shall be amended by the Registration Rights Amending Agreement such that the Offered Shares and the Underlying Common Shares, will be subject to the Registration Rights Agreement on substantially the same terms as the other Common Shares subject thereto (the **Registration Rights Amendment**);
    - (ii) the Governance Agreement shall be amended by the Governance Agreement Amending Agreement to reflect, *inter alia*, the Subscriber Board Designation Right (the **Governance Agreement Amendment**); and
    - (iii) the execution and delivery by the Company of the Lock-Up Amending Agreement and the Standstill Amending Agreement;
  - (h) the Company shall take all actions as are necessary to cause the Articles of Amendment to become effective, including taking all commercially reasonable actions as are necessary to obtain the Company Shareholder Approval so that the Subscriber can fully exercise the Subscriber Board Designation Right from and after the Tier 2 Closing; and
  - (i) the Company shall not sell, offer for sale or solicit offers to buy any security (as defined in Section 2 of the U.S. Securities Act) in a manner that would be integrated with the offer or sale of the Offered Shares and cause the sale of the Offered Shares to the Subscriber to be required to be registered under the U.S. Securities Act.
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## **5.5 Survival of Representations, Warranties and Covenants of the Company**

The representations and warranties of the Company contained in this Subscription Agreement shall survive the Tier 1 Closing and, if applicable, the Tier 2 Closing, and, notwithstanding such Closing, shall continue in full force and effect for the benefit of the Subscriber for a period of two years after the later to occur of the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time. The Subscriber acknowledges that it has had the opportunity to conduct a due diligence investigation with respect to the Company, and in no event shall the Company have any liability to the Subscriber with respect to a breach of representation or warranty under this Agreement to the extent that the Subscriber knew of such breach as of the Tier 1 Closing and, if applicable, the Tier 2 Closing.

## **5.6 Reliance and Indemnity**

The Subscriber is relying on the representations, warranties and covenants contained herein in making the decision to subscribe for the Offered Shares and make payment of consideration therefor, and the Company agrees to indemnify the Subscriber and its directors and officers against all losses, claims, costs, expenses, damages or liabilities which any of them may suffer or incur as a result of or arising from reliance thereon.

## **ARTICLE 6 - ACKNOWLEDGEMENTS, COVENANTS, REPRESENTATIONS AND WARRANTIES OF THE SUBSCRIBER**

### **6.1 Representations and Warranties of the Subscriber**

The Subscriber hereby represents and warrants to, and covenants with, the Company as follows, with effect as of the date hereof and as of the Tier 1 Closing Time and, if applicable and only with respect to the Fundamental Subscriber Representations and Warranties, the Tier 2 Closing, and acknowledges that the Company is relying on such representations and warranties in connection with the transactions contemplated herein:

- (a) the Subscriber certifies that it is resident in the jurisdiction set out on the face page of this Subscription Agreement. Such address was not created and is not used solely for the purpose of acquiring the Offered Shares and the Subscriber was solicited to purchase, and accepted such offer to purchase the Offered Shares, in such jurisdiction;
  - (b) as of the date of execution of this Subscription Agreement and as of the Tier 1 Closing Time and, if applicable, the Tier 2 Closing Time, as the case may be, the Subscriber is an “accredited investor” as defined in Rule 501(a) of Regulation. The Subscriber agrees to furnish any additional information requested by the Company or any of its affiliates to assure compliance with applicable U.S. federal and securities laws in connection with the purchase and sale of the Offered Shares;
  - (c) the current structure of this transaction and all transactions and activities contemplated hereunder is not a scheme to avoid the registration requirements of the U.S. Securities Act;
  - (d) the Subscriber will not offer, sell or otherwise dispose of the Offered Shares unless such offer, sale or disposition is made in accordance with an exemption from the registration requirements of the U.S. Securities Act and the Securities Laws of all applicable states of the United States or the SEC has declared effective a registration statement in respect of such securities. The Offered Shares have not been and will not be registered under the U.S. Securities Act and may not be offered or sold unless registered under the U.S. Securities Act or an exemption from the registration requirements of the U.S. Securities Act is available;
  - (e) the execution and delivery of this Subscription Agreement, the performance and compliance with the terms hereof, the subscription for the Offered Shares and the completion of the transactions by the Subscriber described herein will not result in any material breach of, or be in conflict with or constitute a material default under, or create a state of facts which, after notice or lapse of time, or both, would
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constitute a material default under any term or provision of the constating documents, by-laws or resolutions of the Subscriber, the Securities Laws or any other Laws applicable to the Subscriber, any agreement to which the Subscriber is a party, or any Order, statute, rule or regulation applicable to the Subscriber;

- (f) the Subscriber is subscribing for the Offered Shares as principal for its own account, for investment purposes, and not for the benefit of any other person (within the meaning of applicable Securities Laws) and not with a view to, or for resale in connection with, any distribution of the Offered Shares;
- (g) this Subscription Agreement (and all other documentation in connection with such subscription) has been duly authorized, executed and delivered by, and constitutes a legal, valid and binding agreement of, the Subscriber, enforceable against the Subscriber in accordance with its terms, provided that enforcement thereof may be limited by Laws affecting creditors' rights generally;
- (h) the Subscriber has the necessary legal capacity and authority to execute and deliver this Subscription Agreement and to observe and perform its covenants and obligations hereunder and has obtained all necessary approvals in respect thereof;
- (i) there is no person acting or purporting to act at the request of the Subscriber who is entitled to any brokerage or finder's fee;
- (j) the Subscriber has not received or been provided with a prospectus, offering memorandum, within the meaning of the Securities Laws in Canada, or any sales or advertising literature in connection with the Offering and the Subscriber's decision to subscribe for the Offered Shares was not based upon, and the Subscriber has not relied upon, any representations as to facts made by or on behalf of the Company, other than the representations and warranties of the Company under this Subscription Agreement;
- (k) no person has made any written or oral representations:
  - (i) that any person will resell or repurchase the Offered Shares;
  - (ii) that any person will refund the Tier 1 Subscription Amount or, if applicable, the Tier 2 Subscription Amount; or
  - (iii) as to the future price or value of the Offered Shares; and
- (l) the offering and issue of the Offered Shares has not been made or solicited through or as a result of, and the distribution of the Offered Shares is not being accompanied by any advertisement, including without limitation in printed public media, radio, television or telecommunications, including electronic display, or as part of a general solicitation or general advertising with respect to the Offering.

## 6.2 Acknowledgments and Covenants of the Subscriber

The Subscriber, hereby acknowledges, covenants and agrees as follows:

- (a) the Subscriber shall take all actions as are necessary to cause the following to be effective as of the Tier 1 Closing:
    - (i) the Registration Rights Agreement shall be amended by the Registration Rights Amending Agreement such that the Offered Shares and the Underlying Common Shares, will be subject to the Registration Rights Agreement on substantially the same terms as the other Common Shares subject thereto (the **Registration Rights Amendment**);
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- (ii) the Governance Agreement shall be amended by the Governance Agreement Amending Agreement to reflect, *inter alia*, the Subscriber Board Designation Right (the **Governance Agreement Amendment**); and
    - (iii) the execution and delivery by the Company of the Lock-Up Amending Agreement and the Standstill Amending Agreement;
  - (b) the Subscriber, to the extent required, shall cooperate with the Company to facilitate the timely filing of such forms and documents as may be required to be filed by the Company under the Securities Laws, including the policies of NASDAQ relating to the Offering; provided that the Subscriber will discuss in good faith with the Company, and agree to make, any adjustments required to the terms of the Preferred Shares that are required by NASDAQ and that are not materially adverse to the Subscriber;
  - (c) there are risks associated with the purchase of the Offered Shares, including the risks outlined in the Public Record and in this Subscription Agreement. The Subscriber has such knowledge, skill and experience in business, financial and investment matters that the undersigned is capable of evaluating the merits and risks of an investment in the Offered Shares. The Purchaser has been afforded the opportunity to receive information from, and to ask questions of and receive answers from the management of, the Company concerning this investment so as to allow it to make an informed investment decision prior to its investment. Additionally, with the assistance of the Subscriber's own professional advisors, to the extent that the undersigned has deemed appropriate, the undersigned has made its own legal, tax, accounting and financial evaluation of the merits and risks of an investment in the Offered Shares and the consequences of this Subscription Agreement. The Subscriber has considered the suitability of the Offered Shares as an investment in light of its own circumstances and financial condition and the undersigned is able to bear the risks associated with an investment in the Offered Shares and its authority to invest in the Offered Shares;
  - (d) if required by applicable Securities Laws or the Company, the Subscriber will execute, deliver and file or assist the Company in filing such reports, undertakings and other documents with respect to the issue and/or sale of the Offered Shares as may be required by any securities commission or other regulatory authority;
  - (e) there are restrictions on the Subscriber's ability to resell the Offered Shares and it is the responsibility of the Subscriber to find out what those restrictions are and to comply with them before selling the Offered Shares. The Offered Shares will be subject to the restrictions on transfer as set forth in this Subscription Agreement and under applicable Securities Laws. The Subscriber has been advised to consult its own legal advisors with respect to trading in the Offered Shares and with respect to the resale restrictions imposed by the Securities Laws of the province or territory in which the Subscriber resides and other applicable Securities Laws, and acknowledges that no representation has been made respecting the applicable hold periods imposed by the Securities Laws or other resale restrictions applicable to such securities which restrict the ability of the Subscriber to resell such securities that the Subscriber is solely responsible to find out what these restrictions are and the Subscriber is solely responsible (and the Company is in no way responsible) for compliance with applicable resale restrictions and the Subscriber is aware that it may not be able to resell such securities except in accordance with limited exemptions under the Securities Laws and other applicable Securities Laws;
  - (f) the Offered Shares will be "restricted securities" as such term is defined in Rule 144(a)(3) under the U.S. Securities Act and may not be offered, resold or otherwise transferred, directly or indirectly, except pursuant to an effective registration statement under the U.S. Securities Act or in accordance with an exemption from the registration requirements of the U.S. Securities Act and applicable Securities Laws, as described in the legend affixed to the face of the certificates (or, if applicable, notice of entry into a direct registration system) evidencing the Offered Shares and the provisions of Section 6.2 hereof. The Subscriber understands that the availability of the exemption from registration afforded by Rule 144 under the U.S. Securities Act depends upon the satisfaction of various conditions, and that Rule 144
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under the U.S. Securities Act may afford the basis for sales only in limited circumstances. The Subscriber understands that as an “affiliate” of the Company, it is subject to restrictions imposed by the U.S. Securities Act on its ability to transfer the Offered Shares. The Subscriber does not have the protection of Section 11 of the U.S. Securities Act in connection with its purchase of the Offered Shares hereunder;

- (g) the certificates (or, if applicable, notice of entry into a direct registration system) representing the Offered Shares issued pursuant to the Offering will bear the following legends as required by National Instrument 45-102 - *Resale of Securities* and the U.S. Securities Act, and with the necessary information inserted and the Subscriber agrees to comply with the terms of such legends:

“UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE <INSERT DATE THAT IS FOUR (4) MONTHS AND ONE (1) DAY AFTER CLOSING DATE>”

“THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR ANY STATE SECURITIES LAWS. THE HOLDER HEREOF, BY PURCHASING SUCH SECURITIES, AGREES FOR THE BENEFIT OF THE ISSUER THAT THESE SECURITIES MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, DIRECTLY OR INDIRECTLY, ONLY (A) TO THE ISSUER, (B) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, (C) OUTSIDE THE UNITED STATES PURSUANT TO REGULATIONS UNDER THE SECURITIES ACT, (D) INSIDE THE UNITED STATES PURSUANT TO THE EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER, IF AVAILABLE, OR (E) IN A TRANSACTION THAT IS OTHERWISE EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND IN EACH CASE IN COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS AND THE APPLICABLE LAWS OF ANY OTHER JURISDICTION, *PROVIDED THAT* IN THE CASE OF (C), (D) OR (E) ABOVE, THE HOLDER HAS, PRIOR TO SUCH SALE, FURNISHED TO THE ISSUER A LEGAL OPINION OF COUNSEL OF RECOGNIZED STANDING, REASONABLY SATISFACTORY TO THE ISSUER. HEDGING TRANSACTIONS INVOLVING THESE SECURITIES MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE SECURITIES ACT.”

- (h) no prospectus or registration statement has been filed by the Company with any securities regulatory authorities in connection with the issuance of the Offered Shares or the Underlying Common Shares, the sale of the Offered Shares and the issuance of the Underlying Common Shares is conditional upon such sale being exempt from the requirements to file and obtain a receipt for a prospectus, to file and make effective a registration statement or to deliver an offering memorandum with this Subscription Agreement and the requirement to be a registered dealer, and as a consequence of acquiring the Offered Shares pursuant to such exemptions:
- (i) certain protections, rights and remedies provided by the Securities Laws including certain statutory rights of rescission or damages and certain statutory remedies against an issuer, underwriters, auditors, directors and officers that are available to investors who acquire securities offered by a prospectus or registration statement, may not be available to the Subscriber;
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- (ii) the common law may not provide investors with an adequate remedy in the event that they suffer investment losses in connection with securities acquired in a private placement;
  - (iii) the Subscriber may not receive certain information that would otherwise be required to be given under the Securities Laws; and
  - (iv) the Company is relieved from certain obligations that would otherwise apply under the Securities Laws;
- (i) the Company is collecting the Subscriber's personal information (as that term is defined under applicable privacy legislation, including, without limitation, the *Personal Information Protection and Electronic Documents Act* (Canada) and any other applicable similar, replacement or supplemental provincial or federal legislation or Laws in effect from time to time), for the purpose of completing this Subscription Agreement. The Subscriber acknowledges and consents to the Company retaining such personal information for only so long as required by Law. The Subscriber further acknowledges and consents to the fact that the Company may be required by the Securities Laws to provide regulatory authorities with any personal information provided under this Subscription Agreement;
- (j) the Subscriber represents and warrants that none of the funds being used to purchase the Offered Shares are, to such Subscriber's knowledge, proceeds obtained or derived, directly or indirectly, as a result of illegal activities and that:
- (i) the funds being used to purchase the Offered Shares and advanced by or on behalf of the Subscriber do not represent proceeds of crime or otherwise result in a violation of any applicable anti-money laundering Laws or regulations including, without limitation, the *Proceeds of Crime (Money Laundering) and Terrorist Financing Act* (Canada) (the **PCMLTFA**) and the *Common Sharing and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act* (the **Patriot Act**); and
  - (ii) the Subscriber is not a person or entity identified on a list established under section 83.05 of the *Criminal Code* (Canada) (the **Criminal Code**); and
- (k) the Subscriber acknowledges and agrees that (i) the Company may in the future be required by law to disclose the Subscriber's name and other information relating to the Subscriber and any purchase of the Offered Shares, on a confidential basis, pursuant to the Criminal Code, PCMLTFA, the Patriot Act or as otherwise may be required by applicable Laws, regulations or rules, and (ii) the Company or their agents may in the future be required by law to disclose the Subscriber's name and other information relating to the Subscriber and any purchase of the Offered Shares, on a confidential basis, pursuant to the PCMLTFA, the Patriot Act, the Criminal Code or as otherwise may be required by applicable Laws, regulations or rules.

### **6.3 Survival of Representations, Warranties and Covenants of the Subscriber**

The representations, warranties and covenants of the Subscriber contained in this Subscription Agreement shall survive the Tier 1 Closing and, if applicable, the Tier 2 Closing, notwithstanding such Closing or any investigation made by or on behalf of the Company with respect thereto and notwithstanding any subsequent disposition by the Subscriber of any of the Offered Shares, shall continue in full force and effect for the benefit of the Company for a period of two years following the later to occur of the Tier 1 Closing Time or, if applicable, the Tier 2 Closing Time.

### **6.4 Reliance and Indemnity**

The Company is relying on the representations, warranties and covenants contained herein to determine the Subscriber's eligibility to subscribe for the Offered Shares under applicable Securities Laws, and the Subscriber

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agrees to indemnify the Company and its directors and officers against all losses, claims, costs, expenses, damages or liabilities which any of them may suffer or incur as a result of or arising from reliance thereon.

#### **ARTICLE 7 - FILINGS AND AUTHORIZATIONS**

The Parties shall use their respective commercially reasonable efforts to obtain the authorizations, consents, waiting period expirations or terminations, Orders and approvals necessary or advisable for, and to avoid any Order which would block, their execution and delivery of, and the performance of their obligations pursuant to this Subscription Agreement. The Parties shall coordinate and cooperate with one another and shall exchange and provide information to each other, subject to entering into a reasonable joint defense and confidentiality agreement, as necessary for this Article 7. The Parties shall use commercially reasonable efforts to supply such assistance as may be reasonably requested by each another in connection with the foregoing. Subject to applicable confidentiality restrictions or restrictions required by applicable Law, the Parties will notify each other promptly upon the receipt of any request by any officials of any Governmental Entity for information or the production of any documents relating to an investigation of the transactions contemplated by this Subscription Agreement. Without limiting the generality of the foregoing, each Party shall, subject to such joint defense and confidentiality agreement, provide to the others (or the others' respective advisors) upon request copies of all correspondence between such Party and any Governmental Entity relating to the transactions contemplated by this Subscription Agreement. In addition, to the extent reasonably practicable and acceptable to the Governmental Entity, all discussions, telephone calls, and meetings with a Governmental Entity regarding the transactions contemplated by this Subscription Agreement shall include representatives of both Parties. Subject to applicable Law, the Parties will consult and cooperate with each other in connection with any analyses, appearances, presentations, and memoranda submitted to any Governmental Entity regarding the transactions contemplated by this Subscription Agreement. Notwithstanding the foregoing, to the extent not precluded by MI 61-101, the Subscriber shall take all commercially reasonable steps to vote, or cause to be voted, the Offered Shares in favour of the special resolution approving the Articles of Amendment at the Company Meeting.

#### **ARTICLE 8 - TERMINATION RIGHTS**

##### **8.1 Subscriber's Termination Rights**

In addition to any other remedies which may be available to the Subscriber in respect of any default, act or failure to act, or non-compliance with the terms of this Subscription Agreement by the Company, the Subscriber shall be entitled, at the Subscriber's sole discretion, to terminate and cancel, without any liability on such Subscriber's part, the Subscriber's obligations to purchase the Tier 1 Preferred Shares under this Subscription Agreement if any condition set out in Section 4.2 has not been satisfied by the Company or waived by the Subscriber on or prior to 3:00 pm (EST) on October 31, 2017, unless such failure was caused by the Subscriber's bad faith or breach in any material respect of any provision of this Subscription Agreement, or unless such time restriction is amended by both the Company and Subscriber in writing.

##### **8.2 Company's Termination Rights**

In addition to any other remedies which may be available to the Company in respect of any default, act or failure to act, or non-compliance with the terms of this Subscription Agreement by the Subscriber, the Company shall be entitled, at the Company's sole discretion, to terminate and cancel, without any liability on such Company's part, the Company's obligations to issue the Tier 1 Preferred Shares under this Subscription Agreement if any condition set out in Section 4.3 has not been satisfied by the Subscriber or waived by the Company on or prior to 3:00 pm (EST) on October 31, 2017, unless such failure was caused by the Company's bad faith or breach in any material respect of any provision of this Subscription Agreement, or unless such time restriction is amended by both the Subscriber and Company in writing.

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### **8.3 Additional Termination Rights - Both Parties**

In addition to any other remedies which may be available to either Party in respect of any default, act or failure to act, or non-compliance with the terms of this Subscription Agreement by the other Party, either Party shall be entitled, at such Party's sole discretion, to terminate and cancel this Subscription Agreement at any time prior to the Tier 2 Closing Time if any order or ruling is issued by any stock exchange or market, or any other Governmental Entity in Canada, the United States, or any other applicable jurisdiction; or any law or regulation under or pursuant to any statute of Canada or of any province thereof, the United States or any other applicable jurisdiction, is promulgated or changed which moratorium, inquiry, investigation, proceeding, order, ruling, law or regulation permanently restrains, enjoins or otherwise prohibits the transactions to be consummated at the Tier 2 Closing Time, as applicable, as contemplated by this Subscription Agreement and has become final and non-appealable.

### **8.4 Alternative Transaction and Outside**

If, despite the good faith efforts of both Parties and compliance in all materials respects with the provisions of this Subscription Agreement, the Company Shareholder Approval has not been obtained by February 28, 2018, then the Company and Subscriber shall, at the request of either Party, negotiate in good faith to determine if an alternative transaction can be undertaken between the Parties, and the manner in which the Parties would most effectively undertake such a transaction. If, despite the good faith efforts of the Parties, the Parties are not able to agree on an alternative transaction by April 30, 2018, this Subscription Agreement shall automatically terminate, without any liability on either Party, unless the failure to reach such an alternative transaction was caused by a Party's bad faith or breach in any material respect of any provision of this Subscription Agreement.

### **8.5 Notice of Termination**

The rights of termination contained in Sections 8.1, 8.2 and 8.3 may be exercised by the applicable Party giving written notice thereof to the other Party at any time prior to the Tier 1 Closing Time or, if applicable, Tier 2 Closing Time, and are in addition to any other rights or remedies such Party may have in respect of any default, act or failure to at or non-compliance by the other Party in respect of any of the matters contemplated by this Subscription Agreement or otherwise. In the event of any such termination, there shall be no further liability or obligation on the part of the Subscriber to the Company or on the part of the Company to the Subscriber except in respect of any liability or obligation under Sections 9.2, 9.3 and 9.5 of this Subscription Agreement, which will remain in full force and effect.

## **ARTICLE 9 - MISCELLANEOUS**

### **9.1 Further Assurances**

Each of the Parties, upon the request of each of the other Party hereto, whether before or after the Tier 1 Closing or the Tier 2 Closing, if applicable, shall do, execute, acknowledge and deliver or cause to be done, executed, acknowledged and delivered all such further acts, deeds, documents, assignments, transfers, conveyances, powers of attorney and assurances as may reasonably be necessary or desirable to complete the transactions contemplated herein.

### **9.2 Press Releases**

All information with respect to this Subscription Agreement, the transactions contemplated hereby and all negotiations, discussions and actions related hereto shall be treated by the Parties as confidential information. A Party intending to make a public announcement or statement, including a news release, shall make the text of such announcement available to the other Party not less than two (2) Business Days prior to publication and the other Party may make suggestions for changes. If the Subscriber is identified in any such public announcement or statement, the Company shall not release the public announcement or statement without the Subscriber's consent in writing, which consent the Subscriber may withhold in its sole discretion. Notwithstanding the

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foregoing, nothing in this paragraph shall prevent the Company from making any public disclosure, including, without limitation, disclosure of the name of the Subscriber, if such disclosure is required by Law.

### 9.3 Notices

(a) Any notice, direction or other instrument required or permitted to be given to any Party hereto shall be in writing and shall be sufficiently given if delivered personally, or transmitted by facsimile or electronic mail tested prior to transmission to such Party, as follows:

(i) in the case of the Company, to:

Arbutus Biopharma Corporation 100 - 9800 Glenlyon Parkway  
Burnaby, British Columbia V5J 5J8

Attention: Bruce Cousins, Executive Vice President and Chief Financial Officer  
Fax: (604) 419-3201  
Email: bcousins@arbutusbio.com

with a copy to (which shall not constitute notice): Farris, Vaughn, Wills & Murphy LLP  
25th Floor, 700 W Georgia St  
Vancouver, British Columbia V7Y 1B3

Attention: R. Hector MacKay-Dunn, J.D., Q.C. Fax: (604) 661-9349  
Email: hmackay-dunn@farris.com

Dorsey & Whitney LLP  
Suite 1070, 1095 West Pender Street Vancouver, British Columbia V6E 2M6

Attention: Daniel M. Miller Fax: (604)687-8504  
Email: miller.dan@dorsey.com

(ii) in the case of the Subscriber:

Roivant Sciences, Inc.  
320 West 37th Street, 5th Floor New York, New York 10018

Attention: Allen Waxman, General Counsel Email: allen.waxman@roivant.com

with a copy to (which shall not constitute notice): Lawson Lundell LLP  
1600 - 925 West Georgia Street Vancouver, British Columbia V6C 3L2

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Attention: Valerie Mann and Crispin Arthur Fax: (604) 641-2811  
Email: vcmann@lawsonlundell.com carthur@lawsonlundell.com

White & Case LLP  
1221 Avenue of the Americas New York, New York 10020

Attention: Chang-Do Gong Fax: (212) 354-8113  
Email: cgong@whitecase.com

- (b) Any such notice, direction or other instrument, if delivered personally, shall be deemed to have been given and received on the day on which it was delivered, provided that if such day is not a Business Day then the notice, direction or other instrument shall be deemed to have been given and received on the first Business Day next following such day and if transmitted by facsimile or electronic mail, shall be deemed to have been given and received on the day of its transmission, provided that if such day is not a Business Day or if it is transmitted or received after the end of normal business hours then the notice, direction or other instrument shall be deemed to have been given and received on the first Business Day next following the day of such transmission.
- (c) Any Party may change its address for service from time to time by notice given to the other Party in accordance with the foregoing provisions.

#### **9.4 Time of the Essence**

Time shall be of the essence of this Subscription Agreement and every part hereof.

#### **9.5 Costs and Expenses**

All costs and expenses (including, without limitation, the fees and disbursements of legal counsel) incurred in connection with this Subscription Agreement and the transactions herein contemplated shall be paid and borne by the party incurring such costs and expenses.

#### **9.6 Applicable Law**

This Subscription Agreement shall be construed and enforced in accordance with, and the rights of the Parties shall be governed by, the Laws of the Province of British Columbia and the Laws of Canada applicable therein. Any and all disputes arising under this Subscription Agreement, whether as to interpretation, performance or otherwise, shall be subject to the non-exclusive jurisdiction of the courts of the Province of British Columbia and each of the Parties hereby irrevocably attorns to the jurisdiction of the courts of such jurisdiction.

#### **9.7 Entire Agreement**

This Subscription Agreement, including the Schedules hereto, constitutes the entire agreement between the parties with respect to the transactions contemplated herein and cancels and supersedes any prior understandings, agreements, negotiations and discussions between the Parties. There are no representations, warranties, terms, conditions, undertakings or collateral agreements or understandings, express or implied, between the Parties hereto other than those expressly set forth in this Subscription Agreement or in any such agreement, certificate, affidavit, statutory declaration or other document as aforesaid. This Subscription Agreement may not be amended or modified in any respect except by written instrument executed by each of the Parties.

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## **9.8 Counterparts**

This Subscription Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same Subscription Agreement. Counterparts may be delivered either in original or faxed form and the Parties adopt any signature received by a receiving fax machine as original signatures of the Parties.

## **9.9 Assignment**

This Subscription Agreement may not be assigned by either Party except with the prior written consent of the other Party.

## **9.10 Enurement**

This Subscription Agreement shall enure to the benefit of and be binding upon the Parties hereto and their respective heirs, executors, successors (including any successor by reason of the amalgamation or merger of any party), administrators and permitted assigns.

## **9.11 Specific Performance**

The Parties agree that irreparable damage would occur in the event that any of the provisions of this Subscription Agreement or any of the Company's covenants, agreements and obligations under the terms of the Preferred Shares were not performed in accordance with their specific terms or were otherwise breached or threatened to be breached and that an award of money damages would be inadequate in such event. Accordingly, it is acknowledged that the Parties shall be entitled to equitable relief, without proof of actual damages, including an injunction or injunctions or orders for specific performance to prevent breaches of this Subscription Agreement or the Company's covenants, agreements and obligations under the terms of the Preferred Shares and to enforce specifically the terms and provisions of this Subscription Agreement and the terms of the Preferred Shares in addition to any other remedy to which they are entitled at law or in equity as a remedy for any such breach or threatened breach. Each Party further agrees that the other Party shall not be required to obtain, furnish or post any bond or similar instrument in connection with or as a condition to obtaining any remedy referred to in this Section 9.11, and each Party (a) irrevocably waives any right it may have to require the obtaining, furnishing or posting of any such bond or similar instrument and (b) agrees to cooperate fully in any attempt by the other Party in obtaining such equitable relief. Each Party further agrees that the only permitted objection that it may raise in response to any action for equitable relief is that it contests the existence of a breach or threatened breach of this Subscription Agreement or the Company's covenants, agreements and obligations under the terms of the Preferred Shares, as applicable.

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The Company hereby accepts the subscription for the Offered Shares as set forth on the face page of this Subscription Agreement on the terms and conditions contained in this Subscription Agreement (including all applicable schedules) this 2nd day of October, 2017.

**ARBUTUS BIOPHARMA CORPORATION**

Per: /s/ Dr. Mark Murray Authorized Signing Officer

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**SCHEDULE "A"**  
**FORM OF MI 61-101 RESOLUTION**

**"BE IT RESOLVED THAT:**

- (a) the Company is hereby authorized and directed to issue (i) the Tier 2 Preferred Shares, (ii) up to 13,025,536 Underlying Common Shares upon conversion of the Tier 2 Preferred Shares and (iii) such additional Common Shares as may become issuable upon conversion of the Tier 2 Common Shares pursuant to the rights attached thereto, all as more particularly described in the Company Circular, and such resolution is hereby confirmed, approved and adopted in all respects;
  - (b) the Articles of the Company be amended to authorize the Subscriber Board Designation Right, as more particularly described in the Company Circular, and the Company be and is hereby authorized to make such conforming amendments to its corporate documents as may be necessary or advisable to give effect to the foregoing resolution;
  - (c) any officer or director of the Company is hereby authorized, acting for, in the name of and on behalf of the Company, to execute, under the seal of the Company or otherwise, and to deliver or cause to be delivered, all such documents, agreements and instruments, and to do or cause to be done all such other acts and things, as such officer or director determines to be necessary or desirable in order to carry out the intent of the foregoing paragraphs of this resolution and the matters authorized hereby, such determination to be conclusively evidenced by the execution and delivery of such document, agreement or instrument or the doing of any such act or thing; and
  - (d) these approvals are given for all purposes under the NASDAQ rules and under Multilateral Instrument 61-101."
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**SCHEDULE "B"**  
**PREFERRED SHARE RIGHTS AND RESTRICTIONS**

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**TERMS OF  
SERIES A PARTICIPATING CONVERTIBLE PREFERRED STOCK  
OF  
ARBUTUS BIOPHARMA CORPORATION**

WHEREAS, the board of Arbutus Biopharma Corporation (the "Company") desires to designate a new series of preferred shares, no par value per share (the "Preferred Shares"), set the number of shares constituting such series, and the special rights and restrictions thereof;

RESOLVED that pursuant to Article 26 of the Articles of the Company:

- (a) there be created a Series A of Preferred shares of the Company;
- (b) the identifying name of the Series A Preferred shares of the Company be "Series A Participating Convertible Preferred Shares" (the "Series A Preferred Shares");
- (c) the maximum number of Series A Preferred Shares which the Company is authorized to issue is 1,164,000 no par value shares;
- (d) there be created and attached to the Series A Preferred Shares the special rights and restrictions set out in Part 27 of the Articles of the Company, as adopted by paragraph (f) below;
- (e) the Notice of Articles of the Company be altered accordingly;
- (f) the Articles of the Company be altered by the addition of Part 27 thereof in the form of Part 27 set out in Schedule A to these resolutions, such alteration to the Articles not to take effect until the Notice of Articles of the Company is altered to reflect such alteration to the Articles;
- (g) the Company hereby appoints Farris Vaughan Wills and Murphy LLP to act as its agent for filing the Notice of Alteration to the Notice of Articles as set out above; and
- (h) any director of the Company be and is hereby authorized to do, sign and execute all things, instruments, deeds and documents as such director may deem necessary or desirable to carry out the foregoing resolutions.

**Schedule A - Special Rights and Restrictions of the Preferred Shares - Series A Participating Convertible Preferred Shares:**

**ARTICLE 127. 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.

27.1 Interpretation. In this Part 27, unless the context otherwise requires the following terms have the following meanings:

(a) “affiliate” means as to any Person, any other Person that, directly or indirectly, is in control of, is controlled by, or is under common control with, such entity.

(b) “Conversion Price” means initially \$7.13, as adjusted from time to time as provided in Article 27.6(f).

(c) “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.

(d) “Dividend” means, as the context requires, Participating Dividend and Participating Penalty Dividends.

(e) “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.

(f) “Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(g) “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.

(h) “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.

(i) “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.

(a) “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.

(b) “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.

(c) “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.

(d) “Purchase Price” means \$100.00 per Series A Preferred Share, as the same may be increased pursuant to Article 27.3.

(e) “Shareholder Approval Date” means the date on which the Company Shareholder Approval (as such term is defined in the Subscription Agreement) is obtained.

(f) “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).

(g) “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.

(h) Each of the following terms is defined in the Article set forth opposite such term:

<u>Term</u>	
Common Dividend	27.3(b)
Company	Recitals
Conversion Date	27.6(d)
In-Kind Common Dividend	27.3(c)
Junior Securities	27.2(b)(i)
Liquidation Preference	27.6(c)(i)
Optional Conversion Date	27.6(a)
Parity Securities	27.2(b)(ii)
Participating Cash Dividend	27.3(b)

Participating Cash Penalty Dividends	27.3(b)
Participating Dividends	27.3(c)
Participating In-Kind Dividend	27.3(c)
Participating In-Kind Penalty Dividends	27.3(c)
Participating Penalty Dividends	27.3(c)
Preferred Shares	Recitals
Reference Property	27.6(f)(iii)
Senior Securities	27.2(b)(iii)
Series A Preferred Shares	27.2(a)
Shareholder Rights Plan	27.3(c)
Transaction	27.6(f)(iii)

(i) 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.

27.2 Number; Designation; Rank.

(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 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”).

### 27.3 Dividends.

(c) Dividends. No dividends shall accrue or be payable to holders of the Series A Preferred Shares except as set forth in Articles 27.3(b) and (c).

(d) 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).

(e) 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 27.6(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).

### 27.4 Liquidation Preference.

(f) 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.

(g) 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.

(h) 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.

(i) 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.

(j) 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.

(k) For the avoidance of doubt, a Transaction or Fundamental Change shall not be treated as a Liquidation Event for the purpose of this Article 27.4 (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 27.6(c) hereof.

27.5 Voting Rights. 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.

27.6 Conversion. Each Series A Preferred Share is convertible into Common Shares (or Reference Property, to the extent applicable) as provided in this Article 27.6.

(a) Conversion at the Option of Holders of Series A Preferred Shares. Subject to Article 27.6(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 27.6(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 27.3(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 27.6(e)(i). Except as provided in Article 27.6(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 27.6(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 27.6(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 27.6(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 27.6(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 27.6(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 27.6(b).

(c) Amounts Received Upon Conversion. Upon a conversion of Series A Preferred Shares pursuant to Articles 27.6(a) or 27.6 (b), the holder of such converted Series A Preferred Shares shall, subject to the limitations and adjustments pursuant to the first paragraph of Article 27.6, 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 27.6(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 27.6(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 27.6(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 preemptive 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 27.6 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 27.6.

(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 27.6 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.

(i) 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.

(ii) 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 nonassessable, not issued in violation of any preemptive 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:

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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 27.6(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 27.6(f)(i) is declared but not so paid or made, or any share split or combination of the type described in this Article 27.6(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 27.6(f) to the contrary, if a Conversion Price adjustment becomes effective pursuant to Article 27.6(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 27.6(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 27.6(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 27.6(f)(i);
- (B) any Transaction to which Article 27.6(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 27.6, 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

1. 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

2. 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 27.6 shall serve to limit or otherwise affect the right of the Company to enter into a Transaction or effect a Fundamental Change.

(f) No Other Conversion Rights. The holders of Series A Preferred Shares shall have no rights of conversion other than as specifically set forth herein.

**SCHEDULE “C”  
OPINIONS OF COMPANY’S COUNSEL**

1. The incorporation and valid existence of the Company and the Subsidiaries.
2. That the Company has the corporate power and capacity to carry on its business as now carried on by it and to own its assets and to amend the Articles to designate and issue the Offered Shares having such rights, privileges and obligations as described in Schedule B of the Subscription Agreement.
3. The authorized share capital of the Company. The rights of the Offered Shares are as set forth in the Articles.
4. That the Subscription Agreement has been duly authorized, executed and delivered by the Company and constitutes a valid and binding obligation of the Company enforceable against the Company in accordance with its terms.
5. That the execution and delivery of the Subscription Agreement, the performance of the obligations of the Company thereunder, the compliance by the Company with the terms and conditions thereof and the issue and sale of the Offered Shares (including the terms of the Offered Shares) do not constitute and will not constitute, with notice or lapse of time or with both notice and lapse of time, a breach of, or default under the articles of the Company or any statute or regulation of the Province of British Columbia or any federal statute or regulation of Canada having the force of law binding upon the Company and do not and will not conflict with the articles or notice of articles of the Company.
6. That the Tier 1 Preferred Shares and, if applicable, the Tier 2 Preferred Shares have been duly authorized, allotted and validly issued, and that the Underlying Common Shares, have been reserved for issuance.
7. That no prospectus, offering memorandum or other document is required under the Securities Laws of British Columbia, and except as have been obtained or completed, no proceeding is required to be taken and no approval, consent or authorization of or filing with any securities regulatory authority in the such jurisdiction is required in order to permit the issuance of the Offered Shares, subject to certain specified conditions and exceptions.
8. That no prospectus, offering memorandum or other document is required to be filed, no proceeding required to be taken and no approval, permit, consent or authorization is required to be obtained under the Securities Laws of British Columbia in connection with the first trade of the Tier 1 Preferred Shares or and, if applicable, the Tier 2 Preferred Shares in the such jurisdiction through persons registered in a category permitting them to trade such securities under such Securities Laws, provided that:
  - (a) the Company is and has been a reporting issuer in a jurisdiction of Canada for the four-month period immediately preceding the trade;
  - (b) a four-month period has elapsed from the date of issue of the Offered Shares;
  - (c) the trade is not a “control distribution” as defined in National Instrument 45-102;
  - (d) no unusual effort is made to prepare the market or create a demand for such securities;
  - (e) no extraordinary commission or other consideration is paid in respect of such trade;
  - (f) if the seller is an insider or officer of the Company, the seller has no reasonable grounds to believe that the Company is in default of securities legislation; and



- (g) the certificates representing the Tier 1 Preferred Shares and, if applicable, the Tier 2 Preferred Shares, as the case may be, carried the appropriate legend provided under National Instrument 45-102 and Securities Laws.

Additionally, the Company shall cause to be delivered to the Subscriber an opinion from U.S. counsel in form and content customary for transactions of this nature, including, without limitation, with respect to no order or consent required, no investment company, no registration, no violation of laws, no order or consent required, no investment company, no registration and no violation of laws.

**SCHEDULE "D"**  
**GOVERNANCE AGREEMENT AMENDING AGREEMENT**

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## AMENDED AND RESTATED GOVERNANCE AGREEMENT

THIS AGREEMENT is made as of this \_\_ day of October, 2017.

### BETWEEN:

**Arbutus Biopharma Corporation**, a corporation incorporated under the laws of British Columbia previously known as Tekmira Pharmaceuticals Corporation

(the “**Company**”)

- and -

**Roivant Sciences Ltd.**, a Bermuda exempted limited company (the “**Shareholder**”)

### WHEREAS:

- A. The parties entered into a governance agreement dated as of January 11, 2015 (the “**Original Governance Agreement**”), in connection with a merger agreement entered into between the Company and OnCore Biopharma, Inc., as a result of which the Shareholder received Common Shares of the Company;
- B. The parties entered into a subscription agreement dated as of October 1, 2017 (the “**Subscription Agreement**”), providing for the purchase by the Shareholder of 1,164,000 Class A Preferred Shares (the “**Preferred Shares**”) of the Company, issuable in two tranches;
- C. As a condition to the “**Tier 1 Closing**” (as defined in the Subscription Agreement), the parties agreed to amend and restate the Original Governance Agreement as provided for herein and to use commercially reasonable efforts to cause, by the “**Tier 2 Closing**” (as defined in the Subscription Agreement), the existing articles of the Company to be amended, which amendment (the “**Amendment**”) is attached as Schedule 1 to this Agreement.

**NOW THEREFORE** in consideration of the mutual covenants and agreements contained in this Agreement and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the Parties agree as follows:

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## ARTICLE 1 INTERPRETATION AND GENERAL MATTERS

### 1.1 Definitions

In this Agreement, including the recitals, unless otherwise stated, capitalized terms used will have the meanings specified below:

“**Affiliate**” means with respect to any Person, any other Person that, directly or indirectly: (i) Controls, (ii) is Controlled by or (iii) is under common Control with, such Person;

“**Agreement**” means this document, together with any schedules attached hereto and made a part hereof, all as amended, supplemented or modified from time to time in accordance with the provisions hereof;

“**Amendment**” has the meaning ascribed thereto in Recital C;

“**Articles**” means the articles of the Company as amended by the Amendment; “**Board**” means the board of directors of the Company;

“**Business Day**” means any day other than (i) a Saturday or a Sunday or (ii) a day on which commercial banking institutions are authorized or required by applicable law to be closed in California, New York or British Columbia;

“**Common Shares**” means the common shares in the capital of the Company; “**Company**” has the meaning given to it in the Preamble;

“**Control**” means, (i) when applied to the relationship between any Person(s) and a corporation, the beneficial ownership by such Person(s) at the relevant time of shares of that corporation carrying the lesser of (A) a majority of the voting rights ordinarily exercisable at meetings of shareholders of that corporation and (B) the percentage of voting rights ordinarily exercisable at meetings of shareholders of that corporation that are sufficient to elect a majority of the directors, (ii) when applied to the relationship between any Person(s) and a limited liability company, partnership, trust or joint venture, means the beneficial ownership by such Person(s) at the relevant time of more than 50% of the ownership interests of the limited liability company, partnership, trust or joint venture or the contractual right to direct the affairs of the limited liability company, partnership, trust or joint venture, and (iii) when applied to the relationship between any Person and a limited partnership, means that such Person is the general partner of the limited partnership; and the words “**Controlled by**”, “**Controlling**” and similar words have corresponding meanings; provided that any Person(s) who Controls a corporation, limited liability company, partnership, limited partnership, trust or joint venture will be deemed to Control a corporation, limited liability company, partnership, limited partnership, trust or joint venture that is Controlled by such corporation, limited liability company, partnership, limited partnership, trust or joint venture, and so on;

“**Partially Diluted Basis**” means the sum of (i) the total number of Common Shares beneficially owned by the Shareholder and (ii) the total number of Common Shares into which the Preferred Shares beneficially owned by the Shareholder are convertible as of the Mandatory Conversion Date (as defined in the Company's Articles), and outstanding Common Shares shall be determined based on the sum of (x) the number of outstanding Common Shares as of the date of determination and (y) the number of Common Shares issuable on conversion of the Preferred Shares as of the Mandatory Conversion Date;

“**Parties**” means the Company, the Shareholder and their respective successors and permitted assigns, and “**Party**” means any one of them;

“**Person**” includes an individual, a limited liability company, a partnership, a limited partnership, a corporation with or without share capital, a trust, a joint venture, a syndicate, an unincorporated organization, a union, a government or any department or agency thereof and the heirs, executors, administrators or other legal representatives of an individual;

“**Preferred Shares**” has the meaning given to it in Recital B; “**Shareholder**” has the meaning given to it in the Preamble;

“**Shareholder Designees**” has the meaning given to it in Section 2.1(a); “**Subscription Agreement**” has the meaning given to it in Recital B; “**Tier 1 Closing**” has the meaning given such term in Recital C; and “**Tier 2 Closing**” has the meaning given such term in Recital C.

## **1.2 Effectiveness**

Notwithstanding any other provision contained herein or in any other agreement between the Parties, this Agreement will come into full force and effect, upon completion of the Tier 1 Closing in accordance with the terms of the Subscription Agreement and terminating upon the earlier of (i) forty-eight (48) months following the Tier 1 Closing and (ii) when Shareholder no longer has a right to nominate one or more directors under the Amendment. For greater certainty, this Agreement will not be effective, and the provisions hereof will have no force or effect, if the Tier 1 Closing is not completed.

## **1.3 References, Headings and Schedule**

The references “hereunder”, “herein” and “hereof” refer to the provisions of this Agreement, and references to Articles and Sections herein refer to articles, sections, or subsections of this Agreement. The headings of the Articles and Sections and any other headings, captions or indices herein are inserted for convenience of reference only and shall not be used in any way in construing or interpreting any provision hereof. Schedule 1 - Amendment to Articles attached hereto forms a part of this Agreement.

## **1.4 Singular/Plural; Derivatives**

Whenever the singular or masculine or neuter is used in this Agreement, it shall be interpreted as meaning the plural or feminine or body politic or corporate, and vice versa, as the context requires. Where a term is defined herein, a capitalized derivative of such term shall have a corresponding meaning unless the context otherwise requires.

## **1.5 Statutory References**

Unless stated otherwise, any reference to a statute shall include and shall be deemed to be a reference to such statute and to the regulations made pursuant thereto, and all amendments made thereto and enforced from time to time, and to any statute or regulation that may be passed which has the effect of supplementing the statute so referred to or the regulations made pursuant thereto.

## 1.6 Business Days

Whenever any action to be taken pursuant to this Agreement would otherwise be required to be taken or made on a day that is not a Business Day, such action shall be taken on the first Business Day following such day.

## 1.7 Calculation of Equity Interests

The Company shall be entitled to rely on the public filings of the Shareholder and its Affiliates with respect to the number of shares of the Company held by them unless and until such time as the Shareholder provides evidence satisfactory to the Company, acting reasonably, as to the number of shares held by them. Any calculation of Shareholder's equity interests will be based on the determination of such equity interests on a Partially Diluted Basis at the relevant time.

## ARTICLE 2 GOVERNANCE MATTERS

### 2.1 Board

**2.1.1** The Company will cause that number of individuals designated by the Shareholder set out in the Articles (the “**Shareholder Designees**”) to be appointed to the Board in accordance with the Articles either concurrently with the Tier 2 Closing or, if for any reason such Tier 2 Closing does not occur, then otherwise by resolution of the Board to add a director as provided for, and otherwise in accordance with, the Articles; provided that, in such circumstance, the Company agrees that it will, at the next annual general or special meeting held following the effective date hereof at which directors of the Company are to be elected, put before the shareholders of the Company an amendment to the Articles of the Company substantially in the form of Amendment to provide for the appointment of Shareholder Designees as set out therein. The Company and the Shareholder agree that, if required by applicable laws, any additional Shareholder Designees in addition to the two Shareholder Designees as are currently appointed pursuant to the Original Governance Agreement, will be independent director(s) for the purposes of applicable laws.

**2.1.2** At each annual general or special meeting of the Company’s shareholders held following the effective date hereof at which directors of the Company are to be elected, the Company will put forward for nomination for election to the Board those Shareholder Designees that the Shareholder is entitled to nominate pursuant to the Articles (who need not be the same individuals as the Shareholder Designees appointed to the Board pursuant to Section 2.1(a) but shall be those individuals set out as RS Nominated Directors pursuant to a Nomination Notice as those terms are defined in the Articles), and shall use commercially reasonable efforts to obtain shareholder approval for the election of the Shareholder Designees at such meetings (including by soliciting proxies in favour of the Shareholder Designees) and to that end will support the Shareholder Designees for election in a manner no less rigorous or favourable than the manner in which the Company supports any of its other nominees.

**2.1.3** The Company shall provide advance notice to the Shareholder of any upcoming shareholders’ meetings in accordance with Part 28 of the Articles.

**2.1.4** In the event that any Shareholder Designee 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 shall be filled in accordance with the provisions of section 5 of Part 28 of the Articles. The Company shall use all commercially reasonable steps, promptly upon receipt by it of a written notice from the Shareholder identifying a Shareholder Designee to fill such vacancy and in any event no later than five (5) business days following receipt of such written notice, as are necessary to call

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 Articles and the Act with respect to such appointment.

## **2.2 Voting**

Unless and until the Shareholder no longer has the right to appoint a Shareholder Designee pursuant to the Articles and provided that the Company is in material compliance with the terms of this Agreement and the Articles, the Shareholder will vote, and will cause its Affiliates to vote, all of the shares of the Company then owned by the Shareholder and its Affiliates:

2.2.1 in favour of:

- (a) the election of any person or persons nominated for election to the Board by the Board from time to time in accordance with the Articles, and

2.2.2 against:

- (b) the election of any person nominated by anyone other than the Board.

## **ARTICLE 3 REPRESENTATIONS**

Each Party represents and warrants to the other Party that it has all requisite corporate power and authority to enter into this Agreement and the execution and delivery of, and the performance of, and compliance with, the terms of this Agreement does not and will not result in any breach of, or constitute a default under, and do not and will not create a state of facts which, after notice or lapse of time or both, would result in a breach of or constitute a default under any term or provision of the articles, or resolutions of that Party, any applicable laws, mortgage, note, contract, agreement (written or oral), instrument, lease or other document to which that Party is bound, or any judgment, decree, order, statute, rule or regulation applicable to that Party.

## **ARTICLE 4 INFORMATION RIGHTS**

### **4.1 Shareholder Requirements**

If the Shareholder (i) notifies the Company that it is actively engaging in the preparation of a registration statement to be filed under the Securities Act of 1933, as amended, for an initial public offering of its securities or (ii) has a class of securities registered under Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and, in each case, the Shareholder is required to either account for its investment in the Company under the equity method of accounting or include separate financial statements of the Company in any filing with the Securities Exchange Commission by the Shareholder, then the Company agrees to timely provide such information that the Shareholder reasonably requests in connection the Shareholder's preparation and filing of any registration statement or other filing with Securities and Exchange Commission, or as is otherwise reasonably necessary for Shareholder to comply with obligations imposed on it under applicable securities laws or any stock exchange.

### **4.2 Confidentiality**

The Shareholder agrees that, unless the written consent of the Company is obtained, the Shareholder will not at any time use, disclose or make available, to any Person, any information (herein "**Confidential Information**") concerning the business or affairs of the Company acquired pursuant to the provisions of Section 4.1 and

Section 5.2 of this Agreement; provided, however, that notwithstanding the foregoing, the Shareholder may make use of, reveal or disclose Confidential Information:

4.2.1 as may be expressly permitted by this Agreement;

4.2.2 where it is already in the public domain when disclosed to the Shareholder or becomes, after having been disclosed to the Shareholder, generally available to the public through publication or otherwise unless the publication or other disclosure was made directly or indirectly by the Shareholder in breach of this Agreement;

4.2.3 as required in order to comply with applicable laws, the orders or directions of any governmental authority, the requirements of any stock exchange or clearing house, or the requirements of any other regulatory authority having jurisdiction; and

4.2.4 to Affiliates of the Shareholder, provided such Persons have agreed to maintain such Confidential Information in confidence on terms substantially similar to those in this Section 4.2.

## ARTICLE 5 TAX MATTERS

### 5.1 PFIC Status

For so long as the Shareholder owns stock of the Company, the Company will use its reasonable efforts to avoid, in respect of any taxable year, being treated as a passive foreign investment company (“**PFIC**”) within the meaning of Section 1297 of the Code, including, but not limited to, causing a Subsidiary to file an election pursuant to Treasury Regulation Section 301.7701-3. No later than 75 days after the end of each taxable year, the Company shall deliver to the Shareholder an analysis as to whether the Company believes that it will be treated as a PFIC in respect of such taxable year. Such analysis may be prepared by the Company, but in preparing such analysis the Company shall consult with its internationally recognized tax advisors.

### 5.2 QEF Information

**The Company shall use its commercially reasonable efforts to provide, and shall cause each of its subsidiaries to use its commercially reasonable efforts to provide, to the Shareholder all information that may be necessary to allow the Shareholder, and direct or indirect owners of the Shareholder, to evaluate the analysis referenced in Section 5.1 and to fulfill their U.S. tax filing and reporting obligations. The Company shall provide, and shall cause each of its subsidiaries to provide, such information to the Shareholder as direct and indirect owners of the Shareholder may reasonably require to timely file and maintain a “qualified electing fund” election (as defined in Section 1295(a) of the Code) with respect to any such entity.**

## ARTICLE 6 MISCELLANEOUS PROVISIONS

### 6.1 Waiver Must be in Writing

No waiver by any Party of any breach (whether actual or anticipated) of any of the terms, conditions, representations or warranties contained herein shall take effect or be binding upon that Party unless the waiver is expressed in writing under the authority of that Party. Any waiver so given shall extend only to the particular breach so waived and shall not limit or affect any rights with respect to any other or future breach.



## 6.2 No Amendment Except in Writing

This Agreement may be amended only by written instrument executed by the Company and the Shareholder.

## 6.3 Service of Notice

Notwithstanding anything to the contrary contained herein, any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon delivery, when sent by facsimile (if facsimile numbers are provided in Section 6.4) or electronic mail (provided that confirmation of transmission is generated and kept on file by the sending party); or (iii) one (1) Business Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same.

## 6.4 Addresses for Notice

The address for service of notices hereunder of each of the Parties shall be as follows:

### **To the Company:**

Arbutus Biopharma Corporation 100-8900 Glenlyon Parkway Burnaby, British Columbia Canada V5J 5J8  
Attention: Facsimile: Email:

With a copy sent concurrently to:

Farris, Vaughan, Wills & Murphy LLP 700 West Georgia St., 25<sup>th</sup> Floor Vancouver, British Columbia V7Y 1B3  
Tel: (604) 661-9307  
Attention: R. Hector MacKay-Dunn, Q.C. E-mail: [hmackay-dunn@farris.com](mailto:hmackay-dunn@farris.com)

and

Dorsey & Whitney LLP Pacific Centre  
1070, 1095 West Pender Street Vancouver V6E 2M6 Canada Tel: (604) 687-5151  
Attention: Daniel Miller Email: [miller.dan@dorsey.com](mailto:miller.dan@dorsey.com)

**To the Shareholder:**

Roivant Sciences Ltd.  
Clarendon House  
2 Church Street Hamilton HM11 Bermuda  
Attention: Corporate Secretary Email: [info@roivant.com](mailto:info@roivant.com)

and

Roivant Sciences, Inc. 1441 Broadway, 3<sup>rd</sup> Floor New York, NY 10018  
Attention: Allen Waxman, General Counsel Email: [allen.waxman@roivant.com](mailto:allen.waxman@roivant.com)

With a copy sent concurrently to:

White & Case LLP  
1221 Avenue of the Americas New York, New York 10020  
Attention: Sang I. Ji and Chang-Do Gong Facsimile: (212) 354-8113  
E-mail: [sji@whitecase.com](mailto:sji@whitecase.com); [cgong@whitecase.com](mailto:cgong@whitecase.com)

and

Lawson Lundell LLP  
Suite 1600 - 925 West Georgia St. Vancouver, BC V6C 3L2  
Attention: Valerie Mann and Crispin Arthur Facsimile: (604) 641-2811  
Email: [vcmann@lawsonlundell.com](mailto:vcmann@lawsonlundell.com) [carthur@lawsonlundell.com](mailto:carthur@lawsonlundell.com)

A Party may change its address for service by notice to the other Party, and such changed address for service thereafter shall be effective for all purposes of this Agreement.

**6.5 Further Assurances**

Each Party shall provide such further documents or instruments required by any other Party as may be reasonably necessary or desirable to effect the purpose of this Agreement and carry out its provisions.

**6.6 Governing Law**

This Agreement shall be governed by and construed in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein. Each of the Company and the Shareholder hereby attorn to the exclusive jurisdiction of the courts of competent jurisdiction in the Province of British Columbia located in Vancouver, British Columbia.

## **6.7 Time**

Time shall be of the essence in this Agreement.

## **6.8 Entire Agreement**

This Agreement and any agreement or document delivered pursuant to this Agreement constitute the entire agreement between the Company and the Shareholder relating to the subject matter hereof and thereof. There are no collateral or other statements, understandings, covenants, agreements, representations or warranties, written or oral, relating to the subject matter hereof. This Agreement supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, between the Parties or their predecessors relating to the subject matter of this Agreement.

## **6.9 Assignment and Enurement**

Neither this Agreement nor any benefits or obligations accruing under this Agreement shall be assignable by any Party other than by the Shareholder to an Affiliate with the prior written consent of the Company not to be unreasonably withheld. Subject to the foregoing, this Agreement shall enure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns.

## **6.10 Counterpart Execution**

A Party will be entitled to rely on delivery by facsimile or by e-mail in PDF format of an executed copy of this Agreement by the other Party, including the completed attachments hereto, and acceptance by the receiving party of such facsimile or PDF copy will be legally effective to create a valid and binding agreement between the Company and the Shareholder in accordance with the terms hereof. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which shall constitute one and the same document.

*[The remainder of this page is left blank intentionally]*

**IN WITNESS WHEREOF** the Parties have duly executed this Agreement as of the date first written above.

**ARBUTUS BIOPHARMA CORPORATION**

Per: Name:  
Title:

**ROIVANT SCIENCES LTD.**

Per: Name:  
Title:

[Signature Page to Governance Agreement]

## Schedule 1

### AMENDMENT TO ARTICLES OF INCORPORATION OF ARBUTUS BIOPHARMA CORPORATION

#### Part 27 - Transitional Governance Matters

Notwithstanding any other provision of these Articles, until the earlier of (i) forty-eight (48) months following the first issuance of Series A Preferred Shares, and (ii) the date RS no longer has a right to nominate one or more directors under Section 1 of 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**

1. In this Part, the following terms shall have the meanings assigned to them below:

“**Company Shares**” means the common shares in the capital of the Company as constituted on the date hereof;

“**Independence Standards**” means the standards set forth in NASDAQ Marketplace Rule 4200(a)(15) or any successor rule thereto, but not including the requirements for audit committee members set forth in NASDAQ Marketplace Rule 4350(d);

“**Partially Diluted Basis**” means the sum of (i) the total number of Company Shares beneficially owned by RS and (ii) the total number of Company Shares into which the Series A Preferred Shares beneficially owned by RS would be converted, assuming all Preferred Shares held by RS on any applicable date were converted into Company Shares as of the Mandatory Conversion Date, and outstanding Company Shares shall be determined based on the sum of (x) the number of outstanding Company Shares as of the date of determination and (y) the number of Company Shares that would be issued on conversion of the Series A Preferred Shares, assuming all Preferred Shares held by RS on any applicable date were converted into Company Shares as of the Mandatory Conversion Date.

“**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**

2. 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**”) or exercises control or direction over not less than:

- (a) thirty- percent (30%) of the issued and outstanding Company Shares calculated on a Partially Diluted Basis as at the Record Date Notice, RS has the right to nominate three (3) individuals for election to the board of directors of the Company at each Shareholder Meeting, one (1) of whom must satisfy the Independence Standards; and

(b) twenty- percent (20%) of the issued and outstanding Company Shares calculated on a Partially Diluted 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

(c) ten percent (10%) of the issued and outstanding Company Shares calculated on a Partially Diluted 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**").

3. 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 a Partially Diluted Basis as at the Record Date Notice, the nomination rights provided under Section 2 will be of no further force and effect.

#### **Number of Directors**

4. For so long as the Nominating Shareholder has a right to nominate one or more directors under Section 2 of this Part 28, the number of directors of the Company shall not exceed seven (7) directors, at least a majority of whom must satisfy the Independence Standards, without the prior written consent of the Nominating Shareholder.

#### **Nomination Procedure**

5. 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 a Partially Diluted 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 statute 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**

6. 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**

7. This Part 28 shall remain in effect until the date that is the earlier of (i) forty-eight (48) months following the first issuance of Series A Preferred Shares and (ii) the date RS no longer has a right to nominate one or more directors under Section 1 of this Part 28.

#### **Inconsistencies**

8. 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.



**SCHEDULE "E"**  
**LOCK-UP AMENDING AGREEMENT**

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## AMENDED AND RESTATED LOCK-UP AGREEMENT

This Amended and Restated Lock-Up Agreement (this “Agreement”) is made as of [•], 2017 by and between Arbutus Biopharma Corporation, a British Columbia corporation (the “Company”), and Roivant Sciences Ltd., a Bermuda exempted limited company (the “Shareholder”).

WHEREAS, on January 11, 2015, the Company and the Shareholder entered into that certain Lock-Up Agreement (the “Original Agreement”) with respect to the shares of voting common stock of the Company (the “Common Shares”) acquired by the Shareholder in connection with a merger agreement entered into between the Company and OnCore Biopharma, Inc. (the “Existing Common Shares”);

WHEREAS, on October 2, 2017, the Company entered into that certain Subscription Agreement by and between the Shareholder and the Company (the “Subscription Agreement”);

WHEREAS, pursuant to the Subscription Agreement, the Shareholder will purchase shares of Series A Participating Convertible Preferred Stock of the Company, which are convertible into Common Shares (the “Series A Preferred Shares”);

WHEREAS, as an inducement for the Company to enter into the Subscription Agreement and consummate the subscription, and for the Company to enter into an amended and restated governance agreement dated as of the date hereof with the Shareholder (the “Governance Agreement”), the Shareholder has agreed to execute and deliver this Agreement; and

WHEREAS, the parties hereto desire to amend and restate the Original Agreement in its entirety.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration that the parties hereby acknowledge, the parties hereby amend and restate the Original Agreement in its entirety as follows:

The Shareholder irrevocably agrees that for the Lock-Up Period (as defined below) and solely with respect to the applicable amount of the Lock-Up Securities (as defined below) as specified herein, other than as set forth below or with the prior written consent of the Company, the Shareholder will not, directly or indirectly by itself or through others: (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, the Existing Common Shares (including, but not limited to, Existing Common Shares which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission) or the Series A Preferred Shares; or (2) enter into, sell or otherwise dispose of any swap, option, future, forward or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of such Existing Common Shares, the Series A Preferred Shares or the Common Shares issuable upon conversion of the Series A Preferred Shares (the “Underlying Common Shares” and, together with such Existing Common Shares and the Series A Preferred Shares, the “Lock-Up Securities”), whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Series A Preferred Shares, Common Shares or other securities, in cash or otherwise.

For the purpose of this Agreement, the “Lock-Up Period” shall mean such period commencing on the date hereof and ending on the earlier of (i) the fourth anniversary of the date hereof, and (ii) the occurrence of any of the events set forth in the Amended and Restated Standstill Agreement that results in the restrictions set forth in Section 3 thereof not applying.

The restrictions contained in this Agreement shall not apply to the following:

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- (a) transfers of Common Shares as a bona fide gift or charitable contribution;
- (b) transfers by distribution of Preferred Shares, Common Shares or other securities to affiliates, partners, members, stockholders or holders of similar equity interests of the Shareholder;
- (c) transfers pursuant to any tender offer, takeover bid, merger, consolidation, acquisition of the Company or its voting securities or other similar transaction relating to the Company or its voting securities that occurs after the date hereof and that is approved by the Board of Directors of the Company;
- (d) granting of a security interest in (whether by way of pledge or otherwise) Common Shares by the Shareholder in connection with a loan made with a financial institution in good faith on bona fide, arm's length terms, and any subsequent transfer of such securities to such lender or collateral agent in connection with the exercise of remedies in connection with such loan in the event of default;
- (e) issuances of Common Shares upon conversion of the Series A Preferred Shares; and
- (f) any transfer or issuance of securities of the Shareholder, or any affiliate thereof that indirectly holds the Lock-Up Securities through the Shareholder, in a bona fide transaction; provided, however, that any such transfer or issuance shall not affect any of the Shareholder's obligations hereunder.

*provided however*, that in the case of any transfer or distribution pursuant to clause (a) or (b) hereunder, such transfer shall not involve a disposition for value and *provided further*, (i) in the case of any transfer or distribution pursuant to clause (a) or (b) hereunder, that each transferee or donee or distributee shall execute and deliver to the Company a lock-up agreement substantially in the form of this Agreement; (ii) in the case of any transfer pursuant to clause (d) hereunder, a permitted security interest shall not include any pledge in connection with a hedging or similar transaction or a financing transaction that has substantially the same effect as a hedging or sale transaction; and (iii) that no filing by any party (donor, donee, transferor, transferee, pledger, pledgee, borrower or otherwise) under the Exchange Act, or other public announcement shall be made (including voluntarily) in connection with such transfer, disposition, distribution, pledge or loan, except as otherwise compelled to do so or is required to do so to comply with applicable law or legal process or any request by or from a governmental authority or the rules of any securities exchange or the rules and regulations of any "self regulatory organization" as defined in Section 3(a)(26) of the Securities Exchange Act of 1934, as amended, or any other United States or foreign securities exchange, futures exchange, commodities exchange or contract market.

The Shareholder represents and warrants that it is not a party to any agreement or understanding that would cause a breach of this Agreement if it were entered into during the period in which the restrictions set forth herein are effective.

The Shareholder acknowledges that the execution, delivery and performance of this Agreement is a material inducement to the Company to enter into the Subscription Agreement, and the Company shall be entitled to specific performance of the Shareholder's obligations hereunder. The parties agree that any breach or threatened breach of this Agreement by the Shareholder may cause immediate and irreparable harm to the Company for which monetary damages will not be adequate and that, in the event of a breach or threatened breach of this Agreement, the Company shall be entitled to seek and obtain immediate injunctive and other equitable relief without proof of actual damages in addition to any other remedies as may be available at law or in equity. The Shareholder further agrees to waive any requirement for the

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securing or posting of any bond in connection with such remedy. All rights under this Agreement are cumulative, not exclusive, and will be in addition to all rights and remedies available to the Company at law or in equity.

The Shareholder and the Company agree that this Agreement shall automatically terminate and be of no further force or effect if (a) the Company is in material breach of its obligations under Articles 2 or 4 of the Governance Agreement or Part 27 or Part 28 of the Company's Articles and (b) such breach remains uncured for at least thirty (30) days after notice to the Company thereof.

The Shareholder agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions. In furtherance of the foregoing, the Company and any duly appointed transfer agent for the registration or transfer of the securities described herein are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Agreement.

The Shareholder hereby represents and warrants that the Shareholder has full power and authority to execute, deliver and perform this Agreement. All authority herein conferred or agreed to be conferred and any obligations of the Shareholder shall be binding upon the successors, assigns, heirs or personal representatives of the Shareholder. This Agreement may not be amended or otherwise modified in any respect without the written consent of the Company and the Shareholder.

This Agreement shall become effective only upon the Tier 1 Closing Date.

THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE PROVINCE OF BRITISH COLUMBIA AND THE LAWS OF CANADA APPLICABLE THEREIN, WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES THEREOF.

Any and all disputes arising under this Agreement, whether as to interpretation, performance or otherwise, shall be subject to the non-exclusive jurisdiction of the courts of the Province of British Columbia and each of the Parties hereby irrevocably attorns to the jurisdiction of the courts of such jurisdiction.

[Signature page follows]

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IN WITNESS THEREOF, the parties hereto have executed this Agreement on the date first written above.

**COMPANY:**

ARBUTUS BIOPHARMA CORPORATION

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**SHAREHOLDER:**

ROIIVANT SCIENCES LTD.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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**SCHEDULE "F"**  
**REGISTRATION RIGHTS AMENDING AGREEMENT**

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## AMENDING AGREEMENT

THIS AMENDMENT (this "Amendment") is executed as of [•], 2017, by and among Arbutus Biopharma Corporation (f/k/a Tekmira Pharmaceuticals Corporation) (the "Company"), a British Columbia corporation, Roivant Sciences Ltd., a Bermuda exempted limited company ("RSL"), Patrick T. Higgins, Michael J. McElhaugh, Michael J. Sofia and Bryce A. Roberts (such parties other than the Company being collectively referred to as the "OnCore Holders").

### RECITALS

**WHEREAS**, the parties hereto entered into a Registration Rights Agreement, dated January 11, 2015, as amended on November 2, 2015 (the "Registration Rights Agreement"), pursuant to which the Company agreed in certain circumstances to register for resale under the Securities Act of 1933, as amended, certain common shares in the Company held by the OnCore Holders;

**WHEREAS**, the Company and RSL entered into a Subscription Agreement, dated October 2, 2017, pursuant to which the Company agreed to issue to RSL, and RSL agreed to subscribe for, a certain number of Series A Preferred Shares (as defined below); and

**WHEREAS**, the parties hereto now wish to amend the terms of the Registration Rights Agreement in order to have the Registration Rights Agreement cover the shares of Common Stock issuable upon conversion of the Preferred Shares.

**NOW, THEREFORE**, in consideration of the mutual promises and covenants contained herein, the parties do hereby agree as follows:

1. **Defined Terms. All capitalized terms used and not otherwise defined herein shall have the meaning ascribed thereto in the Registration Rights Agreement.**

2. **Amendment.**

(a) **Section 1.1(m) of the Registration Rights Agreement is deleted in its entirety and replaced with the following:**

"The term "Registrable Securities" means (A) the shares of Common Stock issued to the OnCore Holders pursuant to the Merger Agreement and any assignee or transferee thereof in accordance with Section 1.12 hereof, (B) any and all shares of Common Stock issuable or issued upon conversion of the Series A Preferred Shares, and (C) any shares of Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange for, or in replacement of, the shares referenced in clauses (A) and (B) above or the Series A Preferred Shares. Notwithstanding the foregoing, Registrable Securities shall not include any securities (x) sold by a person to the public pursuant to a registration statement (on Form S-8 or

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otherwise) or pursuant to Rule 144, (y) sold in a private transaction in which the transferor's rights under Section 1 of this Agreement are not assigned or (z) held by a Holder (together with its affiliates and other Holders that share a common investment advisor with such Holder) if such Holder (together with its affiliates and other Holders that share a common investment advisor with such Holder) beneficially owns less than 3% of the Company's outstanding shares of Common Stock, if such securities may then be sold pursuant to Rule 144(b)(1)."

(b) Section 1.1 of the Registration Rights Agreement is amended by adding the following subsection (q):

"(q) The term "Series A Preferred Shares" means the shares of the series of convertible participating preferred shares of the Company designated as "Series A Participating Convertible Preferred Shares" and convertible into shares of Common Stock in accordance with the terms set forth in that certain Terms of Series A Participating Convertible Preferred Shares of the Company, authorized by the Board on [•], 2017.

3. Entire Agreement; Ratification. This Amendment constitutes the entire agreement among the parties with respect to the subject matter hereof. Except as expressly amended hereby, the terms of the Registration Rights Agreement are each hereby confirmed and ratified in all respects by the parties hereto and remain in full force and effect.

4. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties hereto, and any of their respective subsidiaries, affiliates, insurers, predecessors, successors, officers, directors, managers, employees, stockholders, members, agents, attorneys or assigns.

5. Governing Law. This Amendment shall be governed by and construed under the laws of the State of New York as applied to agreements among New York residents entered into and to be performed entirely within New York without giving effect to principles of conflicts of laws.

6. Counterparts. This Amendment may be signed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same agreement.

7. Necessary Action. Each party shall perform any further acts and execute and deliver any documents that may be reasonably necessary to carry out the provisions of this Amendment.

[Signature pages to follow]

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

**ARBUTUS BIOPHARMA CORPORATION**

By:Name:

Title:

Address:

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

**ROIVANT SCIENCES LTD.**

By:Name:

Title:

Address:

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

By: Patrick T. Higgins  
Address:

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

By: Michael J. McElhaugh

Address:

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

By: Michael J. Sofia  
Address:

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

By: Bryce A. Roberts

Address:

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**SCHEDULE "G"**  
**STANDSTILL AMENDING AGREEMENT**

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## AMENDED AND RESTATED STANDSTILL AGREEMENT

This Amended and Restated Standstill Agreement (this “*Agreement*”) is made as of [•], 2017 by and between Arbutus Biopharma Corporation, a British Columbia corporation (“*Arbutus*” or the “*Company*”), and Roivant Sciences Ltd., a Bermuda exempted limited company, for and on behalf of itself and entities and accounts that it controls directly or indirectly, or with respect to which it exercises voting discretion, whether such entities or accounts now exist or are organized in the future (collectively, the “*Shareholder*”).

WHEREAS, on January 11, 2015 the Company and the Shareholder entered into that certain Standstill Agreement (the “*Original Agreement*”);

WHEREAS, on the October 2, 2017, the Company entered into a Subscription Agreement by and among the Shareholder and the Company (the “*Subscription Agreement*”);

WHEREAS, pursuant to the Subscription Agreement, the Shareholder will purchase shares of Series A Participating Convertible Preferred Stock of the Company which are convertible into Common Stock (the “*Preferred Shares*”);

WHEREAS, as an inducement for the Company to enter into the Subscription Agreement and consummate the subscription, and for the Company to enter into an amended and restated governance agreement dated as of the date hereof with the Shareholder (the “*Governance Agreement*”), the Shareholder has agreed to execute and deliver this Agreement; and

WHEREAS, the parties hereto desire to amend and restate the Original Agreement in its entirety. NOW, THEREFORE, in consideration of the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration that the parties hereby acknowledge, the parties hereby amend and restate the Original Agreement in its entirety as follows:

1. Definitions. In this Agreement, the following terms shall have the meaning assigned to them below. Capitalized terms used but not defined herein shall have the meanings ascribed thereto in the Subscription Agreement

“*Common Stock*” means the shares of voting common stock of the Company.

“*Lock-up Agreement*” means the amended and restated Lock-Up Agreement dated as of the date hereof between the Company and the Shareholder.

“*Shareholder Maximum Ownership Percentage*” means 49.99% of the outstanding Common Stock, including shares of Common Stock the Shareholder would be entitled to acquire, assuming all Preferred Shares held by the Shareholder on any applicable date were converted into Common Stock as of the Mandatory Conversion Date (as such term is defined in the rights and restrictions attached to the Preferred Shares).

2. Original Agreement. The Original Agreement is hereby amended and restated in its entirety by this Agreement.

3. Standstill. For a period commencing on the date hereof and ending on the earlier of (i) forty-eight (48) months following the Tier 1 Closing and (ii) the date upon which the Shareholder no longer has the right to nominate at least one (1) director to the Company’s board of directors (the Board) pursuant to the Governance Agreement and/or Part 28 of the Company’s Articles, the Shareholder shall not, without the prior written consent of the Company, directly or indirectly:

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- a. acquire, offer to acquire, or agree to acquire ownership (including, but not limited to, beneficial ownership as defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended (Exchange Act)), by purchase or otherwise, any additional shares of Common Stock, or any rights or options to acquire any such securities or any securities convertible into such securities; provided that, in the event that at any time, whether due to an increase in the total outstanding shares of Common Stock, a sale of shares of Common Stock or Preferred Shares by the Shareholder (made in compliance with the provisions of the Lock-Up Agreement) or otherwise, the Shareholder beneficially owns, directly or indirectly, Common Stock representing less than the Shareholder Maximum Ownership Percentage, the Shareholder may acquire additional shares of Common Stock or rights or options to acquire any such securities or any securities convertible into such securities; provided, further, that the Shareholder's ownership percentage will not exceed the Shareholder Maximum Ownership Percentage;
- b. call or seek to call any meeting of the stockholders of the Company;
- c. submit, or participate with others that submit, any stockholder proposals for the vote or consent (collectively, vote) of stockholders (whether pursuant to Rule 14a-8 under the Exchange Act, or otherwise) of the Company or any proposal for consideration by the Board;
- d. solicit proxies or make, participate in or encourage any solicitation (as such terms are used in the proxy rules of the Securities Exchange Commission) for proxies for any stockholder proposals of the Company or nominations of candidates for election as directors or trustees of the Company;
- e. form or join in a partnership, syndicate or other group, including, without limitations, a group as defined under Section 13(d) of the Exchange Act, with respect to the Common Shares, or deposit any Common Shares in a voting trust, arrangement or agreement, except for such actions that may be permitted under the Lock-Up Agreement;
- f. publicly or privately: (i) encourage, recommend, advise, finance or urge others to put forward stockholder proposals of the Company or nominations with respect to directors/trustees of the Company or enter into any arrangements with any other person in connection with any of the foregoing as they relate to the Company; (ii) indicate support or approval for any stockholder proposals or nominations relating to the Company that are not otherwise approved by the Board in accordance with the Articles; (iii) solicit or encourage others to vote against any matter recommended by the Board in accordance with the Articles; or (iv) act alone or in concert with others to seek control of, or otherwise effect a change to, the management or policies of the Company, unless otherwise approved by the Board in accordance with the Articles; or
- g. take or seek to take, or cause or seek to cause or solicit others to take any action inconsistent with any of the foregoing as they relate to the Company.

For the avoidance of doubt, this Agreement will not be construed to preclude, prohibit, restrict or otherwise prevent the Shareholder from taking any actions that are permitted or contemplated by the Governance Agreement or the Company's Articles.

Notwithstanding anything contained in this Agreement to the contrary, the Shareholder shall not be required to dispose of any of its holdings of Preferred Shares or Common Shares if (i) the number of shares of Common Stock is reduced or if the aggregate ownership of the Shareholder is increased solely as a result of a recapitalization or other transaction of the Company and as a

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result of such transaction, the Shareholder's ownership exceeds the Shareholder Maximum Ownership Percentage or (ii) a majority of the members of the Board of the Company (other than the Shareholder nominees) approve a transaction pursuant to which the Shareholder's ownership exceeds the Shareholder Maximum Ownership Percentage.

The restrictions set forth in this Section 3 shall not apply if any of the following occurs:

- a. in the event that the Company enters into a definitive agreement for a merger, consolidation or other business combination transaction as a result of which the stockholders of the Company would own (including, but not limited to, beneficial ownership) voting securities of the resulting corporation having 50% or less of the total voting power of the outstanding voting securities;
- b. in the event that a bona fide tender offer or exchange offer for at least a majority of the outstanding voting securities of the Company is commenced by a third person (not involving any breach of this Section 3 by the Shareholder); or
- c. the Company solicits from one or more persons or enters into discussions with one or more persons regarding, a proposal with respect to a merger of, or a business combination transaction involving, the Company, in each case without similarly soliciting a proposal from the Shareholder, or the Company makes a public announcement that it is seeking to sell itself and/or explore strategic alternatives which could lead to a sale, restructuring, business combination, merger or other similar transaction and, in such event, such announcement is made with the approval of the Board.

Nothing in this Section 3 shall restrict the Shareholder from (i) making any proposal directly to the Board on a confidential basis; or (ii) voting its Common Stock in any manner the Shareholder determines in its sole discretion; provided that, the Shareholder complies with any voting requirements applicable to the Shareholder set forth in the Governance Agreement and/or the Company's Articles.

4. Termination. The Shareholder may terminate this Agreement if the Company is in material breach of Articles 2 or 4.2 of the Governance Agreement or Part 27 or Part 28 of the Company's Articles and such breach remains uncured for at least fifteen (15) days after notice to the Company thereof.
  5. Remedies. The parties agree that any breach or threatened breach of this Agreement may cause immediate and irreparable harm to the Company for which monetary damages will not be adequate and that, in the event of a breach or threatened breach of this Agreement, the Company shall be entitled to seek and obtain immediate injunctive and other equitable relief without proof of actual damages in addition to any other remedies as may be available at law or in equity. The Shareholder further agrees to waive any requirement for the securing or posting of any bond in connection with such remedy. All rights under this Agreement are cumulative, not exclusive, and will be in addition to all rights and remedies available to the Company at law or in equity.
  6. No Assignment. This Agreement shall be binding upon and inure to the benefit of the parties and their respective agents, executors, heirs, successors and permitted assigns. Neither this Agreement nor any of the benefits of this Agreement shall be assigned by a party without prior written consent of the other parties hereto. No person not a party to this Agreement shall have rights, benefits, or obligations hereunder.
  7. Amendments. No amendments, changes, or modifications may be made to this Agreement without the express prior written consent of each of the parties hereto.
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8. Notices. All notices or communications hereunder shall be in writing, addressed as follows:

**To the Company:**

Arbutus Biopharma Corporation 100-8900 Glenlyon Parkway Burnaby, British Columbia Canada V5J 5J8  
Attention: Bruce Cousins, Executive Vice President and Chief Financial Officer Facsimile: (604) 419-3201

Email: [bcousins@arbutusbio.com](mailto:bcousins@arbutusbio.com) With a copy sent concurrently to:

Farris, Vaughan, Wills & Murphy LLP 700 West Georgia St., 25th Floor Vancouver, British Columbia V7Y 1B3 Tel: (604) 661-9307

Attention: R. Hector MacKay-Dunn, Q.C. E-mail: [hmackay-dunn@farris.com](mailto:hmackay-dunn@farris.com)

and

Dorsey & Whitney LLP

Suite 1070, 1095 West Pender Street Vancouver, British Columbia V6E 2M6 Tel: (604) 687-5151

Attention: Daniel Miller Email: [miller.dan@dorsey.com](mailto:miller.dan@dorsey.com)

**To the Shareholder:**

Roivant Sciences Ltd. Clarendon House

2 Church Street Hamilton HM11 Bermuda

Attention: Corporate Secretary Facsimile: +1 (441) 292 4720 Email: [info@roivant.com](mailto:info@roivant.com)

and

Roivant Sciences, Inc.

320 West 37th Street, 5th Floor New York, New York 10018

Attention: Allen Waxman, General Counsel Email: [allen.waxman@roivant.com](mailto:allen.waxman@roivant.com)

With a copy sent concurrently to:

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White & Case LLP

1221 Avenue of the Americas New York, New York 10020  
Attention: Sang I. Ji and Chang-Do Gong Facsimile: (212) 354-8113  
E-mail: [sji@whitecase.com](mailto:sji@whitecase.com); [cgong@whitecase.com](mailto:cgong@whitecase.com)

Lawson Lundell LLP  
1600 - 925 West Georgia Street Vancouver, British Columbia V6C 3L2  
Attention: Valerie Mann and Crispin Arthur Fax: (604) 641-2811  
Email: [vcmann@lawsonlundell.com](mailto:vcmann@lawsonlundell.com) [carthur@lawsonlundell.com](mailto:carthur@lawsonlundell.com)

Any such notice or communication shall be delivered by hand or by courier or sent certified or registered mail, return receipt requested, postage prepaid, addressed as above (or to such other address as such party may designate in a notice duly delivered as described above), and the third business day after the actual date of mailing shall constitute the time at which notice was given.

9. Invalidity. If any term or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms and provisions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated.
10. No Waiver. No failure or delay by a party in exercising any right hereunder or any partial exercise thereof shall operate as a waiver thereof or preclude any other or further exercise of any right hereunder. No waiver, express or implied, by any party of any breach of default by any other party in the performance by the other party of its obligations under this Agreement shall be deemed or construed to be a waiver of any other breach or default, whether prior, subsequent, or contemporaneous, under this Agreement. Any waiver must be in writing and executed by the party against whom the waiver is sought to be charged.
11. Counterparts. This Agreement may be executed in two counterparts, which may be delivered by facsimile or by portable document format (PDF) attachment to email transmission, each of which shall be deemed an original, and when taken together all such counterparts shall be deemed to constitute one and the same document.
12. Applicable Law This Agreement shall be construed, interpreted and governed in accordance with the laws of the Province of British Columbia and the laws of Canada, without reference to rules relating to conflicts of law.
13. Entire Agreement. This Agreement contains the entire understanding between the parties and is intended to be the complete and exclusive statement of the terms and conditions of the agreement between the parties and supersedes in all respects any prior agreement or understanding between the Company and the Shareholder.

{REMAINDER INTENTIONALLY LEFT BLANK}

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IN WITNESS THEREOF, the parties hereto have executed this Agreement on the date first written above.

**COMPANY:**

ARBUTUS BIOPHARMA CORPORATION

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**SHAREHOLDER:**

ROIIVANT SCIENCES LTD.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**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 Murray, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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) 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: November 2, 2017

/s/ Mark Murray  
Name: Mark Murray  
Title: President and Chief Executive Officer

**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, Bruce Cousins, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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) 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: November 2, 2017

/s/ Bruce Cousins  
Name: Bruce Cousins  
Title: Executive Vice President and  
Chief Financial Officer

**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 Quarterly Report on Form 10-Q of Arbutus Biopharma Corporation (the "Company") for the quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I Mark 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: November 2, 2017

/s/ Mark Murray  
Name: Mark Murray  
Title: President and Chief Executive Officer



**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 Quarterly Report on Form 10-Q of Arbutus Biopharma Corporation (the "Company") for the quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I Bruce Cousins, Executive Vice President, Finance and 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: November 2, 2017

/s/ Bruce Cousins  
Name: Bruce Cousins  
Title: Executive Vice President and  
Chief Financial Officer

