MEDICURE INC Form 20-F

April 30, 2019
UNITED STATES
Securities and Exchange Commission
Washington, D.C. 20549
FORM 20-F
REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934 or
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF x 1934  For the fiscal year ended: December 31, 2018
or
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 or
"SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number: 001-31995
MEDICURE INC.
(Exact name of registrant as specified in its charter)
Canada

(Jurisdiction of incorporation or organization)
2 - 1250 Waverley Street, Winnipeg, Manitoba, Canada R3T 6C6
(Address of principal executive offices)
Dr. Albert D. Friesen, Tel: (204) 487-7412, Fax: (204) 488-9823
2 - 1250 Waverley Street, Winnipeg, Manitoba, Canada R3T 6C6
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)
Securities registered or to be registered pursuant to Section 12(b) of the Act: <b>None</b>
Securities registered or to be registered pursuant to Section 12(g) of the Act:
Common Shares, without par value
(Title of Class)
Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None
Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:
At December 31, 2018 the registrant had 15,547,812 common shares issued and outstanding
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

### Yes "No b

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

### Yes "No b

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 b No "

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

### Yes b No "

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

Large Accelerated Filer " Accelerated Filer " Non-Accelerated Filer b

### **Emerging Growth Company** "

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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<sup>1</sup> provided pursuant to Section 13(a) of the Exchange act. "

<sup>1</sup> The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

International Financial Reporting
US GAAP "Standards as issued by the International Other "Accounting Standards Board b

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

### Item 17 " Item 18 "

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes "No b

## TABLE OF CONTENTS

<u>GENERAL</u>	1
GLOSSARY OF TERMS	1
FORWARD LOOKING STATEMENTS	<u>2</u>
PART I	<u>4</u>
ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS A. Directors and Senior Management B. Advisers C. Auditors	4 4 4 4
ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE	<u>4</u>
ITEM 3. KEY INFORMATION  A. Selected Financial Data  B. Capitalization and Indebtedness  C. Reasons for the Offer and Use of Proceeds  D. Risk Factors	4 4 7 7 7
ITEM 4. INFORMATION ON THE COMPANY A. History and Development of the Company B. Business Overview C. Organizational Structure D. Property, Plant and Equipment	28 28 32 44 44
ITEM 4A. UNRESOLVED STAFF COMMENTS	<u>44</u>
ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS A. Operating Results B. Liquidity and Capital Resources C. Research and Development, Patents and Licenses, Etc. D. Trend Information E. Off-balance Sheet Arrangements F. Contractual Obligations	45 50 58 59 64 64 65
ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES A. Directors and Senior Management B. Compensation C. Board Practices D. Employees E. Share Ownership	68 68 70 72 83 84

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS	<u>86</u>
A. Major Shareholders	<u>86</u>
B. Related Party Transactions	<u>87</u>
C. Interests of Experts and Counsel	<u>91</u>
ITEM 8. FINANCIAL INFORMATION	<u>91</u>
A. Consolidated Statements or Other Financial Information	<u>91</u>
B. Significant Changes	<u>92</u>
ITEM 9. THE OFFERING AND LISTING	<u>92</u>
A. Listing Details	<u>92</u>
B. Plan of Distribution	<u>93</u>
C. Markets	<u>93</u>
D. Selling Shareholders	<u>93</u>
E. Dilution	<u>93</u>

F. Expenses of the Issue	<u>94</u>
ITEM 10. ADDITIONAL INFORMATION A. Share Capital B. Memorandum and Articles of Association C. Material Contracts D. Exchange Controls E. Taxation F. Dividends and Paying Agents G. Statement by Experts H. Documents on Display I. Subsidiary Information	94 94 94 98 99 99 108 109 109
ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	<u>109</u>
ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES	<u>109</u>
PART II	<u>109</u>
ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES	<u>109</u>
ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS	<u>110</u>
ITEM 15. CONTROLS AND PROCEDURES	<u>110</u>
ITEM 16. RESERVED	<u>111</u>
ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT	<u>111</u>
ITEM 16B. CODE OF ETHICS	<u>112</u>
ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES.	<u>112</u>
ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES	<u>112</u>
ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS	<u>113</u>
ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT	<u>113</u>
ITEM 16G. CORPORATE GOVERNANCE	<u>113</u>
ITEM 16H. MINE SAFETY DISCLOSURE	<u>113</u>
PART III	114

ITEM 17. FINANCIAL STATEMENTS	<u>114</u>
ITEM 18. FINANCIAL STATEMENTS	<u>114</u>
ITEM 19. EXHIBITS	<u>157</u>
iii	

#### **GENERAL**

As used in this Annual Report, the "Corporation" or "Company" refers to Medicure Inc., a Canadian public company existing under the *Canada Business Corporations Act*.

The Company uses the Canadian dollar as its reporting currency. Unless otherwise indicated, all references to dollar amounts in this Annual Report are to Canadian dollars. As of December 31, 2018, the rate for Canadian dollars was US \$1.00 for CND \$1.3642. See also Item 3 – *Key Information* for more detailed currency and conversion information.

Except as noted, the information set forth in this Annual Report is as of April 29, 2019 and all information included in this document should only be considered correct as of such date.

#### **GLOSSARY OF TERMS**

The following words and phrases shall have the meanings set forth below:

**"2014 Apicore Transaction"** means the transaction occurring on July 3, 2014, whereby the Company acquired a minority interest in Apicore.

"2016 Apicore Transaction" means the transaction occurring on December 1, 2016, whereby the Company acquired a majority interest in Apicore.

"2017 Apicore Transaction" means the transaction occurring on July 12, 2017 whereby the Company acquired additional interests in Apicore.

"angioplasty" means a surgical procedure to repair a damaged blood vessel or unblock an artery;

"Apicore" means any one or more of Apicore LLC, Apicore US LLC, Apicore Inc., Apigen Investments Limited, and Apicore Pharmaceuticals PVT Ltd., including any of their affiliates and subsidiaries, and if the context requires, the pharmaceutical manufacturing business carried on by this group of companies;

"Apicore Sale Transaction" means the transaction occurring on October 2, 2017, whereby the Company sold its interests in the Apicore business.

"DEA" means the United States Drug Enforcement Administration;

"DMF" means drug master file, which is submitted to the FDA;

"GPIs" means glycoprotein GP IIb/IIIa inhibitors, which are injectable platelet inhibitors used to treat acute coronary syndromes and related conditions and procedures;

**"myocardial infarction"** means destruction of heart tissue resulting from obstruction of the blood supply to the heart muscle;

"NDA" means new drug application, which is submitted to the FDA;

"FDA" means the United States Food and Drug Administration;

"ReDS <sup>TM</sup> "means the ReDS <sup>TM</sup> point of care system;
"sNDA" means supplemental new drug application, which is submitted to the FDA;
"SNP" means Sodium Nitroprusside Injection;
"STEMI" means ST Segment Elevation Myocardial Infarction, a type of heart attack
"TSX-V" means the TSX Venture Exchange.
FORWARD LOOKING STATEMENTS
Medicure Inc. cautions readers that certain important factors (including without limitation those set forth in this Form 20-F) may affect the Company's actual results in the future and could cause such results to differ materially from any forward-looking statements that may be deemed to have been made in this Form 20-F annual report, or that are otherwise made by or on behalf of the Company. This Annual Report contains forward-looking statements and information which may not be based on historical fact, which may be identified by the words "believes," "may," "plan," "will, "estimate," "continue," "anticipates," "intends," "expects," and similar expressions and the negative of such expressions. Such forward-looking statements include, without limitation, statements regarding:
(a) the Company's intention to sell and market its acute care cardiovascular drug, AGGRASTA® in the United States and its territories through the Company's U.S. subsidiary, Medicure Pharma, Inc.;
(b) the Company's intention to sell and market its cardiovascular drug, ZYPITAMAGM in the United States and its territories through the Company's U.S. subsidiary, Medicure Pharma, Inc.;
(c) the Company's intention to sell and market the ReDS <sup>TM</sup> in the United States and its territories through the Company's U.S. subsidiary, Medicure Pharma, Inc.;

(d)

the Company's intention to sell and market its cardiovascular drug, SNP in the United States and its territories through the Company's U.S. subsidiary, Medicure Pharma, Inc.;

- (e) the Company's intention to develop and implement clinical, regulatory and other plans to generate an increase in the value of AGGRASTAT®;
- the Company's intention to expand or otherwise improve the approved indications and/or dosing information contained within AGGRASTAT®'s approved prescribing information;
- (g) the Company's intention to increase sales of AGGRASTAT®;
- (h) the Company's intention to increase sales of ZYPITAMAGM;
- (i) the Company's intention to launch PREXXARTAN® (valsartan) oral solution, which is currently on hold pending resolution of the dispute between Carmel Biosciences, Inc. ("Carmel") and the third-party manufacturer;
- (j) the Company's intention to launch and generate sales of SNP;
- (k) the Company's intention to generate sales of ReDS<sup>TM</sup>;
  - the Company's intention to develop pyridoxal 5 phosphate ("**P5P**") or TARDOX**AY**, formerly MC-1, for neurological disorders or other applications;

(m) the Company's intention to investigate and advance certain other product opportunities;
(n) the Company's intention to develop and commercialize additional cardiovascular generic drug products;
(o) the Company's intention and ability to obtain regulatory approval for the Company's products;
(p) the Company's expectations with respect to the cost of the testing and commercialization of the Company's products;
(q) the Company's sales and marketing strategy;
(r) the Company's anticipated sources of revenue;
(s) the Company's intentions regarding the protection of the Company's intellectual property;
the Company's intention to identify, negotiate and complete business development transactions (e.g. the sale, purchase, or license of pharmaceutical products or services);
(u) the Company's expectation in regards to the receipt of the holdback receivable funds;
(v) the Company's business strategy; and
(w) the Company's expectation that it will not pay dividends in the foreseeable future.
Such forward-looking statements and information involve a number of assumptions as well as known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements and information including, without limitation:
·general business and economic conditions;
the impact of changes in Canadian-US dollar and other foreign exchange rates on the Company's revenues, costs and results;

the timing of the receipt of regulatory and governmental approvals for the Company's research and development projects;

the availability of financing for the Company's commercial operations and/or research and development projects, or the availability of financing on reasonable terms;

results of current and future clinical trials:

the uncertainties associated with the acceptance and demand for new products;

clinical trials not being unreasonably delayed and expenses not increasing substantially;

government regulation not imposing requirements that significantly increase expenses or that delay or impede the Company's ability to bring new products to market;

the Company's ability to attract and retain skilled management and staff;

the Company's ability, amid circumstances and decisions that are out of the Company's control, to maintain adequate supply of product for commercial sale;

inaccuracies and deficiencies in the scientific understanding of the interaction and effects of pharmaceutical treatments when administered to humans;

market competition;

tax benefits and tax rates; and

the Company's ongoing relations with its employees and with its business partners.

These factors should be considered carefully and readers are cautioned not to place undue reliance on such forward-looking statements and information. The Company disclaims any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements and information contained herein to reflect future results, events or developments, except as otherwise required by applicable law. Additional risks and uncertainties relating to the Company and its business can be found in the "Risk Factors" section of this Annual Report.

PART I
ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS
A. Directors and Senior Management
Not applicable
B. Advisers
Not applicable
C. Auditors
Not applicable
ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE
Not applicable
ITEM 3. KEY INFORMATION

A. Selected Financial Data

The selected financial data of the Company as at December 31, 2018 and 2017, and for the fiscal years ended December 31, 2018, 2017 and 2016, was extracted from the audited consolidated financial statements of the Company included in this Annual Report on Form 20-F. The information contained in the selected financial data is qualified in its entirety by reference to the more detailed consolidated financial statements and related notes included in Item 18 - *Financial Statements*, and should be read in conjunction with such financial statements and with the information appearing in Item 5 - *Operating and Financial Review and Prospects*. The selected financial data of the Company as at December 31, 2016 and 2015, and December 31, 2014 and for the year ended December 31, 2015 and the seven months ended December 31, 2014 was extracted from the audited financial statements of the Company not included in this Annual Report.

## **Under International Financial Reporting Standards (in Canadian dollars):**

Statement of Financial Position	December 31,	December 31,	December 31,	December 31,	December 31,
Data	2018	2017	2016	2015	2014
(as at period end)	\$	\$	\$	\$	\$
Current Assets	89,586,820	114,558,882	55,211,748	17,448,554	3,874,097
Property and Equipment	316,013	221,622	10,300,639	230,162	33,161
Intangible Assets	1,705,250	1,756,300	100,864,817	1,411,992	1,096,946
Goodwill	_	-	47,485,572	-	-
Other Assets	12,153,330	12,394,881	862,891	2,166,170	1,556,315
Total Assets	103,761,413	128,931,685	214,725,667	21,256,878	6,560,519
Current Liabilities	16,932,250	43,673,908	61,560,600	10,352,462	4,377,498
Non-current Liabilities	3,235,618	4,548,617	114,881,163	6,442,865	6,094,037
Total Liabilities	20,167,868	48,222,525	176,441,763	16,795,327	10,471,535
Net Assets / (Deficiency)	83,593,545	80,709,160	36,193,904	4,461,551	(3,911,016)
Capital Stock, Warrants and	122 464 000	124 570 700	122 476 600	120 204 500	100 406 511
Contributed Surplus	132,464,098	134,579,798	133,476,698	128,304,590	122,406,511
Accumulated Other Comprehensive	1 267 717	672.264	691 002	1 071 725	200 220
Income	1,267,717	673,264	681,992	1,071,735	298,329
Deficit	(50,138,270)	(54,543,902)	(97,964,786)	(124,947,427)	(126,615,856)
Non-controlling Interest	-	-	2,090,000	-	-
Statement of Net Income (for the					
fiscal year ended on)					
Product Sales	29,109,365	27,132,832	29,304,800	22,083,128	5,264,395
Loss on Settlement of Debt	-	-	-	(60,595)	-
Net Income for the Period from	3,925,639	11 406 602	2 624 222	1,668,429	1 105 506
continuing operations	3,923,039	11,496,693	3,624,323	1,008,429	1,195,596
Net income for the Period from		31,924,191	23,358,318		
discontinued operations	-	31,924,191	25,556,516	-	-
Comprehensive Income (Loss) for	4,520,092	43,412,156	26,560,245	2,474,488	1,339,134
the Period	4,320,092	45,412,130	20,300,243	2,474,400	1,339,134
Income Per Share from continuing					
operations					
Basic	0.25	0.74	0.24	0.12	0.10
Diluted	0.24	0.63	0.21	0.11	0.09
Income Per Share from discontinued					
operations					
Basic	-	2.04	1.56	-	-
Diluted	-	1.76	1.35	-	-
Income Per Share					
Basic	0.25	2.78	1.80	0.12	0.10
Diluted	0.24	2.39	1.56	0.11	0.09
Weighted-Average Number of					
Common Shares					

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Outstanding – Continuing Operations							
Basic	15,791,396	15,636,853	15,002,005	13,461,609	12,204,827		
Diluted	16,563,663	18,138,080	17,316,401	15,765,570	13,843,126		
Weighted-Average Number of							
Common Shares							
Outstanding – Discontinued							
Operations							
Basic	15,791,396	15,636,853	15,002,005	13,461,609	12,204,827		
Diluted	16,563,663	18,138,080	17,316,401	15,765,570	13,843,126		
Weighted-Average Number of							
Common Shares							
Outstanding							
Basic	15,791,396	15,636,853	15,002,005	13,461,609	12,204,827		
Diluted	16,563,663	18,138,080	17,316,401	15,765,570	13,843,126		

#### Dividends

No cash dividends have been declared nor are any intended to be declared in the foreseeable future. The Company is not subject to legal restrictions respecting the payment of dividends except that they may not be paid if the Company is, or would after the payment be, insolvent. Dividend policy will be based on the Company's cash resources and needs and it is anticipated that all available cash will be required to further the Company's research and development activities for the foreseeable future.

### Exchange Rates

Unless otherwise indicated, all reference to dollar amounts are to Canadian dollars. On April 26, 2019, the rate of exchange of the Canadian dollar, based on the daily exchange rate in Canada as published by the Bank of Canada, was US\$1.00 = Canadian \$1.3460. The exchange rates published by the Bank of Canada and made available on its website, <a href="www.bankofcanada.ca">www.bankofcanada.ca</a>, are nominal quotations — not buying or selling rates — and are intended for statistical or analytical purposes.

The following tables set out the exchange rates, based on the daily noon rates in Canada as published by the Bank of Canada for the conversion of Canadian Dollars into U.S. Dollars, for the periods indicated:

	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015	December 31, 2014
Period End	1.3642	1.2545	1.3427	1.3840	1.1601
Average for the Period*	1.2957	1.2986	1.3248	1.2787	1.1083
High for the Period	1.3642	1.3743	1.4590	1.4004	1.1536
Low for the Period	1.2288	1.2128	1.2544	1.1680	1.0740

<sup>\*</sup>The average rate for each period is the average of the daily closing rates on the last day of each month during the period.

	High	Low
April 2019	1.3493	1.3316
March 2019	1.3438	1.3260
February 2019	1.3298	1.3095
January 2019	1.3600	1.3144

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December 2018	1.3642	1.3191
November 2018	1.3302	1.3088
October 2018	1.3142	1.2803
September 2018	1.3188	1.2803
August 2018	1.3152	1.2917
July 2018	1.3255	1.3017
June 2018	1.3310	1.2913
May 2018	1.3020	1.2775
April 2018	1.2908	1.2552
March 2018	1.3088	1.2830
February 2018	1.2809	1.2288
January 2018	1.2535	1.2293

B. Capitalization and Indebtedness
Not applicable
C. Reasons for the Offer and Use of Proceeds
Not applicable
D. Risk Factors
An investment in the Company's common shares is highly speculative and subject to a number of risks. Only those persons who can bear the risk of the entire loss of their investment should participate. An investor should carefully consider the risks described below and the other information that the Company furnishes to, or files with, the Securities and Exchange Commission and with Canadian securities regulators before investing in the Company's common shares.
Uncertainties and risks include, but are not limited to, the risk that the Company may face with respect to importing

The following are significant factors known to us that could materially harm our business, financial position, or operating results or could cause our actual results to differ materially from our anticipated results or other expectations, including those expressed in any forward-looking statement made in this report. The risks described are not the only risks facing us. Additional risks and uncertainties not currently known to us, or that we currently deem to be immaterial, also may adversely affect our business, financial position, and operating results. If any of these risks actually occur, our business, financial position, and operating results could suffer significantly. As a result, the market price of our common stock could decline and investors could lose all or part of their investment.

raw materials, increased competition, acquisitions, contract manufacturing arrangements, delays or failure in obtaining product approvals from the FDA, general business and economic conditions, market trends, product development,

regulatory, and other approvals and marketing.

The fact that the Company currently derives nearly all of its revenue from a single product, AGGRASTAT®, exposes the Company to the risks inherent in the establishment and maintenance of a developing business

enterprise, such as those related to product acceptance, competition and viable operations management, and the long-term profitability of the Company remains uncertain.

At December 31, 2018, with the exception of AGGRASTAT® and ZYPITAMAG<sup>TM</sup>, the Company's commercial products are in the development stage and accordingly, its business operations are subject to all of the risks inherent in the establishment and maintenance of a developing business enterprise, such as those related to product acceptance, competition and viable operations management.

The long-term profitability of the Company's operations is uncertain, and any profitability may not be sustained. The Company's long-term profitability will depend in significant part on its ability to maintain or expand sales of AGGRASTAT®, and to acquire and/or develop other commercially viable drug products. This in turn depends on numerous factors which remain uncertain, including the following:

- (a) the success of the Company's research and development activities;
- (b) obtaining regulatory approvals to market any of its development products;

- (c) the ability to contract for the manufacture of the Company's products according to schedule and within budget, given the Company's limited experience and lack of internal capabilities for manufacturing;
- (d) the ability to develop, implement and maintain appropriate systems and structures to market and operate within applicable regulatory, industry and legal guidelines;
- (e) the ability to identify, negotiate and complete business development transactions (e.g. the sale, purchase, or license of pharmaceutical products or services) with third parties;
- (f) the ability to maintain current or higher pricing and margins for the Company's products;
- (g) the ability to successfully prosecute and defend its patents and other intellectual property; and
- (h) the ability to successfully market the Company's products, including AGGRASTAT®, given that it has limited resources.

Further, if the Company does achieve sustained profitability, it may not be able to increase profitability in the future.

There is no assurance that the Company will be successful in growing the sales of ZYPITAMAG<sup>TM</sup> in the United States and its territories, and its failure to do so could have a material adverse effect on the Company's long-term profitability.

During 2017, the Company acquired an exclusive license to sell and market ZYPITAMAG<sup>TM</sup> in the United States and its territories for an initial term of seven years, with extensions to the term available. ZYPITAMAG<sup>TM</sup>, used for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia, was approved early in 2017 by the FDA for sale and marketing in the United States and its territories, and the Company launched the product using its existing commercial infrastructure in May 2018.

ZYPITAMAG competes in a highly competitive class of products and to date, the rate of uptake of ZYPITAMAG<sup>TM</sup> has been slow resulting in minimal sales of ZYPITAMAG<sup>TM</sup> recorded for the year ended December 31, 2018. There is no assurance that the Company will be successful in growing the sales of ZYPITAMAG<sup>TM</sup> in 2019 and beyond as there is no assurance that a viable market for ZYPITAMAG<sup>TM</sup> will develop. The failure of the Company to grow sales of ZYPITAMAG<sup>TM</sup>, or to establish a viable market for the product, could have a material adverse effect on the Company's long-term profitability.

There is no assurance that the Company will be successful in launching SNP in the United States and its territories, and its failure to do so could have a material adverse effect on the Company's long-term profitability.

On August 13, 2018, the Company announced that the FDA approved its ANDA for SNP. SNP is indicated for the immediate reduction of blood pressure for adult and pediatric patients in hypertensive crisis. The product is also

indicated for producing controlled hypotension in order to reduce bleeding during surgery and for the treatment of acute congestive heart failure. The filing of the ANDA was previously announced by the Company on December 13, 2016. The Company expects to launch the product in the second quarter of 2019.

SNP will be launched into a genericized market with several competitors already selling generic versions of the product and as such there is no assurance that the Company will be successful in launching SNP in 2019 and growing sales for the product. The failure of the Company to successfully launch and grow sales of SNP, or to establish a viable market for the Company's version of the product, could have a material adverse effect on the Company's long-term profitability.

There is no assurance that the Company will be successful in marketing ReDS<sup>TM</sup> in the United States and its territories, and its failure to do so could have a material adverse effect on the Company's long-term profitability.

Subsequent to December 31, 2018, on January 28, 2019, the Company entered into an agreement with Sensible Medical Innovations Inc. ("Sensible") to become the exclusive marketing partner for ReDS<sup>TM</sup> in the United States. ReDS<sup>TM</sup> is a non-invasive, FDA-cleared medical device that provides an accurate, actionable and absolute measurement of lung fluid which is important in the management of congestive heart failure. ReDS<sup>TM</sup> was already being marketed to United States hospitals by Sensible and the Company has begun marketing ReDS<sup>TM</sup> immediately using its existing commercial organization. Under the terms of the agreement, Medicure will receive a percentage of total U.S. sales revenue of the device and must meet minimum annual sales quotas.

At the time of the signing of the marketing agreement, ReDS<sup>TM</sup> was available commercially in the United States, however, there is no assurance that the Company will be successful in its marketing efforts regarding ReDS<sup>TM</sup> and achieve significant sales growth in 2019 as planned, or at all. Further, there is no assurance that a viable market for ReDS<sup>TM</sup> will develop after the marketing efforts begin. The failure of the Company to successfully market and grow sales of ReDS<sup>TM</sup>, or to establish a viable market for the product, could have a material adverse effect on the Company's long-term profitability.

The commercial launch and marketing of PREXXARTAN® (valsartan) oral solution has been placed on hold by the Company and the Company may not commercially launch the product.

On October 31, 2017, the Company announced that it had acquired an exclusive license to sell and market PREXXARTAN® (valsartan) oral solution, which treats hypertension, in the U.S. and its territories from Carmel for a seven-year term with extensions to the term available. Medicure acquired the license rights for an upfront payment of U.S.\$100,000, with an additional U.S.\$400,000 payable on final FDA approval. Carmel would also be entitled to receive royalties and milestone payments from the net revenues of PREXXARTAN®. PREXXARTAN® had been granted tentative approval by the FDA and the tentative approval was converted to final approval on December 19, 2017.

As announced on March 19, 2018 and up-dated on March 28, 2018, all PREXXARTAN® related activities were placed on hold by the Company pending the resolution of a dispute that Medicure became aware of between the owner of the New Drug Application ("NDA"), Carmel and the third-party manufacturer of the product. The Company was also named in a civil claim in Florida between the third-party manufacturer and Carmel. The claim disputed the rights granted to Medicure by Carmel in regards to PREXXARTAN®. More recently the claim against the Company has been withdrawn, however the dispute between Carmel and the third-party manufacturer continues.

Medicure had intended to launch PREXXARTAN® during the first half of 2018 and to date, only an up-front payment of U.S.\$100,000, has been made to Carmel in regards to PREXXARTAN® and the Company has reserved all of its rights under the license agreement with Carmel for PREXXARTAN®.

As a result of the uncertainty surrounding the marketing rights for PREXXARTAN®, marketing activities remain on hold in regards to the product. There can be no assurances that the Company launches the product commercially in 2019 or future years. Further, there is no assurance that the Company will be successful in its launching PREXXARTAN® and achieve sales results as planned, or at all. Further, there is no assurance that a viable market for PREXXARTAN® will develop if the marketing efforts begin.

The Company may never receive regulatory approval in the United States, Canada or abroad for any of its products in development. Therefore, the Company may not be able to sell any therapeutic products currently under development.

The Company's failure to maintain or obtain necessary regulatory approvals to fully market its current and future development stage products in one or more significant markets may adversely affect its business, financial condition and results of operations. The process involved in obtaining regulatory approval from the competent authorities to market therapeutic products is long and costly and may delay product development. The approval to market a product may be applicable to a limited extent only or it may be refused entirely.

While the Company's approved product portfolio has grown during 2018 and into 2019 to AGGRASTA®, ZYPITAMAG<sup>TM</sup>, PREXXARTAN®, which is currently on hold, SNP, which is expected to be launched in the second quarter of 2019 and ReDS<sup>TM</sup>, with a marketing agreement entered into subsequent to December 31, 2018, the Company still has products that are currently in the research and development stages. The Company may never develop another commercially viable drug product approved for marketing. To obtain regulatory approvals for its products and to achieve commercial success, human clinical trials must demonstrate that the new chemical entities are safe for human use and that they show efficacy, and generic drug products under development need to show analytical equivalence and /or bioequivalence to the referenced product on the market. Unsatisfactory results obtained from a particular study or clinical trial relating to one or more of the Company's products may cause the Company to reduce or abandon its commitment to that program.

If the Company fails to successfully complete its development projects, it will not obtain approval from the FDA and other international regulatory agencies, to market its these products. Regulatory approvals also may be subject to conditions that could limit the market its products can be sold in or make either products more difficult or expensive to sell than anticipated. Also, regulatory approvals may be revoked at any time for various reasons, including for failure to comply with regulatory requirements or poor performance of its products in terms of safety and effectiveness.

The Company's business, financial condition and results of operations are likely to be adversely affected if it fails to maintain or obtain regulatory approvals in the United States, Canada and abroad to market and sell its current or future drug products, including any limitations imposed on the marketing of such products.

If the Company fails to acquire and develop additional product candidates or approved products, it will impair the Company's ability to grow its business and to increase value for shareholders.

Currently, the Company generates its commercial product revenue only from AGGRASTAT® and ZYPITAMAGTM with additional products being launched in 2019. A component of the Company's plan to generate additional revenue is its intention to develop and/or to acquire or license, and then develop and/or market, additional product candidates or approved products. The success of this growth strategy depends upon the Company's ability to identify, select and then to develop, acquire or license products that meet the criteria it has established. Due to the fact the Company has limited financial capacity, and limited value in its equity, relative to other companies in the industry, it has a limited number of product opportunities to choose from. Moreover, the Company's ability to research and develop its own, or other acquired/licensed products, is limited by the extent of its internal scientific research capabilities. In addition, proposing, negotiating and implementing an economically viable acquisition or license is a lengthy and complex process. Other companies, including those with substantially greater financial, marketing and sales resources, may compete with the Company for the acquisition or license of product candidates and approved products. The Company may not be able to acquire or license the rights to additional product candidates and approved products on terms that it finds acceptable, or at all. Moreover, the Company may not have the human, technical, financial, manufacturing and/or clinical resources to successfully develop additional products.

The Company may not receive regulatory approval in the United States to further expand or otherwise improve the approved indications and/or dosing information contained within AGGRASTAT®'s prescribing information. Therefore, the Company may not be able to continue to materially increase sales of AGGRASTAT®.

In fiscal 2014 the Company was able to obtain revisions to AGGRASTAT®'s prescribing information and these revisions have had a positive, material impact on sales of AGGRASTAT®. The Company believes that further revisions to AGGRASTAT®'s prescribing information will put the Company in a better position to maximize the revenue potential for AGGRASTAT®. To make such changes, the Company may need to conduct appropriate clinical trials, obtain positive results from those trials, or otherwise provide support in order to obtain regulatory approval for the proposed indications and dosing regimens. The Company's failure to obtain additional regulatory approvals from the FDA to expand or otherwise improve the approved indications and/or dosing information contained within AGGRASTAT®'s prescribing information may adversely affect the Company's ability to materially increase sales. The process involved in obtaining such regulatory approval is long and costly and may require additional investments that may not be reasonably achievable by the Company. The regulatory authorities have substantial discretion in the approval process and may refuse to accept any application. Varying interpretations of the data obtained from pre-clinical and clinical testing could delay, limit or prevent regulatory approval of a new indication for a product. Furthermore, the approval to modify the prescribing information may be applicable to a limited extent only or it may be refused entirely.

The current approved prescribing information for AGGRASTAT® does not include all of the dosing information and therapeutic indications for which a physician may wish to use the product. Although health care professionals may utilize a product at doses and for indications outside of the approved prescribing information, the Company is prohibited from promoting such uses.

To obtain regulatory approvals to modify the prescribing information, the Company must supply sufficient information supporting the safety and efficacy of such uses to the FDA, which in turn must review and deem this information to be sufficient to modify the label in the agreed upon fashion. Unsatisfactory or insufficient results obtained from any particular study or clinical trial relating to the Company's products may cause the Company to reduce or abandon its efforts to expand or otherwise improve the approved indications and/or dosing information contained within AGGRASTAT®'s prescribing information.

If the Company does not comply with federal, state and foreign laws and regulations relating to the health care business, it could face substantial penalties.

The Company and its customers are subject to extensive regulation by the United States federal government, and the governments of the states in which the business is conducted. In the United States, the laws that directly or indirectly affect the Company's ability to operate its business include the following:

the Federal Anti-Kickback Law, which prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce either the referral of an individual or furnishing or arranging for a good or service for which payment may be made under federal health care programs such as Medicare and Medicaid;

other Medicare laws and regulations that prescribe the requirements for coverage and payment for services performed by the Company's customers, including the amount of such payment;

the Federal False Claims Act, which imposes civil and criminal liability on individuals and entities who submit, or cause to be submitted, false or fraudulent claims for payment to the government;

the Federal False Statements Act, which prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with delivery of or payment for health care benefits, items or services; and

various state laws that impose similar requirements and liability with respect to state healthcare reimbursement and other programs.

If the Company's operations are found to be in violation of any of the laws and regulations described above or any other law or governmental regulation to which the Company or its customers are or will be subject, the Company may be subject to civil and criminal penalties, damages, fines, exclusion from the Medicare and Medicaid programs and the curtailment or restructuring of its operations. Similarly, if the Company's customers are found to be non-compliant with applicable laws, they may be subject to sanctions, which could also have a negative impact on the Company. Any penalties, damages, fines, curtailment or restructuring of the Company's operations would adversely affect its ability to operate its business and financial results. Any action against the Company for violation of these laws, even if the Company is able to successfully defend against it, could cause it to incur significant legal expenses, divert management's attention from the operation of the business and damage the Company's reputation.

Due to the fact that a material amount of the use of AGGRASTAT® is outside of the FDA approved indications contained within AGGRASTAT®'s prescribing information, the Company may be at a greater risk than would be the case if the product was almost exclusively used within the approved prescribing information.

AGGRASTAT® must compete with a variety of existing drugs, including generic versions of those existing drugs, and may in the future have to compete with new drugs, which may limit the use of AGGRASTAT® and adversely affect the Company's revenue.

Due to the incidence and severity of cardiovascular diseases, the market for anticoagulant and antiplatelet therapies is large and competition is intense. There are a number of anticoagulant and antiplatelet drugs recently approved, currently on the market, awaiting regulatory approval or in development. AGGRASTAT® must compete with these drugs, and may in the future have to compete with new drugs, to the extent that AGGRASTAT® and such drugs are approved for the same or similar indications.

AGGRASTAT® competes primarily with other platelet inhibitors, in particular the other GP IIb/IIIa inhibitors, ReoPro® (abciximab) (sold by Eli Lilly and Company) and Integrilin® (eptifibatide) (a branded drug sold by Merck & Co., Inc.), in addition to generic eptifibatide sold by other companies. It also competes with a number of oral platelet inhibitors, which can be used alone or in conjunction with anticoagulants, most notably with heparin (sold generically by a number of companies), and with a recently approved injectable platelet inhibitor, Kengreal® (cangrelor) (sold by Chiesi Farmaceutics S.p.A. Inc.). In addition, some alternative methods of treatment, such as the use of Angiomax® (bivalirudin) (sold by The Medicines Company, Inc.), also compete with AGGRASTAT®. These competing products are all marketed by large pharmaceutical companies with significantly more resources and experience than the Company.

There still remains many hospitals in the United States where AGGRASTAT® is not available on the hospital formulary, and it can be very difficult and time consuming to have AGGRASTAT® added to formulary for use by health care professionals. In many cases, competing treatment approaches may have FDA approval for dosing regimens and/or therapeutic indications that are outside of AGGRASTAT®'s approved prescribing information. The risk of bleeding associated with AGGRASTAT® may cause physicians to choose an alternative therapy. Although AGGRASTAT® is positioned as a relatively low-cost therapy, in certain circumstances other treatment approaches are lower cost and may for this reason be preferred by health care professionals - in particular where oral antiplatelet agents are deemed suitable.

ZYPITAMAG<sup>TM</sup> competes with a variety of existing drugs and may compete against other new drugs, which may limit the use of ZYPITAMAG<sup>TM</sup> and potentially affect the Company's revenue.

Due to the incidence and severity of cardiovascular diseases, the market for antihyperlipidemics is large and competition is intense. There are a number of approved antihyperlipidemic drugs approved, currently on the market, awaiting regulatory approval or in development. ZYPITAMAG<sup>TM</sup> will compete with these drugs to the extent ZYPITAMAG<sup>TM</sup> and any of these drugs are approved for the same or similar indications.

Although ZYPITAMAG<sup>TM</sup> is positioned as a relatively low-cost therapy, in certain circumstances, other treatment approaches are lower cost and may for this reason be preferred by health care professionals.

The development of generic treatment options may decrease or eliminate the cost advantage that AGGRASTAT® currently enjoys, which could negatively impact the Company's sales.

AGGRASTAT® is a branded pharmaceutical product for which there is currently no generic alternative available in the Company's market. AGGRASTAT®'s reduced cost relative to other products was one of the advantages being used

by the Company to promote and increase sales of AGGRASTAT<sup>®</sup>. Distributors of generic products typically price products significantly below the branded alternative, and these distributors are always seeking to introduce these generic alternatives of pharmaceuticals. There is a risk that new generic products will be introduced that compete with AGGRASTAT<sup>®</sup> and that their low pricing would reduce AGGRASTAT<sup>®</sup>'s relative cost advantage, and therefore negatively impact the maintenance and growth of sales by the Company. As at December 31, 2018, there are generic versions of a competing product, eptifibatide, that are commercially available and are now competing directly against AGGRASTAT<sup>®</sup>. Additional generic competitors are expected to enter the market in the months and years ahead, and it is anticipated that these will result in further reductions to the price of eptifibatide.

Moreover, due to the recent growth in sales of AGGRASTAT®, there is increased probability that generic companies will attempt to enter the U.S. market before the last AGGRASTAT® patent expires. If this occurs, the Company will have to defend its patent position and market exclusivity for AGGRASTAT® against larger, better funded and more experienced generic companies. The entry of a generic version of AGGRASTAT® into the market would have a major negative effect on both the volume and profitability of the Company's AGGRASTAT® sales.

Further to this, as announced on November 16, 2018, the Company filed a patent infringement action against Gland Pharma Ltd. ("Gland") in the U.S. District Court for the District of New Jersey, alleging infringement of U.S. Patent No. 6,770,660 ("the '660 patent").

The patent infringement action was in response to Gland's filing of an ANDA seeking approval from the FDA to market a generic version of AGGRASTAT® before the expiration of the '660 patent. The '660 patent is listed in FDA's Orange Book for AGGRASTAT®. Medicure will vigorously defend the '660 patent and will pursue the patent infringement action against Gland and all other legal options available to protect its patent rights.

The Company may not be able to hire or retain the qualified scientific, technical and management personnel it requires.

The Company's business prospects and operations depend on the continued contributions of certain of the Company's executive officers and other key management and technical personnel, certain of whom would be difficult to replace.

The Company's subsidiary, Medicure International, Inc., contracts with third parties to perform a significant amount of its research and development activities. Because of the specialized scientific nature of the Company's business, the loss of services of any one or more of these parties may require the Company to attract and retain replacement qualified scientific, technical and management personnel. Competition in the biotechnology industry for such personnel is intense and the Company may not be able to hire or retain a sufficient number of qualified personnel, which may compromise the viability, pace and success of its research and development activities.

Also, certain of the Company's management personnel are officers and/or directors of other companies and organizations, some publicly-traded, and will only devote part of their time to the Company. Although the Company has key person insurance for Dr. Albert Friesen, President and Chief Executive Officer, the Company does not have key person insurance in effect in the event of a loss of any other management, scientific or other key personnel. The loss of the services of one or more of the Company's current executive officers or key personnel or the inability to continue to attract qualified personnel could have a material adverse effect on the Company's business prospects, financial results and financial condition.

The Company faces substantial technological competition from many biotechnology and pharmaceutical companies with much greater resources, and it may not be able to effectively compete.

Technological and scientific competition in the pharmaceutical and biotechnology industry is intense. The Company competes with other companies in Canada, the United States and abroad to develop products designed to treat similar conditions. Most of these other companies have substantially greater financial, technical and scientific research and development resources, manufacturing and production and sales and marketing capabilities than the Company. Smaller companies may also prove to be significant competitors, whether acting independently or through collaborative arrangements with large pharmaceutical and biotechnology companies. Developments by other companies may adversely affect the competitiveness of the Company's products or technologies or the commitment of its research and marketing collaborators to its programs or even render its products obsolete.

The pharmaceutical and biotechnology industry is characterized by extensive drug discovery and drug research efforts and rapid technological and scientific change. Competition can be expected to increase as technological advances are made and commercial applications for biopharmaceutical products increase. The Company's competitors may use different technologies or approaches to develop products similar to the products which it is developing, or may develop new or enhanced products or processes that may be more effective, less expensive, safer or more readily available before or after the Company obtains approval of its products. The Company may not be able to successfully compete with its competitors or their products and, if it is unable to do so, the Company's business, financial condition and results of operations may suffer.

The Company may be unable to establish collaborative and commercial relationships with third parties, in which case the Company's business, financial position and operating results could be materially adversely affected.

The Company's success may depend to some extent on its ability to enter into and to maintain various arrangements with corporate partners, licensors, licensees and others for the research, development, clinical trials, manufacturing, marketing, sales and commercialization of its products. These relationships are crucial to the Company's intention to license to or contract with other pharmaceutical companies for the manufacturing, marketing, sales and/or distribution of any its current or future products. There can be no assurance that any licensing or other agreements will be established on favourable terms, if at all. The failure to establish successful collaborative arrangements may negatively impact the Company's ability to develop and commercialize its products, and may adversely affect its business, financial condition and results of operations.

The Company is currently dependent on third parties for the production of AGGRASTAT®, and the loss of or other disruption to such third-party relationships could have a material adverse effect on the Company's business, financial position and operating results.

The Company's subsidiary, Medicure International, Inc., has a supply contract for raw materials (active pharmaceutical ingredient) used in the manufacture of AGGRASTAT® with a contract manufacturer which was approved by the FDA as the approved source of the raw material for AGGRASTAT®.

The Company's subsidiary, Medicure Pharma, Inc., has both vial and bag manufacturers of final product that are approved by the FDA.

If either the supply of raw material or the final product manufacturing agreement for AGGRASTAT® is terminated or interrupted, or if, in the event of termination, the Company and its subsidiaries are unable to find a replacement raw material supplier or manufacturer, or obtain regulatory approval for commercial use of product made by a new raw material supplier or a new finished product manufacturer, the Company's business, financial position and operating results could be materially adversely affected. It is also important to note that the establishment of new manufacturing sources of pharmaceutical raw materials or finished products takes a prolonged period of time.

The Company is currently dependent on a third-party manufacturer for the supply of ZYPITAMAG<sup>TM</sup>, and the loss or other disruption to the supply arrangement could have a material adverse effect on the Company's business, financial position and operating results.

The Company's subsidiary, Medicure Pharma, Inc., has entered into a supply arrangement with a third-party manufacturer of ZYPITAMAG<sup>TM</sup> which will expire on December 6, 2024.

If the supply arrangement is interrupted, or if the Company and Medicure Pharma, Inc. are unable to renew or replace the supply arrangement, or if the Company and Medicure Pharma, Inc. are unable to obtain regulatory approval for commercial use of product made by a new supplier, the Company's business, financial position and operating results could be materially adversely affected. It is also important to note that the establishment of new manufacturing sources of pharmaceutical raw materials or finished products takes a prolonged period of time.

The Company is currently dependent on third parties for the production of SNP, and the loss of or other disruption to such third-party relationships could have a material adverse effect on the Company's business, financial position and operating results.

The Company's subsidiary, Medicure International, Inc., has a supply contract for raw materials (active pharmaceutical ingredient) used in the manufacture of SNP with a contract manufacturer which was approved by the FDA as the approved source of the raw material for SNP.

The Company's subsidiary, Medicure Pharma, Inc., has a contracted manufacturer of final product that is approved by the FDA.

If either the supply of raw material or the final product manufacturing agreement for SNP is terminated or interrupted, or if, in the event of termination, the Company and its subsidiaries are unable to find a replacement raw material

supplier or manufacturer, or obtain regulatory approval for commercial use of product made by a new raw material supplier or a new finished product manufacturer, the Company's business, financial position and operating results could be materially adversely affected. It is also important to note that the establishment of new manufacturing sources of pharmaceutical raw materials or finished products takes a prolonged period of time.

 $ReDS^{TM}$  will be manufactured by Sensible, the Company's partner in regards to the technology and as a result the Company is dependent on their manufacturing for the supply of  $ReDS^{TM}$  devices and the loss or other disruption to this supply could have a material adverse effect on the Company's business, financial position and operating results.

The Company's subsidiary, Medicure Pharma, Inc., has entered into a marketing agreement regarding the sale of ReDS<sup>TM</sup> in the United States.

If the supply of product is interrupted, or if the Company and Sensible, are unable to find replacement suppliers, the Company's business, financial position and operating results could be materially adversely affected.

Loss of product inventory could have a material adverse effect on the Company's financial results and financial condition.

If the Company's existing inventories of AGGRASTA® and/or ZYPITAMAG<sup>TM</sup> are contaminated, exhausted due to stock-out, or otherwise lost, the Company's financial results and financial condition could be adversely affected, particularly if the third-party suppliers of raw materials or final product are unable to meet any additional demands that may be placed on them by the Company in its efforts to make up depleted inventory.

Consolidation and the formation of strategic partnerships among and between wholesale distributors, chain drug stores, and group purchasing organizations has resulted in a smaller number of companies, each controlling a larger share of pharmaceutical distribution channels.

Drug wholesalers and retail pharmacy chains, which represent an essential part of the distribution chain for generic pharmaceutical products, have undergone, and are continuing to undergo, significant consolidation. This consolidation may result in declines in the Company's sales volumes if a customer is consolidated into another company that purchases products from a competitor. In addition, the consolidation of drug wholesalers and retail pharmacy chains could result in these groups gaining additional purchasing leverage and consequently increasing the product pricing pressures facing the Company's business and enabling those groups to charge the Company increased fees. Additionally, the emergence of large buying groups representing independent retail pharmacies and the prevalence and influence of managed care organizations and similar institutions potentially enable those groups to extract price discounts on the Company's products. The result of these developments may have a material adverse effect on the Company's business, financial position, and operating results.

The use of legal, regulatory, and legislative strategies by competitors, both branded and generic, including "authorized generics," citizen's petitions, and legislative proposals, may increase the costs to develop and market the Company's generic products, could delay or prevent new product introductions, and could reduce significantly the Company's profit potential. These factors could have a material adverse effect on the Company's business, financial position, and operating results.

The Company's competitors, both branded and generic, often pursue legal, regulatory, and/or legislative strategies to prevent or delay competition from generic alternatives to branded products. These strategies include, but are not limited to:

entering into agreements whereby other generic companies will begin to market an authorized generic, a generic equivalent of a branded product, at the same time generic competition initially enters the market;

launching a generic version of their own branded product at the same time generic competition initially enters the market;

filing citizen petitions with the FDA or other regulatory bodies, including timing the filings so as to thwart generic competition by causing delays of generic product approvals;

seeking to establish regulatory and legal obstacles that would make it more difficult to demonstrate bioequivalence or meet other approval requirements;

·initiating legislative and regulatory efforts to limit the substitution of generic versions of branded pharmaceuticals; filing suits for patent infringement that may delay regulatory approval of generic products;

introducing "next-generation" products prior to the expiration of market exclusivity for the reference product, which often materially reduces the demand for the first generic product;

obtaining extensions of market exclusivity by conducting clinical trials of branded drugs in pediatric populations or by other potential methods;

persuading regulatory bodies to withdraw the approval of branded name drugs for which the patents are about to expire, thus allowing the branded company to obtain new patented products serving as substitutes for the products withdrawn; and

seeking to obtain new patents on drugs for which patent protection is about to expire.

If the Company cannot compete with such strategies, its business, financial position, and operating results could be adversely impacted.

The pharmaceutical industry is subject to regulation by various federal authorities, including the FDA and the DEA, and state governmental authorities. Failure to comply with applicable legal and regulatory requirements can lead to sanctions which could have a material adverse effect on the Company's business, financial position and operating results.

Federal and state statutes and regulations govern or influence the testing, manufacturing, packing, labeling, storage, record keeping, safety, approval, advertising, promotion, sale, and distribution of the Company's products. Noncompliance with applicable legal and regulatory requirements can trigger action by various federal authorities, including the FDA and the DEA, as well as state governmental authorities. This can lead to a broad range of consequences which could have a material adverse effect on the Company's business, financial position and operating results. The potential sanctions include warning letters, fines, seizure of products, product recalls, total or partial suspension of production and distribution, refusal to approve NDAs/aNDAs or other applications or revocation of approvals previously granted, withdrawal of product from marketing, injunctions, withdrawal of licenses or registrations necessary to conduct business, disqualification from supply contracts with the government, civil penalties, debarment, and criminal prosecution.

The Company's research, product development, and manufacturing activities involve the controlled use of hazardous materials, and it may incur significant costs in complying with numerous laws and regulations.

The Company is subject to laws and regulations enforced by the FDA and the DEA, and other regulatory statutes including the Occupational Safety and Health Act ("OSHA"), the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, and other current and potential federal, state, local, and foreign laws and regulations governing the use, manufacture, storage, handling, and disposal of its products, materials used to develop and manufacture such products, and resulting waste products.

The Company cannot completely eliminate the risk of contamination or injury, by accident or as the result of intentional acts, from these materials. In the event of an accident, the Company could be held liable for any damages that result, and any resulting liability could exceed its resources. The Company may also incur significant costs in complying with environmental laws and regulations in the future. The Company is also subject to laws generally applicable to businesses, including but not limited to, federal, state, and local regulations relating to wage and hour matters, employee classification, mandatory healthcare benefits, unlawful workplace discrimination, and whistle-blowing. Any actual or alleged failure to comply with any regulation applicable to our business or any whistle-blowing claim, even if without merit, could result in costly litigation, regulatory action or otherwise harm our business, financial position, and operating results.

The Company relies on third parties to assist with its research and development projects and clinical studies. If these third parties do not perform as required or expected, we may not be able to obtain regulatory approval for or commercialize the subject products.

The Company relies on third parties to assist with its clinical studies. If these third parties do not perform as required or expected, or if they are not in compliance with FDA rules and regulations, our clinical studies may be extended, delayed or terminated, or may need to be repeated, and we may not be able to obtain regulatory approval for or commercialize the products being tested in such studies. Further, we may be required to audit or redo previously completed trials or recall already-approved commercial products.

The Company may fail to obtain acceptable prices or appropriate reimbursement for its products and its ability to successfully commercialize its products may be impaired as a result.

Government and insurance reimbursements for healthcare expenditures play an important role for all healthcare providers, including physicians, medical device companies, pharmaceutical companies, medical supply companies, and companies, such as the Company, that offer or plan to offer various products in the United States and other countries. The Company's ability to earn sufficient returns on its products will depend in part on the extent to which reimbursement for the costs of such products, related therapies and related treatments will be available from government health administration authorities, private health coverage insurers, managed care organizations, and other organizations. In the United States, the Company's ability to have its products and related treatments and therapies eligible for Medicare or private insurance reimbursement is and will remain an important factor in determining the ultimate success of its products. If, for any reason, Medicare or the insurance companies decline to provide reimbursement for the Company's products and related treatments, the Company's ability to commercialize its products would be adversely affected. There can be no assurance that the Company's products and related treatments will be eligible for reimbursement.

There has been a trend toward declining government and private insurance expenditures for many healthcare items. Third-party payers are increasingly challenging the price of medical products and services.

If purchasers or users of the Company's products and related treatments are not able to obtain appropriate reimbursement for the cost of using such products and related treatments, they may forgo or reduce such use. Even if the Company's products and related treatments are approved for reimbursement by Medicare and private insurers, as is the case with AGGRASTAT®, the amount of reimbursement may be reduced at times, or even eliminated. This would have a material adverse effect on the Company's business, financial condition, and results of operations.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products, and there can be no assurance that adequate third-party coverage will be available for new products developed or acquired by the Company.

The Company does not have significant manufacturing experience and has limited marketing resources and may never be able to successfully manufacture or market certain of its products.

The Company has limited experience in commercial manufacturing and has limited resources for marketing or selling its products. The Company may never be able to successfully manufacture and market certain of its development products. If any other of its development products are approved for sale, the Company intends to contract with and rely on third parties to manufacture, and possibly also to market and sell its products. Accordingly, the quality, timing and commercial success of such products may be outside of the Company's control. Failure of, or delays by, a third-party manufacturer to comply with good manufacturing practices or similar quality control regulations or satisfy regulatory inspections may have a material adverse effect on the Company and its products. Failure of, or delays by, a third party in the marketing or selling of the Company's products or failure of the Company to successfully market and sell such products likewise may have a material adverse effect on the Company and its products.

The Company has limited product liability insurance and may not be able to obtain adequate product liability insurance in the future.

The sale and use of the Company's commercial and development products, and the conduct of clinical studies involving human subjects, entails product and professional liability risks that are inherent in the testing, production, marketing and sale of pharmaceuticals to humans. While the Company has taken, and intends to continue to take, what it believes are appropriate precautions, there can be no assurance that it will avoid significant liability exposure. Although the Company currently carries product liability insurance, there can be no assurance that it has sufficient coverage, or can in the future obtain sufficient coverage at a reasonable cost. An inability to obtain insurance on economically feasible terms or to otherwise protect against potential product liability claims could inhibit or prevent the commercialization of products developed by the Company. The obligation to pay any product liability claim or recall for a product may have a material adverse effect on its business, financial condition and future prospects. In addition, even if a product liability claim is not successful, adverse publicity and the time and expense of defending such a claim may significantly impact the Company's business.

If the Company is unable to successfully protect its intellectual proprietary rights, its competitive position will be adversely affected.

The patent positions of pharmaceutical companies are generally uncertain and involve complex legal, scientific and factual issues. The Company's success depends significantly on its ability to:

a) obtain and maintain U.S. and foreign patents, including defending those patents against adverse claims;

b) secure patent term extensions for the patents covering its approved products;
c) protect trade secrets;
d) operate without infringing the proprietary rights of others; and
e) prevent others from infringing its proprietary rights.

The Company's success will depend to a significant degree on its ability to obtain and protect its patents and protect its proprietary rights in unpatented trade secrets.

The Company owns or jointly owns numerous patents from the United States Patent Office and other jurisdictions. The Company has additional pending United States patent applications along with applications pending in other jurisdictions. The Company's pending and any future patent applications may not be accepted by the United States Patent and Trademark Office or any other jurisdiction in which applications may be filed. Also, processes or products that may be developed by the Company in the future may not be patentable. Errors or ill-advised decisions by Company staff and/or contracted patent agents may also affect the Company's ability to obtain or maintain valid patent protection.

The patent protection afforded to biotechnology and pharmaceutical companies is uncertain and involves many complex legal, scientific and factual questions. There is no clear law or policy involving the degree of protection afforded under patents. As a result, the scope of patents issued to the Company may not successfully prevent third parties from developing similar or competitive products. Competitors may develop similar or competitive products that do not conflict with the Company's patents. Litigation may be commenced by the Company to prevent infringement of its patents. Litigation may also commence against the Company to challenge its patents that, if successful, may result in the narrowing or invalidating of such patents. It is not possible to predict how any patent litigation will affect the Company's efforts to develop, manufacture or market its products. However, the cost of litigation to prevent infringement or uphold the validity of any patents issued to the Company may be significant, in which case its business, financial condition and results of operations may suffer. Patents provide protection for only a limited period of time, and much of such time can occur well before commercialization commences.

The U.S. Congress is considering patent reform legislation. In addition, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the value of patents, once obtained, and the Company's ability to obtain patents in the future. Depending on decisions by the U.S. Congress, the federal courts, and the United States Patent and Trademark Office, the laws and regulations governing patents could change in unpredictable ways that would weaken the Company's ability to obtain new patents or to enforce its existing patents and patents that it might obtain in the future.

Disclosure and use of the Company's proprietary rights in unpatented trade secrets not otherwise protected by patents are generally controlled by written agreements. However, such agreements will not provide the Company with adequate protection if they are not honoured, others independently develop an equivalent technology, disputes arise concerning the ownership of intellectual property, or its trade secrets are disclosed improperly. To the extent that consultants or other research collaborators use intellectual property owned by others in their work with the Company, disputes may also arise as to the rights to related or resulting know-how or inventions.

Others could claim that the Company infringes on their proprietary rights, which may result in costly, complex and time-consuming litigation.

The Company's success will depend partly on its ability to operate without infringing upon the patents and other proprietary rights of third parties. The Company is not currently aware that any of its products or processes infringes the proprietary rights of third parties. However, despite its best efforts, the Company may be sued for infringing on the patent or other proprietary rights of third parties at any time in the future.

Such litigation, with or without merit, is time-consuming and costly and may significantly impact the Company's financial condition and results of operations, even if it prevails. If the Company does not prevail, it may be required to stop the infringing activity or enter into a royalty or licensing agreement, in addition to any damages it may have to pay. The Company may not be able to obtain such a license or the terms of the royalty or license may be burdensome for it, which may significantly impair the Company's ability to market its products and adversely affect its business, financial condition and results of operations.

The Company is subject to stringent governmental regulation, in the future may become subject to additional regulations and if it is unable to comply, its business may be materially harmed.

Pharmaceutical companies operate in a high-risk regulatory environment. The FDA and other national health agencies can be very slow to approve a product and can also withhold product approvals. In addition, these health agencies also oversee many other aspects of the Company's operations, such as research and development, manufacturing, and testing and safety regulation of products. As a result, regulatory risk is normally higher than in other industry sectors.

The Company is or may become subject to various federal, provincial, state and local laws, regulations and recommendations. The Company and third parties providing manufacturing, research and/or development services to the Company is subject to various laws and regulations, relating to product emissions, use and disposal of hazardous or toxic chemicals or potentially hazardous substances, infectious disease agents and other materials, and laboratory and manufacturing practices used in connection with the activities. If the Company, or its contracted third party, fails to comply with these regulations, the Company may be fined or suffer other consequences that could materially affect the Company's business, financial condition or results of operations.

The pharmaceutical sales and marketing industry within which the Company operates is a complex legal and regulatory environment. The failure to comply with applicable laws, rules and regulations may result in civil and criminal legal proceedings. As those rules and regulations change or as governmental interpretation of those rules and regulations evolve, prior conduct may be called into question. The Company may become subject of federal and/or state governmental investigations into pricing, marketing, and reimbursement of its prescription drug product. Any such investigation could result in related restitution or civil litigation on behalf of the federal or state governments, as well as related proceedings initiated against the Company by or on behalf of consumers and private payers. Such proceedings may result in trebling of damages awarded or fines in respect of each violation of law. Criminal proceedings may also be initiated against the Company. Any of these consequences could materially and adversely affect the Company's financial results.

The Company is unable to predict the extent of future government regulations or industry standards; however, it should be assumed that government regulations or standards will increase in the future. New regulations or standards may result in increased costs, including costs for obtaining permits, delays or fines resulting from loss of permits or

failure to comply with regulations.

The Company's products may not gain market acceptance, and as a result it may be unable to generate significant revenues.

Except for AGGRASTAT® and ZYPITAMAG<sup>TM</sup>, at December 31, 2018 none of the Company's products are being marketed commercially and many do not have the required manufacturing approvals or capabilities, clinical data and regulatory approvals necessary to be marketed in any jurisdiction; future clinical or preclinical results may be negative or insufficient to allow the Company to successfully market any of its products under development; and obtaining needed data and results may take longer than planned, and may not be obtained at all.

Even if the Company's products under development are approved for sale, they may not be successful in the marketplace. Market acceptance of any of the Company's products will depend on a number of factors, including: demonstration of clinical effectiveness and safety; the potential advantages of its products over alternative treatments; the availability of acceptable pricing and adequate third-party reimbursement; and the effectiveness of marketing and distribution methods for the products. Providers, payors or patients may not accept the Company's products, even if they prove to be safe and effective and are approved for marketing by the FDA and other national regulatory authorities. The Company anticipates that its initial development product will not be sold commercially during 2019. If the Company's products do not gain market acceptance among physicians, patients, and others in the medical community, its ability to generate significant revenues from its products would be limited.

The Company may not achieve its projected development and commercial goals in the time frames it announces and expects.

The Company sets goals for and may from time to time make public statements regarding timing of the accomplishment of objectives related to AGGRASTAT®, ZYPITAMAGTM and/or its products under development, that are material to the Company's success, such as the commencement and completion of clinical trials, anticipated regulatory approval dates, and timing of product launches. The actual timing of these events can vary dramatically due to factors such as delays or failures in the Company's clinical trials, the uncertainties inherent in the regulatory approval process, and delays in achieving product development, manufacturing or marketing milestones. There can be no assurance that the Company's clinical trials will be completed, that it will make regulatory submissions or receive regulatory approvals as planned, or that it will be able to adhere to its current schedule for the scale-up of manufacturing and launch of any of its products. If the Company fails to achieve one or more of these milestones as planned, that could materially affect its business, financial condition or results of operations.

The Company's business involves the use of hazardous material, which requires it to comply with environmental regulations.

The Company's research and development processes and commercial activities may involve the controlled storage, use, and disposal of hazardous materials and hazardous biological materials. The Company and the third-party service providers conducting manufacturing, research and development for the Company, are subject to laws and regulations governing the use, manufacture, storage, handling, and disposal of such materials and certain waste products. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by such laws and regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result, and any such liability could exceed its resources. There can be no assurance that the Company will not be required to incur significant costs to comply with current or future environmental laws and regulations, or that its business, financial condition, and results of operations will not be materially or adversely affected by current or future environmental laws or regulations.

The Company's insurance may not provide adequate coverage with respect to environmental matters.

Environmental regulations could have a material adverse effect on the results of the Company's operations and its financial position.

The Company is subject to a broad range of environmental regulations imposed by federal, state, provincial, and local governmental authorities. Such environmental regulation relates to, among other things, the handling and storage of hazardous materials, the disposal of waste, and the discharge of contaminants into the environment. Although the Company believes that it is in material compliance with applicable environmental regulation, as a result of the potential existence of unknown environmental issues and frequent changes to environmental regulation and the interpretation and enforcement thereof, there can be no assurance that compliance with environmental regulation or obligations imposed thereunder will not have a material adverse effect on the Company in the future.

There have been claims made against the Company's holdback receivable with respect to representation and warranties.

The holdback receivable of US\$10 million, originated on October 2, 2017 as a part of the Apicore Sale Transaction. On February 13, 2019, the Company received notice from the Buyer in the Apicore Sales Transaction of potential claims against the holdback receivable in respect of representations and warranties under the Apicore Sales Transaction, with the maximum exposure of the claims being the total holdback receivable. The notice did not contain sufficiently detailed information to enable the Company to assess the merits of the claims. The Company will proceed diligently to investigate the potential claims and attempt to satisfactorily resolve them with a view to having the holdback receivable released. Uncertainty exists as a result of the claims made against the holdback receivable and this uncertainty could lead to receiving less than the holdback receivable balance, with the maximum exposure being the total holdback receivable. Additionally, the collection of any funds regarding the holdback receivable may take an extended period of time to realize.

The Company operates in an industry that is more susceptible to legal proceedings. The Company may become involved in litigation.

The Company operates in an industry consisting of firms that are more susceptible to legal proceedings than firms in other industries. This susceptibility is due to several factors, including but not limited to, the fact that the Company's shares and those of its competitors are publicly traded, and the uncertainty and complex regulatory environment involved in the development and sale of pharmaceuticals. The Company intends to vigorously defend such actions if and when they arise. Defense and prosecution of legal claims can be expensive and time consuming, may adversely affect the Company regardless of the outcome due to the diversion of financial, management and other resources away from the Company's primary operations, and could impact the Company's ability to continue as a going concern in the longer term. In addition, a negative judgment against the Company, even if the Company is planning to appeal such a decision, or even a settlement in a case, could negatively affect the cash reserves of the Company, and could have a

material negative effect on the development and sale of its products.

Indemnification obligations to the Company's directors and senior management may adversely affect its financial condition.

The Company has entered into agreements pursuant to which it will indemnify the directors and senior management in respect of certain claims made against them while acting in their capacity as such. If the Company is called upon to perform its indemnity obligations, the Company's financial condition will be adversely affected. The Company is not currently aware of any matters pending or under consideration that may result in indemnification payments to any of its present or former directors or senior management.

The Company is exposed to foreign exchange movements since all of its sales are denominated in U.S. currency.

The majority of the Company's sales revenues and a substantial portion of its selling, general and administrative expenses are denominated in U.S. dollars. The Company does not utilize derivatives, such as foreign currency forward contracts and futures contracts, to manage its exposure to currency risk and as a result a change in the value of the Canadian dollar against the U.S. dollar could have a negative impact on the Company's business prospects, financial results and financial condition. In the future, the Company may begin to utilize foreign exchange rate mitigation and management strategies, however any such efforts, if they are not based on accurate predictions of future fluctuations in foreign exchange rates, may actually have a negative impact on the Company.

The Company may need to raise additional capital through the sale of its securities, resulting in dilution to its existing shareholders. Such funds may not be available, or may not be available on reasonable terms, adversely affecting the Company's operations.

To meet future cash needs or product acquisition requirements the Company may need to rely on the taking on of debt and/or the sale of such securities for future financing, resulting in dilution to its existing shareholders. The Company's long-term capital requirements may be significant and will depend on many factors, including revenue and revenue growth, continued scientific progress in its product discovery and development program, progress in the maintenance and expansion of its sales and marketing capabilities, progress in its pre-clinical and clinical evaluation of products and product candidates, time and expense associated with filing, prosecuting and enforcing its patent claims and costs associated with obtaining regulatory approvals. In order to meet such capital requirements, the Company will consider contract fees, collaborative research and development arrangements, debt financing, public financing or additional private financing (including the issuance of additional equity securities) to fund all or a part of particular programs.

The Company is exposed to risks given its significant dependence on revenue from the sale of AGGRASTAT®.

The Company is largely dependent upon revenue from the sale of AGGRASTAT®. If revenue from the sale of AGGRASTAT® is not maintained, the Company may have to reduce substantially or eliminate expenditures for research and development, testing, production and marketing of its proposed products, or obtain funds through arrangements with corporate partners that require it to relinquish rights to certain of its technologies, assets or products.

#### The Company's effective tax rates could increase.

The Company has operations in various countries that have differing tax laws and rates. The Company's tax reporting is supported by current domestic tax laws in the countries in which the Company operates and the application of tax treaties between the various countries in which the Company operates. The Company's income tax reporting is subject to audit by domestic and foreign authorities. The effective tax rate of the Company may change from year to year based on changes in the mix of activities and income earned among the different jurisdictions in which the Company operates, changes in tax laws in these jurisdictions, changes in the tax treaties between various countries in which the Company operates, changes in the Company's eligibility for benefits under those tax treaties and changes in the estimated values of tax provisions and deferred tax assets. Tax laws, regulations and administrative practices in various jurisdictions may be subject to significant change, with or without notice, due to economic, political and other conditions, and significant judgment is required in evaluating and estimating our provision and accruals for these taxes. Such changes could result in a substantial increase in the effective tax rate on all or a portion of the Company's income.

The Company's provision for income taxes is based on certain estimates and assumptions made by management. The Company's consolidated income tax rate is affected by the amount of pre-tax income earned in our various operating jurisdictions, the availability of benefits under tax treaties, and the rates of taxes payable in respect of that income. The Company enters into many transactions and arrangements in the ordinary course of business in respect of which the tax treatment is not entirely certain. The Company therefore makes estimates and judgements based on knowledge and understanding of the applicable tax laws and tax treaties and the application of those tax laws and tax treaties to the Company's business, in determining the Company's consolidated tax provision. For example, certain countries could seek to tax a greater share of income than the Company will allocate to the business in such countries. The final outcome of any audits by taxation authorities may differ from the estimates and assumptions that the Company may use in determining our consolidated tax provisions and accruals. This could result in a material adverse effect on the Company's consolidated income tax provision, financial condition and the net income for the period in which such determinations are made.

The Company's provision for tax liabilities, deferred tax assets and any related valuation allowances are effect by events and transactions arising in the ordinary course of business, acquisitions of assets and businesses and non recurring items. The assessment of the appropriate amount of valuation allowance against the deferred tax assets is dependent upon several factors, including estimates of the realization of deferred income tax assets, which realization will be primarily based on future taxable income, including the reversal of existing taxable temporary differences. Significant judgement is applied to determine the appropriate amount of valuation allowance to record. Changes in the amount of any valuation allowance required could materially increase or decrease our provision for income taxes in a given period.

Future issuance of the Company's common shares will result in dilution to its existing shareholders. Additionally, future sales of the Company's common shares into the public market may lower the market price which may result in losses to its shareholders.

As of December 31, 2018, the Company had 15,547,812 common shares issued and outstanding. A further 1,394,642 common shares are issuable upon exercise of outstanding stock options (of which 1,044,892 were exercisable at December 31, 2018) and another 900,000 common shares are issuable upon exercise of share purchase warrants, all of which may be exercised in the future resulting in dilution to the Company's shareholders. The Company's stock option plan allowed for the issuance of stock options to purchase up to a maximum of 20% of the outstanding common shares at the time of the approval of the stock option plan, which resulted in a fixed number of stock options allowed to be granted totaling 2,934,403.

By Articles of Amendment filed by the Company under the *Canada Business Corporations Act* on November 1, 2012, a consolidation of shares was completed to reduce the total number of outstanding shares.

Additionally, on May 16, 2018, the Company announced that the TSX Venture Exchange ("**TSXV**") accepted the Company's notice of intention to make a normal course issuer bid ("**NCIB**"). Under the terms of the NCIB, the

Company may acquire up to an aggregate of 794,088 common shares. During the year ended December 31, 2018 the Company repurchased and cancelled 441,400 common shares. The aggregate price paid for these common shares totaled \$3,021,340. As a result of the NCIB, during the year ended December 31, 2018 the Company recorded \$479,993 directly in its retained deficit representing the difference between the aggregate price paid for these common shares and a reduction of the Company's share capital totaling \$3,501,333.

However, as described above, the Company may from time to time be required to finance its operations through the sale of equity securities. In addition, it may be required to issue equity securities as consideration for services or asset acquisition transactions. Sales of substantial amounts of the Company's common shares into the public market, or even the perception by the market that such sales may occur, may lower the market price of its common shares.

The Company's common shares may experience extreme price and volume volatility which may result in losses to its shareholders.

The Company's common shares historically have been subject to extreme price and volume volatility. For example, during the period from January 1, 2018 to December 31, 2018, the high and low closing trading prices of the Company's common shares on the TSX-V were CDN\$7.55 and CDN\$5.71, respectively, with a total trading volume of 3,665,500 shares. Daily trading volume on the TSX-V of the Company's common shares for the period from January 1, 2018 to December 31, 2018 has fluctuated, with a high of 679,000 shares and a low of no shares traded, averaging approximately 20,437 shares per trading day.

The Company expects that the trading price of its common shares will continue to be subject to wide fluctuations in response to a variety of factors including announcement of material events by the Company, such as the dependence of revenue on a single product, the status of required regulatory approvals for its products, competition by new products or new innovations, fluctuations in its operating results, general and industry-specific economic conditions and developments pertaining to patent and proprietary rights. The trading price of the Company's common shares may be subject to wide fluctuations in response to a variety of factors and/or announcements concerning such factors, including:

- ·actual or anticipated period-to-period fluctuations in financial results;
- ·litigation or threat of litigation;
- ·failure to achieve, or changes in, financial estimates of individual investors and/or by securities analysts;
- new or existing products or generic equivalents to products or services or technological innovations by the Company or its competitors;
- ·comments or opinions by securities analysts or major shareholders;

- ·conditions or trends in the pharmaceutical, biotechnology and life science industries;
- ·significant acquisitions, strategic partnerships, joint ventures or capital commitments;

results of, and developments in, the Company's manufacturing, research and development efforts, including results and adequacy of, and developments in, its manufacturing activities, development activities, clinical trials and applications for regulatory approval;

·additions or departures of key personnel;

sales of the Company's common shares, including by holders of the notes on conversion or repayment by the Company in common shares;

·economic and other external factors or disasters or crises;
·limited daily trading volume; and
·developments regarding the Company's patents or other intellectual property or that of its competitors.
In addition, the securities markets in the United States and Canada have recently experienced a high level of price and volume volatility, and the market price of securities of pharmaceutical companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies.
There may not be an active, liquid market for the Company's common shares.
There is no guarantee that an active trading market for the Company's common shares will be maintained on the TSX-V. Investors may not be able to sell their shares quickly or at the latest market price if trading in its common shares is not active.
If there are substantial sales of the Company's common shares, the market price of its common shares could decline.
Sales of substantial numbers of the Company's common shares could cause a decline in the market price of its common shares. The Company has three significant shareholders that each own more than 10% of the outstanding common shares of the Company as of December 31, 2018. Any sales by existing shareholders or holders of options of warrants may have an adverse effect on the Company's ability to raise capital and may adversely affect the market price of its common shares.
The Company has no history of paying dividends, does not intend to pay dividends in the foreseeable future and may never pay dividends.
Since incorporation, the Company has not paid any cash or other dividends on its common shares and does not expect to pay such dividends in the foreseeable future as all available funds will be invested to finance the growth of its business. The Company will need to achieve significant and prolonged profitability prior to any dividends being

declared, which may never happen.

If the Company is classified as a "passive foreign investment company" for United States federal income tax purposes, it could have significant and adverse tax consequences to United States holders of its common shares.

The Company believes it was a "passive foreign investment company" ("**PFIC**") in one or more previous taxable years, but does not believe that it was a PFIC for the taxable years ended December 31, 2018 or December 31, 2017, and does not expect that it will be a PFIC for the taxable year ending December 31, 2019. (See more detailed discussion in Item 10E - Taxation). However, there can be no assurance that the United States Internal Revenue Service ("**IRS**") will not challenge the determination made by the Company concerning its PFIC status or that the Company will not be a PFIC for the current taxable year or any subsequent taxable year. U.S. Holders who own common shares of the Company while it is a PFIC could have significant and adverse tax consequences.

#### Risks associated with material weaknesses within the Company's financial reporting and review process

In connection with its review of the Company's Internal Control over Financial Reporting, the Company has identified material weaknesses with the Company's financial reporting and review process, involving the accounting and reporting for complex transactions, due to limited staff not allowing for appropriate reviews of such transactions. Any failure to remediate the material weaknesses, to implement the required new or improved control, or difficulties encountered in the implementation, could cause the Company to fail to meet its reporting obligations on a timely basis or result in material misstatements in the annual or interim financial statements. Inadequate internal control over financial reporting could also cause investors to lose confidence in the Company's reported financial information, which could cause the Company's stock price to decline.

New risks emerge from time to time. It is not possible for the Company's management to predict all risks. The forward-looking statements contained in this document are made only as of the date of this document. The Company undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise.

#### ITEM 4. INFORMATION ON THE COMPANY

#### A. History and Development of the Company

On December 22, 1999, the Company was formed by the amalgamation of Medicure Inc. with Lariat Capital Inc. pursuant to the provisions of the *Business Corporations Act* (Alberta). The Company was continued from Alberta to the federal jurisdiction by Certificate of Continuance issued pursuant to the provisions of the *Canada Business Corporations Act* on February 23, 2000.

The Company's current legal and commercial name is Medicure Inc. and its current registered office and head office is 2-1250 Waverley Street, Winnipeg, Manitoba, Canada, R3T 6C6.

In August 2006, the Company acquired the U.S. rights to its first commercial product, AGGRASTAT® Injection (tirofiban hydrochloride) in the United States and its territories (Puerto Rico, Virgin Islands and Guam) for US\$19,000,000.

In September 2007, the Company monetized a percentage of its current and potential future commercial revenues by entering into a debt financing agreement with Birmingham Associates Ltd. ("Birmingham"), an affiliate of Elliott Associates, L.P. ("Elliott") for proceeds of US\$25 million. This debt was subsequently settled in July 2011 for consideration that included a royalty payable by the Company to Birmingham based on future commercial AGGRASTAT® sales until 2023. The royalty is based on four percent of the first \$2,000,000 of quarterly AGGRASTAT® sales, six percent on the portion of quarterly sales between \$2,000,000 and \$4,000,000 and eight percent on the portion of quarterly sales exceeding \$4,000,000 payable within 60 days of the end of the preceding quarter.

In February 2008, the Company announced that its pivotal Phase III MEND-CABG II clinical trials with MC-1 did not meet the primary endpoint and as a result was not sufficient to support the filings. As a result, the Company announced a restructuring plan that resulted in the organization reducing its head count by approximately 50 employees and full-time consultants. The restructuring and downsizing in March 2008 conserved capital for ongoing operations.

Since March 2008, the Company has continued to focus on the sale and marketing of AGGRASTAT®. The Company has also explored and implemented a number of cost savings measures and has further downsized its operations. All these measures were initiated due to the restructuring plan announced towards the end of fiscal 2008. These activities assisted in further reducing the Company's use of capital, in particular its investment in research and development programs, but have moved forward certain programs on a limited and focused fashion such as the development and implementation of a new clinical, product and regulatory strategy for AGGRASTAT® and the development of additional generic cardiovascular products.

During calendar years 2014, 2015 and 2016, as a part of its effort to expand sales of AGGRASTAT®, the Company began to significantly increase the number of employees and otherwise increase expenses related to sales and marketing of AGGRASTAT®, and related to General and Administrative costs of the Company.

On December 14, 2017 and subsequently up-dated on March 7, 2018, the Company announced it had acquired, from Zydus Cadila ("Zydus"), an exclusive license to sell and market a branded cardiovascular drug, ZYPITAMA® (pitavastatin magnesium) in the United States and its territories for a term of seven years with extensions to the term available. ZYPITAMAG<sup>TM</sup> is used for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia and was approved earlier in 2017 by the FDA for sale and marketing in the United States. The Company launched the product using its existing commercial infrastructure during May 2018.

Subsequent to December 31, 2018, on January 28, 2019, the Company entered into an agreement with Sensible Medical Innovations Inc. ("Sensible") to become the exclusive marketing partner for ReDS<sup>TM</sup> in the United States. ReDS<sup>TM</sup> is a non-invasive, FDA-cleared medical device that provides an accurate, actionable and absolute measurement of lung fluid which is important in the management of congestive heart failure. ReDS<sup>TM</sup> was already being marketed to United States hospitals by Sensible and the Company has begun marketing ReDS<sup>TM</sup> immediately using its existing commercial organization. Under the terms of the agreement, Medicure will receive a percentage of total U.S. sales revenue of the device and must meet minimum annual sales quotas.

During 2018, the Company received approval from the FDA for its first ANDA for SNP and expects to launch the product in mid 2019. As well, the Company is focused on the development of additional cardiovascular generic drugs which is expected to transform the Company's commercial suite of products to more than five approved products in 2020.

In 2019, the Company plans to further maintain selling, general and administrative expenditure levels as it continues to focus on the sale of AGGRASTAT® and ZYPITAMAG<sup>TM</sup>, the sale of ReDS<sup>TM</sup>, the commercial launch of SNP and the development of additional generic cardiovascular products.

The Company's future operations are dependent upon its ability to maintain sales of AGGRASTA®, to increase sales of ZYPITAMAG<sup>TM</sup> and ReDS<sup>TM</sup>, the commercial launch of SNP and the development and/or acquisition of new products and/or secure additional capital, which may not be available under favorable terms or at all.

If the Company is unable to maintain sales of AGGRASTAT®, grow sales of ZYPITAMAG<sup>TM</sup>, successfully launch SNP, grow sales of ReDS<sup>TM</sup>, develop and/or acquire new products, and/or raise additional capital, management will consider other strategies including cost curtailments, delays of research and development activities, asset divestures and/or monetization of certain intangible assets.

On July 18, 2011, the Company borrowed \$5,000,000 from the Government of Manitoba, under the Manitoba Industrial Opportunities Program ("MIOP"), to assist with settling the Company's debt to Birmingham. Effective August 1, 2013, the Company renegotiated this debt and received an additional two-year deferral of principal repayments. Under the renegotiated terms, the loan continued to be interest only until August 1, 2015, when blended payments of principal and interest commenced, and the loan maturity date was extended to July 1, 2018. On November 6, 2017, the Company repaid the MIOP loan from funds on hand from the proceeds of the Apicore Sale Transaction.

On July 3, 2014, the Company and its newly formed and wholly owned subsidiary, Medicure U.S.A. Inc. ("Medicure USA"), entered into an arrangement whereby they acquired a minority interest in a pharmaceutical manufacturing business known as Apicore, along with an option to acquire all of the remaining issued shares within the next three years. Specifically, the Company and Medicure USA acquired a 6.09% equity interest (5.33% on a fully-diluted basis) in two newly formed holding companies of which Apicore LLC and Apicore US LLC were to be wholly-owned operating subsidiaries. The Company's equity interest and certain other rights, including the option rights were obtained by the Company for services provided in its lead role in structuring a US\$22.5 million majority interest purchase and financing of Apicore. There was no cash outflow in connection with the acquisition of the minority interest in Apicore. The business and operations of Apicore were distinct from the Company, and the Company's primary operating focus continued to remain on the sale and marketing of AGGRASTAT<sup>®</sup>.

On November 17, 2016, in connection with the exercise of the Company's acquisition of the controlling ownership in Apicore, the Company received a term loan (the "**Term Loan**") from Crown Capital Fund IV LP, an investment fund managed by Crown Capital Partners Inc. ("**Crown**") (TSX: CRN) for \$60,000,000 of which \$30,000,000 was syndicated to the Ontario Pension Board ("**OPB**") a limited partner in Crown's funds. Under the terms of the loan agreement with Crown, the loan bears interest at a fixed rate of 9.5% per annum, compounded monthly and payable on an interest only basis, maturing in 48 months, and is repayable in full upon maturity. On November 17, 2017, the Company repaid the Crown loan from funds on hand from the proceeds of the Apicore Sale Transaction. Additionally, the Company incurred an early prepayment penalty of \$2,400,000 relating to the early repayment of the Term Loan.

The Term Loan was used by the Company, acting through its wholly owned subsidiary, Medicure Mauritius Limited, to exercise the Company's option rights to purchase interests in Apicore, Inc. and Apicore LLC. The 2016 Apicore Transaction was closed on December 1, 2016. Apicore, Inc. and Apicore LLC are affiliated entities that together operate the Apicore pharmaceutical business and are referred to together as "Apicore". Apicore is a process research and development and Active Pharmaceutical Ingredients ("APIs") manufacturing service provider for the worldwide pharmaceutical industry. The acquisition brought the Company's indirect ownership interests in Apicore, Inc. to 64% (or approximately 59% on a fully diluted basis), and the Company's indirect ownership in Apicore LLC. to 64% (basic and fully-diluted). Five percent of Medicure's ownership in Apicore LLC was then held by Apigen Investments Limited ("Apigen"), a Company which owned 100 percent of Apicore LLC, before the Acquisition.

Medicure continued to have additional option rights until July 3, 2017 to acquire additional shares in Apicore, Inc. and Apicore LLC at predetermined prices consistent with the value reflected in the 2016 Apicore Transaction. On July 3,

2017, the Company announced that its option to acquire additional shares in Apicore, which otherwise would have expired, had been extended. The option covered an additional minority interest in Apicore (the "Minority Interest") representing approximately 32% of the fully diluted shares of Apicore.

On July 10, 2017, the Company, acting through Medicure Mauritius Limited, exercised the Company's option rights to acquire the Minority Interest in Apicore Inc. and Apicore LLC from Apicore's founding shareholders. The 2017 Apicore Transaction closed on July 12, 2017 and allowed for the acquisition of all of the shares of Apicore Inc. and Apicore LLC held by the founding shareholders (representing approximately 32% of the fully diluted ownership of Apicore) for US\$24.5 million, being the price provided for under the option. This acquisition brought Medicure's ownership in Apicore Inc. to approximately 98% (94% on a fully diluted basis).

On July 10, 2017, the Company announced that Apicore repaid the U.S.\$9.8 million secured loan previously provided to Apicore by Medicure. Additionally, Apicore provided a U.S.\$14.8 million loan to Medicure bearing interest at 12% per annum with a term of three years. These funds were obtained from Apicore's current business which includes API sales, aNDA development partnership payments, and royalty and upfront payments from aNDA commercial partnerships. The loan proceeds were used by Medicure to help satisfy the purchase price of the 2017 Apicore Transaction.

During the year ended December 31, 2017, employees and former directors of Apicore exercised 292,500 stock options to acquire 292,500 Class E common shares of Apicore for gross proceeds to the company of U.S.\$280,125. These shares, as well as 112,500 Class E common shares previously issued for gross proceeds of U.S.\$48,375 were then purchased by the Company upon the employees and former directors exercising their put right to the Company. This resulted in the Company acquiring 405,000 Class E common shares of Apicore for a total cost of U.S.\$1,974,772 during 2017. As a result of the employees and former directors exercising their put right to the Company, the liability to repurchase Apicore Class E common shares on the statement of financial position in the Company's consolidated financial statements was reduced.

On October 3, 2017, the Company announced that it sold its interests in Apicore (the "Sales Transaction") to an arm's length, pharmaceutical company (the "Buyer"). Under the Apicore Sale Transaction, the Company would receive net proceeds of approximately U.S.\$105 million of which approximately U.S.\$55 million was received on October 3, 2017, with the remainder to be received in early 2018. These funds received and to be received by the Company were after payment of all transaction costs, the cashing in of Apicore's employee stock options, the redemption of the remaining shares of Apicore not owned by Medicure and other adjustments. Over the 18 months following the close of the transaction, additional payments could have become payable under the Apicore Sale Transaction, in the form of contingent payments, including an earn out payment based on the achievement of certain financial results by Apicore following closing and other customary adjustments.

On February 1, 2018, the Company announced that it had received the deferred purchase price proceeds of approximately U.S.\$50 million from the Buyer as a result of the Apicore Sale Transaction. The U.S.\$50 million was included in the total net proceeds of U.S.\$105 million described earlier. The Company did not receive any contingent payments based on an earn out formula as certain financial results within the Apicore business were not met following the Apicore Sale Transaction. Additionally, up to U.S.\$10 million became payable in 2019 based on the release of certain holdback funds (Refer to "Update on Holdback Funds from Apicore Sale").

The funds received from the Apicore sales transaction will be invested and used to for business and product development purposes and to fund operations as needed.

#### **B.** Business Overview

#### Plan of Operation

Medicure is a pharmaceutical company focused on the development and commercialization of therapies for the United States cardiovascular market. The Company's present focus is the sale and marketing of its cardiovascular products, AGGRASTAT® owned by its subsidiary, Medicure International Inc. and ZYPITAMAG<sup>TM</sup>, licensed by Medicure International Inc. and subsequent to December 31, 2018, the sale and marketing of the ReDS<sup>TM</sup> medical device. The products are distributed in the United States and its territories through the Company's U.S. subsidiary, Medicure Pharma, Inc. The Company's registered office and head office is located at 2-1250 Waverley Street, Winnipeg, Manitoba, R3T 6C6.

In December 2017, the Company acquired an exclusive license to sell ZYPITAMAG<sup>TM</sup> in the U.S. and on May 1, 2018 the Company announced the commercial launch of ZYPITAMAG<sup>TM</sup>. The Company received approval from the FDA for its first ANDA for SNP and expects to launch the product in mid 2019.

Subsequent to December 31, 2018, on January 28, 2019, the Company entered into an agreement with Sensible Medical Innovations Inc. ("Sensible") to become the exclusive marketing partner for ReDS<sup>TM</sup> in the United States. ReDS<sup>TM</sup> is a non-invasive, FDA-cleared medical device that provides an accurate, actionable and absolute measurement of lung fluid which is important in the management of congestive heart failure. ReDS<sup>TM</sup> was already being marketed to United States hospitals by Sensible and the Company has begun marketing ReDS<sup>TM</sup> immediately using its existing commercial organization. Under the terms of the agreement, Medicure will receive a percentage of total U.S. sales revenue of the device and must meet minimum annual sales quotas. In addition, Medicure invested US\$10.0 million in Sensible for a 7.71% equity stake on a fully diluted basis.

The Company's research and development program is focused on making selective research and development investments in certain additional acute cardiovascular generic and reformulation product opportunities, as well as continuing the development and implementation of its regulatory, brand and life cycle management strategy for AGGRASTAT®. The Company is also continuing to explore neurological treatment applications of its legacy product P5P (MC-1, TARDOXAL<sup>TM</sup>). The Company is actively seeking to acquire, license and/or enter into marketing partnerships for additional products as evidenced by the in licensing of ZYPITAMAG<sup>TM</sup> in December 2017 and the marketing partnership for ReDS<sup>TM</sup> in January 2019. The Company is focused on the development of additional cardiovascular generic drugs which is expected to transform the Company's commercial suite of products to more than five approved products in 2020.

The increased sales of AGGRASTAT® experienced over recent years and the staged acquisition and subsequent sale of the Apicore business completed in 2016 and 2017 have dramatically improved the Company's financial position compared to previous years.

The ongoing focus of the Company includes AGGRASTAT®, ZYPITAMAG<sup>TM</sup>, sales and marketing of ReDS<sup>TM</sup>, the launch of SNP and the development of additional generic cardiovascular products. In parallel with the Company's ongoing commitment to support AGGRASTAT®, its valued customers and the continuing efforts of the commercial organization, the Company is in the process of developing and further implementing its regulatory, brand and life cycle management strategy for AGGRASTAT®. The objective of this effort is to further expand AGGRASTAT®'s share of the glycoprotein GP IIb/IIIa ("GPI") inhibitor market in the United States. GPIs are injectable platelet inhibitors used in the treatment of patients with acute coronary syndrome ("ACS"). The marketing and sales of ZYPITAMAG<sup>TM</sup> became a key focus of the Company during 2018.

The Company has financed its operations principally through the net revenue received from the sale of AGGRASTAT®, the sale of its equity securities, the issuance and subsequent exercises of warrants and stock options, interest on excess funds held, and the issuance of debt. As announced on October 3, 2017, the Company sold the Apicore business for net proceeds to Medicure of approximately US\$105 million, as well as additional contingent payments. These funds generated from the sale of Apicore were partially used to repay the Company's long-term debt and the remaining funds will be invested and used to finance the Company's operations, development and growth moving forward.

#### **Recent Developments**

### **Update on Holdback Funds from Apicore Sale**

Subsequent to December 31, 2018, on February 13, 2019, the Company announced that it had received notice from the purchaser of Medicure's interests in Apicore of potential claims against funds held back in respect of representations and warranties under the Apicore sale agreement. The notice did not contain sufficiently detailed information to enable Medicure to assess the merits of the claims with the maximum exposure of the claims being the total holdback receivable. The Company will proceed diligently to investigate the potential claims and attempt to satisfactorily resolve them with a view to having the holdback funds released. In conjunction with the sale of Medicure's interests in Apicore, representation and warranty insurance was obtained by the purchaser that could result in mitigation of the potential claims.

#### **Agreement to Market ReDS**<sup>TM</sup> **device**

Subsequent to December 31, 2018, on January 28, 2019 the Company announced it had entered into an agreement with Sensible to become the exclusive marketing partner for ReDS<sup>TM</sup> in the United States. ReDS is a non-invasive, FDA-cleared medical device that provides an accurate, actionable and absolute measurement of lung fluid which is important in the management of congestive heart failure. The lung fluid measurements are used in guiding treatment and monitoring a heart failure patient's condition and may lead to a significant decrease in readmissions and hospital costs. Clinical studies have shown an 87% reduction in heart failure readmission rates for patients using the ReDS<sup>TM</sup> system at home for three months post-discharge versus those who were treated with usual care alone. ReDS<sup>TM</sup> is already marketed to U.S. hospitals by Sensible and Medicure expects to begin marketing ReDS<sup>TM</sup> immediately using its existing commercial organization. Under the terms of the agreement, Medicure will receive a percentage of total U.S. sales revenue of the device and must meet minimum annual sales quotas.

In addition, Medicure invested US\$10.0 million in Sensible for a 7.71% equity stake on a fully diluted basis. In connection with the investment, Medicure's President and CEO, Dr. Albert D. Friesen, has been appointed to the Board of Directors of Sensible.

### **Filing of Patent Infringement Action**

On November 16, 2018, the Company announced that it had filed a patent infringement action against Gland Pharma Ltd. ("Gland") in the U.S. District Court for the District of New Jersey, alleging infringement of U.S. Patent No. 6,770,660 ("the '660 patent").

The patent infringement action was in response to Gland's filing of an ANDA seeking approval from the FDA to market a generic version of AGGRASTAT® before the expiration of the '660 patent. The '660 patent is listed in FDA's Orange Book for AGGRASTAT®. Medicure will vigorously defend the '660 patent and will pursue the patent infringement action against Gland and all other legal options available to protect its patent rights.

#### FDA Approval of Sodium Nitroprusside Injection

On August 13, 2018, the Company announced that the FDA approved its ANDA for SNP. SNP is indicated for the immediate reduction of blood pressure for adult and pediatric patients in hypertensive crisis. The product is also indicated for producing controlled hypotension in order to reduce bleeding during surgery and for the treatment of acute congestive heart failure. The filing of the ANDA was previously announced by the Company on December 13, 2016. The Company continues to develop two additional generic versions of acute cardiovascular drugs and explore other potential development opportunities.

#### **Normal Course Issuer Bid**

On May 16, 2018, the Company announced that the TSX Venture Exchange ("TSXV") accepted the Company's notice of intention to make a normal course issuer bid ("NCIB"). In the opinion of the Company, its common shares have been trading at prices that do not reflect its underlying value. Accordingly, the Company believes that purchasing its common shares for cancellation, at present pricing, represents an opportunity to enhance value for its shareholders.

Under the terms of the NCIB, the Company may acquire up to an aggregate of 794,088 common shares. The NCIB commenced on May 28, 2018 and will end on May 27, 2019, or on such earlier date as the Company may complete its maximum purchases under the NCIB. The actual number of common shares which will be purchased, if any, and the timing of such purchases will be determined by the Company. All common shares purchased by the Company will be purchased on the open market through the facilities of TSXV by PI Financial Corp. ("PI") acting on behalf of the Company in accordance with the policies of the TSXV and will be surrendered by the Company to its transfer agent for cancellation. The prices that the Company will pay for common shares purchased will be the market price of the shares at the time of purchase.

The Company also announced that it has entered into an automatic share purchase plan with PI (the "**Plan**") in order to facilitate repurchases of its common shares under the NCIB. Under the Plan, PI may purchase common shares under the NCIB at times when the Company would ordinarily not be permitted to do so, due to regulatory restrictions or self-imposed blackout periods.

Purchases under the Plan will be made by PI based upon parameters prescribed by the TSXV, applicable Canadian securities laws and terms of the Plan.

During the year ended December 31, 2018 the Company repurchased and cancelled 441,400 common shares. The aggregate price paid for these common shares totaled \$3,021,340. As a result of the NCIB, during the year ended

December 31, 2018 the Company recorded \$479,993 directly in its retained deficit representing the difference between the aggregate price paid for these common shares and a reduction of the Company's share capital totaling \$3,501,333.

Subsequent to December 31, 2018, the Company repurchased an additional 159,900 common shares to be cancelled for an aggregate cost of \$999,826.

## Acquisition of ZYPITAMAGTM License

On December 14, 2017 and subsequently up-dated on March 7, 2018, the Company announced it had acquired from Zydus, an exclusive license to sell and market a branded cardiovascular drug, ZYPITAMAG<sup>TM</sup> (pitavastatin magnesium) in the United States and its territories for a term of seven years with extensions to the term available. ZYPITAMAG<sup>TM</sup> is used for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia and was approved in July 2017 by the FDA for sale and marketing in the United States. On May 1, 2018 the Company announced the commercial availability of ZYPITAMAG<sup>TM</sup> in retail pharmacies throughout the United States. The Company's product launch has utilized its existing commercial infrastructure.

#### **Divesture of Apicore**

On October 3, 2017, the Company announced that it sold its interests in Apicore (the "**Apicore Sale Transaction**") to an arm's length, pharmaceutical company (the "**Buyer**"). Under the Apicore Sale Transaction, the Company received net proceeds of approximately U.S.\$105 million of which approximately U.S.\$55 million was received on October 3, 2017, with the remainder received in early 2018. There is also a holdback receivable that became due in 2019. These funds received and yet to be received by the Company were after payment of all transaction costs, the compensation paid to holders of Apicore's employee stock options, the redemption of the remaining shares of Apicore not owned by Medicure and other adjustments.

On February 1, 2018, the Company announced that it had received the deferred purchase price proceeds of approximately U.S.\$50 million from the Buyer as a result of the Apicore Sale Transaction. The U.S.\$50 million was included in the total net proceeds of U.S.\$105 million described earlier. The Company did not receive any contingent payments based on an earn out formula as certain financial results within the Apicore business were not met following the Apicore Sale Transaction. Additionally, up to U.S.\$10 million became payable in 2019 based on the release of certain holdback funds (Refer to "Update on Holdback Funds from Apicore Sale").

## Licensing of PREXXARTAN®

On October 31, 2017, the Company announced that it had acquired an exclusive license to sell and market PREXXARTAN® (valsartan) oral solution, which treats hypertension, in the U.S. and its territories from Carmel for a seven-year term with extensions to the term available. Medicure acquired the license rights for an upfront payment of U.S.\$100,000, with an additional U.S.\$400,000 payable on final FDA approval. Carmel would also be entitled to receive royalties and milestone payments from the net revenues of PREXXARTAN®. PREXXARTAN® had been granted tentative approval by the FDA and the tentative approval was converted to final approval on December 19, 2017.

As announced on March 19, 2018 and up-dated on March 28, 2018, all PREXXARTAN® related activities were placed on hold by the Company pending the resolution of a dispute that Medicure became aware of between the owner of the New Drug Application ("NDA"), Carmel and the third-party manufacturer of the product. The Company was also named in a civil claim in Florida between the third-party manufacturer and Carmel. The claim disputed the rights granted to Medicure by Carmel in regards to PREXXARTAN®. More recently the claim against the Company has been withdrawn, however the dispute between Carmel and the third-party manufacturer continues.

Medicure had intended to launch PREXXARTAN® during the first half of 2018. To date, only an up-front payment of U.S.\$100,000, has been made to Carmel in regards to PREXXARTAN® and the Company has reserved all of its rights under the license agreement with Carmel for PREXXARTAN®.

## **Granting of Stock Options**

On December 19, 2017, the Company announced that its Board of Directors had approved the grant of an aggregate of 576,000 stock options to certain directors, officers, employees, management company employees and consultants of the Company pursuant to its stock option plan of which 476,000 were issued in 2017, with the remaining 100,000 stock options issued on January 8, 2018. These options, which were subject to the approval of the TSXV, are set to expire on the fifth anniversary of the date of grant and were issued at an exercise price of \$7.20 per share.

On February 1, 2018, the Company announced that its Board of Directors had approved the grant of 100,000 stock options to an officer of the Company pursuant to its stock option plan. These options, which were subject to the approval of the TSXV, are set to expire on the fifth anniversary of the date of grant and were issued at an exercise price of \$7.30 per share.

#### Commercial:

In fiscal 2007, the Company through its wholly owned Barbadian subsidiary, Medicure International Inc., acquired the U.S. rights to its first commercial product, AGGRASTAT®, in the United States and its territories (Puerto Rico, Virgin Islands, and Guam). AGGRASTAT®, a GPI, is used for the treatment of ACS, including unstable angina (chest pain) ("UA"), which is characterized by chest pain when one is at rest, and non Q wave myocardial infarction ("MI"). AGGRASTAT® is indicated to reduce the rate of thrombotic cardiovascular events (combined endpoint of death, myocardial infarction, or refractory ischemia/repeat cardiac procedure) in patients with non ST elevation acute coronary syndrome ("NSTE ACS"). Under a contract with Medicure International Inc., the Company's wholly owned U.S. subsidiary, Medicure Pharma Inc., continues to support, market and distribute the product. Through a services agreement with Medicure Inc., work related to AGGRASTAT® is primarily conducted by staff based in Winnipeg, Canada, with support from third party contractors.

Net revenue from the sale of AGGRASTAT® for the year ended December 31, 2018 increased by 4% over the net revenue from the sale of AGGRASTAT® for the year ended December 31, 2017.

Hospital demand for AGGRASTAT® continued to increase compared to the prior year with the number of new hospital customers using AGGRASTAT® continuing to increase leading to patient market share held by the product increasing to over 50% during the year ended December 31, 2017 and to approximately 65% as at December 31, 2018. The Company's commercial team continues to work on expanding its customer base, however this continued increase in the customer base for AGGRASTAT® has not directly resulted in corresponding revenue increases as the Company continues to face increased competition resulting from further genericizing of the Integrilin market which has created pricing pressures on AGGRASTAT®. The Company continues to expect strong performance from the

AGGRASTAT® brand, primarily its patient market share, but diversifying revenues away from a single product became increasingly important for the Company during 2018 and continues to occur during 2019.

The number of new customers reviewing and implementing AGGRASTAT® increased sharply since October 11, 2013 as a result of FDA approval of the High Dose Bolus ("**HDB**") regimen for AGGRASTA®Tand due to the increased marketing and promotional efforts of the Company.

As all of the Company's sales are denominated in U.S. dollars and the U.S. dollar improved in value against the Canadian dollar during the second half of 2018 when compared to the 2017, Canadian dollar revenue growth increased, however it was offset by the increasing price pressures facing AGGRASTAT® when comparing the two periods.

On December 14, 2017 and subsequently up-dated on March 7, 2018, the Company announced it had acquired from Zydus, an exclusive license to sell and market a branded cardiovascular drug, ZYPITAMAG<sup>TM</sup> in the United States and its territories for a term of seven years with extensions to the term available. ZYPITAMAG<sup>TM</sup> is used for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia and was approved in July 2017 by the FDA for sale and marketing in the United States. On May 1, 2018 the Company announced the commercial availability of ZYPITAMAG<sup>TM</sup> in retail pharmacies throughout the United States. The Company's product launch has utilized its existing commercial infrastructure. While not an in-hospital product like AGGRASTAT®, ZYPITAMAG<sup>TM</sup> adds to the Company's cardiovascular portfolio and expands the Company's reach to new patients. ZYPITAMAG<sup>TM</sup> contributed \$652,000 of revenue to the Company during year ended December 31, 2018 and although early into the commercial availability of the product the Company continues to work towards growing the ZYPITAMAG<sup>TM</sup> brand.

Going forward and contingent on sufficient finances being available, the Company intends to further expand revenue through marketing and promotional activities, strategic investments related to AGGRASTAT® and ZYPITAMAG<sup>TM</sup>, the launch of SNP and the sales and marketing of ReDS<sup>TM</sup>, as well as the licensing, acquisition and/or development of other cardiovascular products that fit the commercial organization.

On August 13, 2018, the Company announced that the FDA has approved its ANDA for SNP. SNP is indicated for the immediate reduction of blood pressure for adult and pediatric patients in hypertensive crisis. The product is also indicated for producing controlled hypotension in order to reduce bleeding during surgery and for the treatment of acute congestive heart failure. The filing of the ANDA was previously announced by the Company on December 13, 2016. The Company continues to develop two additional generic versions of acute cardiovascular drugs and explore other potential development opportunities.

#### Research and Development:

The Company's research and development activities are predominantly conducted by its wholly-owned Barbadian subsidiary, Medicure International Inc.

#### **AGGRASTAT®**

One of the primary ongoing research and development activities is the continued development and further implementation of a new regulatory, brand and life cycle management strategy for AGGRASTAT®. The extent to which the Company is able to invest in this plan is dependent upon the availability of sufficient finances and the expected returns from those investments.

An important aspect of the AGGRASTAT® strategy was the revision of its approved prescribing information. On October 11, 2013, the Company announced that the FDA approved the AGGRASTAT® HDB regimen, as requested under Medicure's sNDA. The AGGRASTAT® HDB regimen (25 mcg/kg within 5 minutes, followed by 0.15 mcg/kg/min) has become the recommended dosing for the reduction of thrombotic cardiovascular events in patients with NSTE ACS.

The Company believes that further expanded indications and dosing regimens could provide added value to further maximize the revenue potential for AGGRASTAT®. The Company is currently exploring the potential to make such changes, and the Company may need to conduct appropriate clinical trials, obtain positive results from those trials, or otherwise provide support in order to obtain regulatory approval for such proposed indications and dosing regimens.

On April 23, 2015, the Company announced that the FDA approved a revision to the duration of the bolus delivery for the AGGRASTAT® HDB regimen. The dosing change and label modification was requested by the Company to help health care professionals more efficiently meet patient-specific administration needs and to optimize the implementation of AGGRASTAT® at new hospitals. The newly approved labeling supplement now allows the delivery duration of the AGGRASTAT® HDB (25 mcg/kg) to occur anytime within 5 minutes, instead of the previously specified duration of 3 minutes. This change was part of the Company's ongoing regulatory strategy to expand the applications for AGGRASTAT®.

On September 10, 2015, the Company announced that it submitted a sNDA to the FDA to expand the label for AGGRASTAT® to include the treatment of patients presenting with ST-segment elevation myocardial infarction ("STEMI"). If approved for STEMI, AGGRASTA®Twould be the first in its class of GPIs to receive such a label in the United States.

In previous communication with the Company, the FDA's Division of Cardiovascular and Renal Drug Products indicated its willingness to review and evaluate this label change request based substantially on data from the On-TIME 2 study, with additional support from published studies and other data pertinent to the use of the AGGRASTAT® HDB regimen in the treatment of STEMI. The efficacy and safety of the HDB regimen in STEMI has been evaluated in more than 20 clinical studies involving over 11,000 patients and is currently recommended by the ACCF/AHA Guideline for the Management of STEMI.

On July 7, 2016, the Company received a Complete Response Letter ("CRL") from the FDA for its sNDA requesting an expanded indication for patients presenting with STEMI. The FDA issued the CRL to communicate that its initial review of the application was completed; however, it could not approve the application in its present form and requested additional information. The Company continues to work directly with the FDA to address these comments.

The sNDA filing was accompanied by a mandatory U.S.\$1.2 million user fee paid by Medicure International Inc. to the FDA. In December 2016, the Company received a waiver and full refund of the user fee which had been paid and expensed during fiscal 2015.

On September 1, 2016, the Company announced that it had received approval from the FDA for its bolus vial product format for AGGRASTAT®.

This product format is a concentrated, 15 ml vial containing sufficient drug to administer the FDA approved, HDB of 25 mcg/kg given at the beginning of treatment. AGGRASTAT® is also sold two other sizes, a 100 ml vial and a 250 ml bag. The existing, pre-mixed products continue to be available, providing a convenient concentration for

administering the post-HDB maintenance infusion of 0.15 mcg/kg/min. (Approved Dosing: Administer intravenously 25 mcg/kg within 5 minutes and then 0.15 mcg/kg/min for up to 18 hours). Commercial launch of the bolus vial occurred during the fourth quarter of 2016 and the Company continues to believe this product format will have a positive impact on hospital utilization of AGGRASTAT®.

Another aspect of the AGGRASTAT® strategy is to advance studies related to the contemporary use and future regulatory positioning of the product. On May 10, 2012, the Company announced the commencement of enrolment in a clinical trial of AGGRASTAT® entitled "Shortened AGGRASTAT® Versus Integrilin in Percutaneous Coronary Intervention" ("SAVI-PCI"). SAVI PCI is a randomized, open-label study enrolling patients undergoing percutaneous coronary intervention ("PCI") at sites across the United States. The study was designed to evaluate whether patients receiving the HDB regimen of AGGRASTAT® (25 mcg/kg bolus over 3 minutes) followed by an infusion of 0.15 mcg/kg/min for a shortened duration of 1 to 2 hours will have outcomes that are similar, or "non-inferior," to patients receiving a 12 to 18-hour infusion of Integrilin® (eptifibatide) (Merck & Co., Inc.) at its FDA approved dosing regimen.

The primary objective of SAVI-PCI is to demonstrate AGGRASTAT® is non-inferior to Integrilin with respect to the composite endpoint of death, PCI-related myocardial infarction, urgent target vessel revascularization, or major bleeding within 48 hours following PCI or hospital discharge. The secondary objectives of this study include the assessment of safety as measured by the incidence of major bleeding.

The first patient was enrolled in June 2012. Enrolment was completed during the fourth quarter of 2018 and analysis of the results is currently under way.

#### **Cardiovascular Generic and Reformulation Products**

Through an ongoing research and development investment, the Company is exploring new product opportunities in the interest of developing future sources of revenue and growth.

On August 13, 2018, the Company announced that the FDA has approved its ANDA for SNP. SNP is indicated for the immediate reduction of blood pressure for adult and pediatric patients in hypertensive crisis. The product is also indicated for producing controlled hypotension in order to reduce bleeding during surgery and for the treatment of acute congestive heart failure. The filing of the ANDA was previously announced by the Company on December 13, 2016.

The Company's intention is that SNP will be launched using its existing commercial organization and infrastructure in mid 2019.

The Company is focused on the development of two additional cardiovascular generic drugs. When combined with the ANDA described above and the recent acquisition of an exclusive license for ZYPITAMAG<sup>TM</sup>, the Company expects to transform its commercial suite of products from two products as of December 31, 2018 to up to five approved products in 2020.

The Company had been devoting a modest amount of resources to its research and development programs, including, but not limited to the development of TARDOXAL<sup>TM</sup> (pyridoxal 5 phosphate ("**P5P**") formerly known as MC-1) for neurological conditions such as Tardive Dyskinesia. This work included, but was not limited to, working with the FDA to better understand and refine the next steps in development of the product. The advancement of TARDOXAL<sup>TM</sup> is currently on hold. The Company changed its focus from TARDOXAL<sup>TM</sup> to other uses of P5P and continues to devote time and resources to the advancement of P5P development.

The following table summarizes the Company's research and development programs, their therapeutic focus and their stage of development.

Product Candidate	Therapeutic focus	Stage of Development
AGGRASTAT®	Acute Cardiology	Approved/Marketed – Additional studies underway
ZYPITAMAG <sup>TM</sup>	Primary Hyperlipidemia or Mixed Dyslipidemia	Approved/Marketed
$ReDS^{TM}$	Heart Failure – Medical Device	Approved/Marketed
PREXXARTAN®	Hypertension	Approved – Commercial launch on hold
SNP	Acute Cardiology	ANDA approved – pre-launch activities underway
Generic ANDA 2	Acute Cardiology	Formulation development underway
Generic ANDA 3	Acute Cardiology	Formulation development underway
TARDOXAL <sup>TM</sup> /P5P	TD/Neurological indications	On hold/Regulatory and clinical planning underway

#### **Other Products**

The Company is investing in the research and development of other new product development opportunities. The Company is also exploring opportunities to grow the business through acquisition. The Company has evaluated and continues to evaluate the acquisition or license of other approved commercial products with the objective of further broadening its product portfolio and generating additional revenue.

As at December 31, 2018, the Company had numerous issued United States patents (see Item 5 – *Operating and Financial Review and Prospects – C. Research and Development, Patents and Licenses, Etc.* below).

#### Competitors' Current Products

AGGRASTAT®, is owned by the Company's subsidiary, Medicure International, Inc., and is sold in the United States of America through the Company's subsidiary, Medicure Pharma, Inc. AGGRASTAT® is indicated to reduce the rate of thrombotic cardiovascular events (combined endpoint of death, myocardial infarction, or refractory ischemia/repeat cardiac procedure) in patients with non-ST elevation acute coronary syndrome (NSTE-ACS).

AGGRASTAT® competes in a market segment commonly referred to as the anti-thrombotic market (treatments to remove or prevent formation of blood clots). More specifically, AGGRASTAT® is an antiplatelet drug which affects thrombus (blood clot) formation by preventing the aggregation of platelets in the blood stream. Of the different classes of antiplatelet drugs, AGGRASTAT® is a representative of the glycoprotein IIB/IIIA inhibitors drug class. There are three of these agents approved for use, including abciximab (ReoPro®), eptifibatide (Integrilin®), and tirofiban (AGGRASTAT®). All three are proprietary drugs and only eptifibatide has generic equivalents, which were

introduced beginning in December 2015. Of the two directly competing agents, AGGRASTAT® is most closely comparable to eptifibatide (Integrilin) as they are both highly potent, small molecule drugs that have reversible antiplatelet effects.

The launch of the injectable antiplatelet agent, cangrelor (Kengreal<sup>TM</sup>), by The Medicines Company, occurred in 2015 and has had some impact on the use and sale of GPIs, including AGGRASTAT®.

The initial launch of generic versions of eptifibatide (Integrilin) occurred in December 2015 and could impact the utilization of AGGRASTAT® in the future.

Due to the incidence and severity of cardiovascular diseases, the market for antihyperlipidemics is large and competition is intense. There are a number of approved antihyperlipidemic drugs currently on the market, awaiting regulatory approval or in development. ZYPITAMAG<sup>TM</sup> will compete with these drugs to the extent ZYPITAMAG<sup>TM</sup> and any of these drugs are approved for the same or similar indications.

Although ZYPITAMAG<sup>TM</sup> would be positioned as a relatively low-cost therapy, in certain circumstances, other treatment approaches are lower cost and may for this reason be preferred by health care professionals.

SNP will be launched into a genericized market with several competitors already selling generic versions of the product and as such there is no assurance that the Company will be successful in launching SNP in 2019 and growing sales for the product. The failure of the Company to successfully launch and grow sales of SNP, or to establish a viable market for the Company's version of the product, could have a material adverse effect on the Company's long-term profitability.

### Competitors' Products in Development

At present the Company is not aware of any other glycoprotein IIb/IIIa inhibitors in mid to late stage clinical development. However, the choice and use of AGGRASTAT® may be affected by the continued advancement of new antithrombotic and antiplatelet agents, including the recently approved oral antiplatelet agents, ticagrelor (Brilinta®) and prasugrel (Effient®). Any future launch of generic version of AGGRASTAT® and/or of other competitive drugs may also be expected to impact utilization of the Company's drug. Many companies, including large pharmaceutical and biotechnology companies, are conducting development of products that are intended to address the same or a similar medical need. Many of these companies have much larger financial and other resources than the Company does, including those related to research and development, manufacturing, and sales and marketing. The Company also faces competition in recruiting scientific personnel from colleges, universities, agencies, and research organizations who seek patent protection and licensing agreements for the technologies they develop.

There are a number of approved antihyperlipidemic drugs currently on the market, awaiting regulatory approval or in development. ZYPITAMAG<sup>TM</sup> will compete with these drugs to the extent ZYPITAMAG<sup>TM</sup> and any of these drugs are approved for the same or similar indications.

SNP will be launched into a genericized market with several competitors already selling generic versions of the product and as such there is no assurance that the Company will be successful in launching SNP in 2019 and growing sales for the product. The failure of the Company to successfully launch and grow sales of SNP, or to establish a viable market for the Company's version of the product, could have a material adverse effect on the Company's long-term profitability.

#### Divesture of Apicore

On October 3, 2017, the Company announced the completion of the Apicore Sale Transaction to the Buyer. Under the Apicore Sale Transaction, the Company received net proceeds of approximately U.S.\$105 million of which approximately U.S.\$55 million was received on October 3, 2017, with the remainder received in early 2018. There is also a holdback receivable of U.S. \$10 million that became due in 2019. These funds received and yet to be received by the Company were after payment of all transaction costs, the compensation paid to holders of Apicore's employee stock options, the redemption of the remaining shares of Apicore not owned by Medicure and other adjustments.

On February 1, 2018, the Company announced that it had received the deferred purchase price proceeds of approximately U.S.\$50 million from the Buyer as a result of the Apicore Sale Transaction. The U.S.\$50 million was included in the total net proceeds of U.S.\$105 million described earlier. The Company did not receive any contingent payments based on an earn out formula as certain financial results within the Apicore business were not met following the Apicore Sale Transaction. Additionally, up to U.S.\$10 million became payable in 2019 based on the release of certain holdback funds (Refer to "Update on Holdback Funds from Apicore Sale").

#### Competitive Strategy and Position

The Company is primarily focusing on:

Maintaining and growing AGGRASTAT® sales in the United States

The Company continues to work to expand the sales of AGGRASTAT® in the United States. The present market for GPIs is based on wholesaler acquisition cost, of which AGGRASTAT® is one of three agents, is approximately U.S.\$180 million per year (2017). The use of AGGRASTAT® is recommended by the AHA and ACC Guidelines for the treatment of ACS. AGGRASTAT® has been shown, to reduce the rate of thrombotic cardiovascular events (combined endpoint of death, myocardial infarction, or refractory ischemia/repeat cardiac procedure) in patients with NSTE ACS.

As stated previously, one of the Company's primary ongoing research and development activities is the continued development and further implementation of a new regulatory, brand and life cycle management strategy for AGGRASTAT®.

An important aspect of the AGGRASTAT® strategy was the revision of its approved prescribing information. On October 11, 2013, the Company announced that the FDA approved the AGGRASTAT® HDB regimen, as requested under Medicure's supplemental new drug application ("sNDA"). The AGGRASTA®THDB regimen (25 mcg/kg within 5 minutes, followed by 0.15 mcg/kg/min) has become the recommended dosing for the reduction of thrombotic cardiovascular events in patients with NSTE ACS.

The Company believes that further expanded indications and dosing regimens could provide added value to further maximize the revenue potential for AGGRASTAT<sup>®</sup>. The Company is currently exploring the potential to make such changes, and the Company may need to conduct appropriate clinical trials, obtain positive results from those trials, or otherwise provide support in order to obtain regulatory approval for such proposed indications and dosing regimens.

On September 1, 2016, the Company announced that it had received approval from the FDA for its bolus vial product format for AGGRASTAT®. The product format is a concentrated, pre-mixed, 15 ml vial designed specifically for convenient delivery of the AGGRASTAT® bolus dose (25 mcg/kg). Development of the bolus vial was in response to feedback from interventional cardiologists and catheterization lab nurses from across the United States. Commercial launch of the bolus vial took place in October of 2016 and the Company continues to believe this product format will have a positive impact on hospital utilization of AGGRASTAT®.

The Company is also providing funding for a number of investigator sponsored research projects targeting contemporary utilization of AGGRASTAT® relative to its competitors.

#### Commercial launch of ZYPITAMAGTM

The Company acquired an exclusive license to sell and market ZYPITAMAG<sup>TM</sup> in the United States and its territories for a term of seven years with extensions to the term available. ZYPITAMAG<sup>TM</sup>, used for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia, was approved early in 2017 by the FDA for sale and marketing in the United States and its territories and on May 1, 2018 the Company launched ZYPITAMAG<sup>TM</sup> commercially in retail pharmacies throughout the United States. The Company's product launch has utilized its existing commercial infrastructure. While not an in-hospital product like AGGRASTAT®, ZYPITAMAG<sup>TM</sup> adds to the Company's cardiovascular portfolio and expands the Company's reach to new patients. ZYPITAMAG<sup>TM</sup> contributed \$652,000 of revenue to the Company during the year ended December 31, 2018 and although early into the commercial availability of the product the Company continues to work towards growing the ZYPITAMAG<sup>TM</sup> brand.

## Acquisitions, licensing or marketing partnerships for new commercial products

In addition to the acquisitions of licenses in the United States for ZYPITAMAG<sup>TM</sup>, the Company continues to explore additional opportunities for the acquisition or licensing of other cardiovascular products that fit the commercial organization.

Subsequent to December 31, 2018, on January 28, 2019 the Company announced it had entered into an agreement with Sensible to become the exclusive marketing partner for ReDS<sup>TM</sup> in the United States. ReDS<sup>TM</sup> is a non-invasive, FDA-cleared medical device that provides an accurate, actionable and absolute measurement of lung fluid which is important in the management of congestive heart failure. The lung fluid measurements are used in guiding treatment and monitoring a heart failure patient's condition and may lead to a significant decrease in readmissions and hospital costs. Clinical studies have shown an 87% reduction in heart failure readmission rates for patients using the ReDS<sup>TM</sup> system at home for three months post-discharge versus those who were treated with usual care alone. ReDS<sup>TM</sup> is already marketed to U.S. hospitals by Sensible and Medicure expects to begin marketing ReDS<sup>TM</sup> immediately using its existing commercial organization. Under the terms of the agreement, Medicure will receive a percentage of total U.S. sales revenue of the device and must meet minimum annual sales quotas.

#### Developing additional cardiovascular generic and reformulation products

On August 13, 2018, the Company announced that the FDA has approved its ANDA for SNP. SNP is indicated for the immediate reduction of blood pressure for adult and pediatric patients in hypertensive crisis. The product is also indicated for producing controlled hypotension in order to reduce bleeding during surgery and for the treatment of acute congestive heart failure.). The filing of the ANDA was previously announced by the Company on December 13, 2016.

Medicure has also begun the development of two additional generic versions of acute cardiovascular drugs and is exploring other potential opportunities.

The Company's intention is that SNP will be launched using its existing commercial organization and infrastructure in mid 2019.

#### C. Organizational Structure

Medicure International, Inc., a wholly owned subsidiary of the Company, was incorporated pursuant to the laws of Barbados, West Indies, on May 23, 2000. Medicure International, Inc.'s registered office is located at Whitepark House, White Park Road, Bridgetown, Barbados. Medicure International Inc.'s head office is located at It Floor Limegrove Centre Holetown, St. James, Barbados.

Medicure Pharma, Inc., a wholly owned subsidiary of the Company, was incorporated pursuant to the laws of the State of Delaware, United States of America, on September 30, 2005. Medicure Pharma Inc.'s registered office is 2711 Centerville Road, Suite 400, Wilmington, Delaware, 19808. Medicure Pharma, Inc.'s head office is located at 116 Village Blvd. Suite 202, Princeton, NJ, 08540.

Medicure U.S.A., Inc., a wholly owned subsidiary of the Company, was incorporated pursuant to the laws of the State of Delaware, United States of America, on June 23, 2014. Medicure U.S.A. Inc.'s registered office is 2711 Centerville Road, Suite 400, Wilmington, Delaware, 19808.

Medicure Mauritius Limited, a wholly owned subsidiary of the Company was incorporated pursuant to the laws of the Republic of Mauritius on November 17, 2016. Medicure Mauritius Limited's registered office is & floor, Tower A, 1 CyberCity, Ebene, Mauritius.

Apigen Investments Limited, a wholly owned subsidiary of the Company, was incorporated pursuant to the laws of the Republic of Mauritius on June 27, 2014. Apigen Investments Limited's registered office is \$\Phi\$ floor, Tower A, 1 CyberCity, Ebene, Mauritius.

Medicure Pharma Europe Limited, a wholly owned subsidiary of the Company, was incorporated pursuant to the laws of Ireland on October 17, 2017. Medicure Pharma Europe Limited's registered office is Block 3, Harcourt Centre, Harcourt Road, Dublin 2.

## D. Property, Plant and Equipment

Office Space

Included within the *business and administration services agreement* entered into with Genesys Venture Inc. (see Item 5F - *Contractual Obligations*), is the use of office space at Genesys Venture Inc.'s head office located at 1250 Waverley Street in Winnipeg, Manitoba, Canada. As at December 31, 2018, the Company had use of approximately 14,720 square feet.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable

#### ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

This section contains forward-looking statements involving risks and uncertainties. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under part Item 3D - Risk Factors. The following discussion of the financial condition, changes in financial conditions and results of operations of the Company for the years ended December 31, 2018 and December 31, 2017 should be read in conjunction with the consolidated financial statements of the Company. The Company's consolidated financial statements are presented in Canadian dollars and have been prepared in accordance with IFRS included under Item 18 to this Annual Report.

#### **Critical Accounting Policies and Estimates**

The preparation of the Company's consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenue and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Areas where management has made critical judgments in the process of applying accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements include the determination of the Company's and its subsidiaries' functional currencies.

Information about key assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next financial year are as follows:

- ·the valuation of the holdback receivable
- ·the valuation of the royalty obligation
- ·the provisions for returns, chargebacks, rebates and discounts

- ·the measurement of intangible assets
- the measurement of the amount and assessment of the recoverability of income tax assets and income tax provisions

#### Valuation of financial instruments

The Company initially recognizes a financial asset on the trade date at which the Company becomes a party to the contractual provisions of the instrument.

Upon recognition of a financial asset, classification is made based on the business model for managing the asset and the asset's contractual cash flow characteristics. The financial asset is initially recognized at its fair value and subsequently measured as (i) amortized cost; (ii) fair value through other comprehensive income ("FVOCI"); or (iii) fair value through profit or loss ("FVTPL"). Financial assets are classified as FVTPL if they have not been classified and measured at amortized cost or FVOCI. Upon initial recognition of an equity instrument that is not held-for-trading, the Company may irrevocably designate the presentation of subsequent changes in the fair value of such equity instrument as FVTPL.

The Company derecognizes a financial asset when the contractual cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

Financial assets and liabilities are offset and the net amount presented in the consolidated statements of financial position when, and only when, the Company has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Company has classified all of its non-derivative financial assets as financial assets measured at amortized cost, except for the consideration receivable and the holdback receivable, which are classified as FVTPL. The Company has not classified any financial assets as FVOCI.

A non-derivative financial asset is measured at amortized cost when both of the following conditions are met: (i) the asset is held within a business model whose objective is to hold assets in order to collect the contractual cash flows; and (ii) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Such assets are recognized initially at fair value plus any directly attributable transaction costs and measured at amortized cost using the effective interest method subsequent to initial recognition. Financial assets measured at amortized cost are cash and cash equivalents, short-term investments and accounts receivable.

All financial liabilities are recognized initially on the trade date at which the Company becomes a party to the contractual provisions of the instrument. Such financial liabilities are recognized initially at fair value plus any directly attributable transaction costs. All financial liabilities are measured at amortized cost, except for any financial liabilities measured at FVTPL. A financial liability may no longer be reclassified subsequent to initial recognition. Subsequent to initial recognition, financial liabilities are measured at amortized cost using the effective interest method. The Company decognizes a financial liability when its contractual obligations are discharged, cancelled or when they expire.

The royalty obligation was recorded at its fair value at the date at which the liability was incurred and subsequently measured at amortized cost using the effective interest rate method at each reporting date. Estimating fair value for this liability required determining the most appropriate valuation model which was dependent on its underlying terms and conditions. This estimate also required determining expected revenue from AGGRASTAT® sales and an appropriate discount rate and making assumptions about them.

The Company has two commercially available products, AGGRASTAT® and ZYPITAMAG<sup>TM</sup> (the "**Products**") which it provides to United States customers. The Products are sold to wholesalers for resale; with AGGRASTAT® sold by the wholesalers to hospitals, while ZYPITAMAG<sup>TM</sup> is sold to pharmacies. Revenue from the sale of Products is recognized upon the receipt of goods by a wholesaler, the point in time in which title and control of the transferred goods pass from the Company to the wholesale customer. At this point in time, the wholesaler has gained the sole ability to route the goods, and there are no unfulfilled obligations that could affect the wholesaler's acceptance of the goods. Delivery of the product occurs when the goods have been shipped to the wholesaler and the wholesaler has accepted the products in accordance with the terms of the sale.

Sales are made subject to certain discounts available for prompt payment, volume discounts, rebates or chargebacks. Revenue from these sales is recognized based on the price specified per the pricing terms of the sales invoices, net of the estimated discounts. Variable consideration is based on historical information, using the expected value method. Revenue is only recognized to the extent that it is highly probable that a significant reversal will not occur. A liability is included within accounts payable and accrued liabilities and is measured for expected payments that will be made to the customers for the discounts in which they are entitled. Sales do not contain an element of financing as sales are made with a credit terms within the normal operating cycle of the date of the invoice, which is consistent with market practice.

#### The measurement of intangible assets

Intangible assets that are acquired separately are measured at cost less accumulated amortization and accumulated impairment losses. Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are recognized in profit or loss as incurred.

Licenses are amortized on a straight-line basis over the contractual term of the acquired license. Patents are amortized on a straight-line basis over the legal life of the respective patent, ranging from five to twenty years, or its economic life, if shorter. Trademarks are amortized on a straight-line basis over the legal life of the respective trademark, being ten years, or its economic life, if shorter. Customer lists are amortized on a straight-line basis over approximately twelve years, or its economic life, if shorter.

Amortization on licenses commences when the intangible asset is available for use, which would typically be in connection with the commercial launch of the associated product under the license.

Following initial recognition, intangible assets are carried at cost less accumulated amortization and accumulated impairment losses. The cost of servicing the Company's patents and trademarks are expensed as incurred.

The amortization method and amortization period of an intangible asset with a finite useful life are reviewed at least annually. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates in the consolidated statements of net income and comprehensive income.

The measurement of the amount and assessment of the recoverability of income tax assets

The Company and its subsidiaries are generally taxable under the statutes of their country of incorporation.

Income tax expense comprises current and deferred taxes. Current taxes and deferred taxes are recognized in profit or loss except to the extent that they relate to a business combination, or items recognized directly in equity or in other comprehensive income.

Current taxes are the expected tax receivable or payable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax receivable or payable in respect of previous years.

The Company follows the liability method of accounting for deferred taxes. Under this method, deferred taxes are recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred taxes are not recognized for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred taxes are not recognized for taxable temporary differences arising on the initial recognition of goodwill. Deferred taxes are measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the tax laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax assets and liabilities on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

The Company has provided for income taxes, including the impacts of tax legislation in various jurisdictions, in accordance with guidance issued by accounting regulatory bodies, the Canada Revenue Agency, the U.S. Internal Revenue Service, the Barbados Revenue Authority, the Mauritius Revenue Authority, as well as other state and local governments through the date of the issuance of these Consolidated Financial Statements. Additional guidance and interpretations can be expected and such guidance, if any, could impact future results. While management continues to monitor these matters, the ultimate impact, if any, as a result of the application of any guidance issued in the future cannot be determined at this time.

The Company and its subsidiaries file federal income tax returns in Canada, the United States, Barbados and other foreign jurisdictions, as well as various provinces and states in Canada and the United States. The Company and its subsidiaries have open tax years, primarily from 2009 to 2018, with significant taxing jurisdictions, including Canada, the United States and Barbados. These open years contain certain matters that could be subject to differing interpretations of applicable tax laws and regulations and tax treaties, as they relate to the amount, timing or inclusion of revenues and expenses, or the sustainability of income tax positions of the Company and its subsidiaries. Certain of these tax years may remain open indefinitely.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, would be recognized subsequently if information about facts and circumstances changed. The adjustment would either be treated as a reduction to goodwill if it occurred during the measurement period or in profit or loss, when it occurs subsequent to the measurement period.

#### NEW ACCOUNTING STANDARDS AND INTERPRETATIONS

Set out below is the impact of the mandatory adoption of new standards:

IFRS 9, Financial Instruments: Classification and Measurement ("IFRS 9")

Effective January 1, 2018, the Company has adopted IFRS 9 retrospectively. Prior periods were not restated and no material changes resulted from adoption of this new standard. IFRS 9 introduced a revised model for classification and measurement of financial instruments, which has resulted in several financial instrument reclassification changes by the Company. There were no quantitative impacts from adoption of IFRS 9.

Upon recognition of a financial asset, classification is made based on the business model for managing the asset and the asset's contractual cash flow characteristics. The financial asset is initially recognized at its fair value and subsequently classified and measured as (i) amortized cost; (ii) fair value through other comprehensive income ("FVOCI"); or (iii) fair value through profit or loss ("FVTPL"). Financial assets are classified as FVTPL if they have not been classified as measured at amortized cost or FVOCI. Upon initial recognition of an equity instrument that is not held-for-trading, the Company may irrevocable designate the presentation of subsequent changes in the fair value of such equity instrument as FVTPL.

The Company recognizes a financial liability on the trade date in which it becomes a party to the contractual provisions of the instrument at fair value plus any directly attributable costs. Financial liabilities are subsequently measured at amortized cost or FVTPL, and are not subsequently reclassified.

An "expected credit loss" impairment model applies which requires a loss allowance to be recorded on financial assets measured at amortized cost based on their expected credit losses. An estimate is made to determine the present value of future cash flows associated with the asset, and if required, an impairment loss is recorded. The impairment loss reduces the carrying value of the impaired financial asset to the value of the estimated present value of the future cash flows associated with the asset, discounted at the financial asset's original effective interest rate is recorded either directly or through the use of an allowance account and the resulting impairment loss is recorded in profit or loss.

Below is a summary showing the classification and measurement basis for the Company's financial instruments as a result of the adoption of IFRS on January 1, 2018 with a comparison to the previous classification under IAS 39:

Classification under IAS 39	Classification under IFRS 9
Loans and receivables	Amortized cost
Loans and receivables	Amortized cost
Loans and receivables	Amortized cost
Loans and receivables	FVTPL
Loans and receivables	FVTPL
Other financial liabilities	Amortized cost
	Loans and receivables Other financial liabilities

IFRS 15, Revenue from Contracts with Customers ("IFRS 15")

Effective January 1, 2018, the Company has adopted IFRS 15 retrospectively. Prior periods were not restated and no material changes resulted from adoption of this new standard. IFRS 15 provides a model for the recognition and measurement of gains or losses from sales of some non-financial assets. The core principle is that revenue is recognized 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 goods or services. The adoption of the standard will also result in enhanced disclosures about revenue, provide guidance for transactions that were not previously addressed comprehensively (for example, service revenue and contract modifications) and improve guidance for multiple-element arrangements. There were no quantitative impacts from adoption of IFRS 15.

Effective January 1, 2018, the Company has adopted the required amendments to IFRS 2, which provides requirements on the accounting for the effects of vesting and non-vesting conditions on the measurement of cash-settled share-based payments, share-based payment transactions with a net settlement feature for withholding tax obligations, and a modification to the terms and conditions of a share-based payments that changes the classification of the transaction from cash-settled to equity settled. There were no quantitative impacts from adoption of the amendments to IFRS 2.

#### NEW ACCOUNTING STANDARD NOT YET ADOPTED

As at December 31, 2018, the following standard has been issued but is not yet effective:

IFRS 16, Leases ("IFRS 16")

In January 2016, the IASB issued IFRS 16 which requires lessees to recognize assets and liabilities for most leases. Lessees will have a single accounting model for all leases, with certain exemptions. The new standard is effective January 1, 2019, with limited early application permitted. The new standard permits lessees to use either a full retrospective or a modified retrospective approach on transition for leases existing at the date of transition, with options to use certain transition reliefs. The Company has evaluated the standard and does not expect a material impact on its consolidated financial statements as a result of its adoption.

#### A. Operating Results

#### General

Through 2018, the Company was focused on maintaining and growing the sales AGGRASTAT® and the commercial launch and growing the sales of ZYPITAMAG<sup>TM</sup>. The Company expects to launch SNP in mid 2019 and will additionally focus efforts on the marketing of ReDS<sup>TM</sup> in addition to AGGRASTAT® and ZYPITAMAG<sup>TM</sup>.

Historically, the Company concentrated primarily on research and development and continues to invest a significant amount of funds in research and development activities. To date, the Company has yet to and may never derive any revenues from its research and development products.

The Company has a limited operating history and its prospects must be considered in light of the risks, expenses and difficulties frequently encountered with the establishment of a business in a highly competitive industry, characterized by frequent new product introductions.

## Twelve Months Ended December 31, 2018 Compared to the Twelve Months Ended December 31, 2017

Net AGGRASTAT® product sales for year ended December 31, 2018 were \$28.5 million compared to \$27.1 million during the year ended December 31, 2017.

The Company currently sells finished AGGRASTAT® to drug wholesalers. These wholesalers subsequently sell AGGRASTAT® to the hospitals where health care providers administer the drug to patients. Wholesaler management decisions to increase or decrease their inventory of AGGRASTAT® may result in sales of AGGRASTAT® to wholesalers that do not track directly with demand for the product at hospitals.

Hospital demand for AGGRASTAT® continued to increase compared to the prior year with the number of new hospital customers using AGGRASTAT® continuing to increase leading to patient market share held by the product increasing to over 50% during the year ended December 31, 2017 and to approximately 65% as at December 31, 2018. The Company's commercial team continues to work on expanding its customer base, however this continued increase in the customer base for AGGRASTAT® has not directly resulted in corresponding revenue increases as the Company continues to face increased competition resulting from further genericizing of the Integrilin market which has created pricing pressures on AGGRASTAT®. The Company continues to expect strong performance from the AGGRASTAT® brand, primarily its patient market share, but diversifying revenues away from a single product became increasingly important for the Company during 2018 and continues to occur during 2019.

The number of new customers reviewing and implementing AGGRASTAT® increased sharply since October 11, 2013 as a result of FDA approval of the High Dose Bolus ("**HDB**") regimen for AGGRASTA®Tand due to the increased marketing and promotional efforts of the Company.

As all of the Company's sales are denominated in U.S. dollars and the U.S. dollar improved in value against the Canadian dollar during the second half of 2018 when compared to the 2017, Canadian dollar revenue growth increased, however it was offset by the increasing price pressures facing AGGRASTAT® when comparing the two periods. Net revenue from AGGRASTAT® in U.S. dollars for 2018 totaled \$21.9 million compared to \$20.9 million in 2017.

ZYPITAMAG<sup>TM</sup> contributed \$652,000 of revenue to the Company during the year ended December 31, 2018 and although early into the commercial availability of the product the Company continues to work towards growing the ZYPITAMAG<sup>TM</sup> brand.

Cost of goods sold represents direct product costs associated with AGGRASTAT® and ZYPITAMAG<sup>TM,</sup> including write-downs for obsolete inventory and amortization of the related intangible assets.

AGGRASTAT® cost of goods sold for the year ended December 31, 2018 was \$3.7 million compared to \$3.5 million for the comparable period in the prior year. For the year ended December 31, 2018, the increases to cost of goods sold is the result of higher volume of AGGRASTAT product sold offset by a significant write-down of expired inventory during the year ended December 31, 2017. During the year ended December 31, 2018, the Company wrote-off inventory of \$3,000 that had expired or was otherwise unusable, compared to \$385,000 during the year ended December 31, 2017.

ZYPITAMAG<sup>TM</sup> cost of goods sold for the year ended December 31, 2018 is \$142,000 relating to the cost of the ZYPITAMAG<sup>TM</sup> product sold to the Company's wholesale customers and \$196,000 pertaining to the amortization of the ZYPITAMAG<sup>TM</sup> license for the periods, which is recorded on the statement of financial position within intangible assets and \$92,000 relating to a write-down of inventory that had expired or was otherwise unusable.

Selling, general and administrative expenses include salaries and related costs for those employees not directly involved in research and development. The expenditures are required to support sales and marketing efforts of AGGRASTAT® and ZYPITAMAG<sup>TM</sup>, ongoing business development and corporate stewardship activities. The balance also includes professional fees such as legal, audit, investor and public relations.

Total selling, general, and administrative expenses for the year ended December 31, 2018 was \$19.5 million, compared to \$14.9 million for the year ended December 31, 2017. Selling, general, and administrative expenses related to commercial operations were \$15.6 million for the year ended December 31, 2018, compared to \$11.5 million for the year ended December 31, 2017. Selling, general, and administrative expenses – Other were \$3.9 million for the year ended December 31, 2018, compared to \$3.4 million during the year ended December 31, 2017.

Selling, general and administrative expenses include salaries and related costs for those employees not directly involved in research and development. The expenditures are required to support sales and marketing efforts of AGGRASTAT® and ZYPITAMAG<sup>TM</sup> as well as ongoing business development and corporate stewardship activities. The balance also includes professional fees such as legal, audit, investor and public relations and stock-based compensation.

Commercial sales expenses increased during the year ended December 31, 2018 as compared to the prior year as sales and marketing costs including the size of the Company's commercial team increased between the two periods to support the launch of ZYPITAMAG<sup>TM</sup> an well as on going sales efforts of the commercial team in regards to the Company's products.

Selling, general and administrative expenses – other increased for the year ended December 31, 2018 as compared to the year ended December 31, 2017 primarily as a result of \$1,022,000 of stock-based compensation recorded during the year ended December 31, 2018 compared to \$491,000 for the year ended December 31, 2017. After factoring in the difference in stock-based compensation expense between the two periods, the selling, general and administrative expenses – other increased by approximately \$170,000 primarily relating to professional fees resulting from increased business development activities undertaken by the Company during 2018.

Research and development expenditures include costs associated with the Company's clinical development and preclinical programs including salaries, monitoring and other research costs. The Company expenses all research costs and has not had any development costs that meet the criteria for capitalization under IFRS. Prepaid research and development costs represent advance payments under contractual arrangements for clinical activity outsourced to research centers.

Net research and development expenditures for the year ended December 31, 2018 were \$7.3 million, compared to \$5.1 million for the year ended December 31, 2017. Research and development expenditures include costs associated with the Company's on-going AGGRASTAT® development, clinical development and preclinical programs including salaries, research centered costs and monitoring costs, as well as research and development costs associated with the development projects being undertaken to develop additional cardiovascular products. The increase in research and development expenditures for the year ended December 31, 2018 when compared to the year ended December 31, 2017 is as a result of the timing of expenses and work associated with each development project undertaken by the

Company, primarily the Company's development of additional generic ANDA cardiovascular products.

Subsequent to December 31, 2018, on February 13, 2019, the Company received notice from the Buyer in the Apicore Sales Transaction of potential claims against the holdback receivable in respect of representations and warranties under the Apicore Sales Transaction, with the maximum exposure of the claims being the total holdback receivable. The notice did not contain sufficiently detailed information to enable the Company to assess the merits of the claims. The Company will proceed diligently to investigate the potential claims and attempt to satisfactorily resolve them with a view to having the holdback receivable released. In consideration of the uncertainty associated with the potential claims asserted by the Buyer, the Company reduced the carrying value of the holdback receivable by \$1,472,999 on the statement of financial position as at December 31, 2018. The Buyer did not make the required payments on the holdback receivable in February and April 2019.

Intangible assets are reviewed for impairment on an ongoing basis whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

The Company recorded an impairment loss of \$636,000 for the year ended December 31, 2017 pertaining to a write-down in the value of the intangible assets relating to the license acquired for PREXXARTAN® due to the on-going litigation surrounding the product.

The amount and timing of impairments and write-downs may vary substantially from period to period depending on the business and research activities being undertaken at any one time and changes in the Company's commercial strategy.

The finance income for the year ended December 31, 2018 relates primarily to interest on cash and investments held by the Company during 2018 partially offset by accretion on the Company's royalty obligation, which compares to finance expense for the year ended December 31, 2017 which primarily related to accretion on the Company's royalty obligation and interest on the Company's long-term debt. The Company repaid its long-term debt during the fourth quarter of 2017.

The increase in the foreign exchange gain for the year ended December 31, 2018 when compared to the year ended December 31, 2017 relates to increases in the US dollar exchange rate between the two periods combined with the significant increase in US dollar cash and short-term investments held by the Company during the year ended December 31, 2018.

The income tax expense of \$897,000 during the year ended December 31, 2018 is primarily related to taxable income in the United States during the year ended December 31, 2018. Income tax recovery of \$9.1 million during the year ended December 31, 2017 was primarily the result of the utilization of Canadian tax losses as part of the sale of the

Apicore business and other credits offset by taxable income in the United States.

The loss from discontinued operations for the year ended December 31, 2017 relates to the Apicore business, which was divested through the Apicore Sale Transaction which was completed on October 2, 2017. As the Apicore business was divested during 2017, there is no income or loss from discontinued operations for the year ended December 31, 2018.

For the year ended December 31, 2018, the Company recorded consolidated net income from continuing operations of \$1.9 million or \$0.25 per share (\$0.24 per share diluted) compared to consolidated net income from continuing operations of \$11.5 million or \$0.74 per share (\$0.63 per share diluted) for the year ended December 31, 2017. As discussed above, the main factors contributing to the net income decrease was higher selling, general and administrative expenses and research and development expenses for the year ended December 31, 2018 when compared to the year ended December 31, 2017 and the revaluation of the holdback receivable, offset by higher foreign exchange gains and finance income, net. For the year ended December 31, 2018, the Company did not record any net income or loss from discontinued operations related to the Apicore business compared to income from discontinued operations of \$31.9 million or \$2.04 per share (\$1.76 per share diluted) in the year ended December 31, 2017. For the year ended December 31, 2018, the Company recorded net income of \$3.9 million or \$0.25 per share (\$0.24 per share diluted) compared to net income of \$43.4 million or \$2.78 per share (\$2.39 per share diluted) for the year ended December 31, 2017.

For the year ended December 31, 2018, the Company recorded a total comprehensive income of \$4.5 million compared to total comprehensive income of \$43.4 million for the year ended December 31, 2017. The change in comprehensive income results from the factors described above and the fluctuations in the US dollar exchange rate during the periods.

The weighted average number of common shares outstanding used to calculate basic income per share for the years ended December 31, 2018 and 2017 was 15,791,396 and 15,636,853, respectively. The weighted average number of common shares outstanding used to calculate diluted income per share for the years ended December 31, 2018 and 2017 was 16,563,663 and 18,138,080, respectively.

As at December 31, 2018, the Company had 15,547,812 common shares outstanding, 900,000 warrants to purchase common shares and 1,394,642 stock options, of which 1,044,892 were exercisable, to purchase common shares outstanding.

As at April 29, 2018, the Company had 15,387,912 common shares outstanding, 900,000 warrants to purchase common shares and 1,383,992 stock options, of which 1,077,242 were exercisable, to purchase common shares outstanding.

Twelve Months Ended December 31, 2017 Compared to the Twelve Months Ended December 31, 2016

Net AGGRASTAT® product sales for year ended December 31, 2017 were \$27.1 million compared to \$29.3 million in the comparable period in 2016.

The Company currently sells finished AGGRASTAT® to drug wholesalers. These wholesalers subsequently sell AGGRASTAT® to the hospitals where health care providers administer the drug to patients. Wholesaler management decisions to increase or decrease their inventory of AGGRASTAT® may result in sales of AGGRASTAT® to wholesalers that do not track directly with demand for the product at hospitals.

Hospital demand for AGGRASTAT® continued to increase compared to the prior year with the number of new hospital customers using AGGRASTAT® continuing to increase leading to patient market share held by the product increasing to over 50% during the year ended December 31, 2017. The Company's commercial team continues to work on expanding its customer base, however this continued increase in the customer base for AGGRASTAT® has not directly resulted in corresponding revenue increases as the Company continues to battle increased competition resulting from further genericizing of the Integrilin market which has created pricing pressures on AGGRASTAT® resulting in lower net revenues compared to the previous year. The Company continues to expect growth in the AGGRASTAT® brand, primarily its patient market share, but diversifying revenues away from a single product became increasingly important for the Company during 2017.

The number of new customers reviewing and implementing AGGRASTAT® increased sharply since October 11, 2013 as a result of FDA approval of the HDB regimen for AGGRASTAT® and due to the increased marketing and promotional efforts of the Company.

As all of the Company's sales are denominated in U.S. dollars and the U.S. dollar deteriorated against the Canadian dollar during the third quarter and into the fourth quarter of 2017, this restricted the Canadian dollar revenue growth in addition to the increasing price pressures facing AGGRASTAT®.

AGGRASTAT® cost of goods sold represents direct product costs associated with AGGRASTAT® including write-downs for obsolete inventory and amortization of the related acquired AGGRASTAT® intangible assets.

AGGRASTAT® cost of goods sold for the years ended December 31, 2017 were \$3.5 million compared to \$3.7 million for the comparable period in the prior year. For the year ended December 31, 2017, the decreases to cost of goods sold are the result of no amortization of AGGRASTAT® intangible assets for the year ended December 31, 2017 as the associated intangible assets became fully amortized during the fourth quarter of 2016. Amortization of AGGRASTAT® intangible assets for the year ended December 31, 2016 totaled \$1.3 million. During the year ended December 31, 2017, the Company wrote-off inventory of \$385,000 that had expired or was otherwise unusable. During the year ended December 31, 2016, the Company recorded a recovery on inventory which had been previously written-off totaling \$109,000.

Cost of goods sold for the year ended December 31, 2017, excluding amortization and write-downs or write-ups, totaled \$3.1 million compared to \$2.5 million for the year ended December 31, 2016. The increase in cost of goods sold is a result of an increase in the volume of product sold during 2017.

Selling, general and administrative expenses include salaries and related costs for those employees not directly involved in research and development. The expenditures are required to support sales and marketing efforts of AGGRASTAT® and ongoing business development and corporate stewardship activities. The balance also includes professional fees such as legal, audit, investor and public relations.

Total selling, general, and administrative expenditures for the year ended December 31, 2017 were \$14.9 million, compared to \$15.4 million for the year ended December 31, 2016. Selling, general, and administrative expenditures related to AGGRASTAT® were \$11.5 million for the year ended December 31, 2017, compared to \$11.7 million for the prior year. Selling, general, and administrative expenditures – Other were \$3.4 million for the year ended December 31, 2017, compared to \$3.7 million in the prior year. Selling, general and administrative expenses include salaries and related costs for those employees not directly involved in research and development. The expenditures are required to support sales and marketing efforts of AGGRASTAT® as well as ongoing business development and corporate stewardship activities. The balance also includes professional fees such as legal, audit, investor and public relations.

Selling, general and administrative expenditures – AGGRASTA® remained consistent for the year ended December 31, 2017 as compared to the year ended December 31, 2016 as sales and marketing costs including the size of the Company's commercial team has remained consistent between the two periods.

Selling, general and administrative expenditures – Other decreased for the year ended December 31, 2017 as compared to the year ended December 31, 2016, however these costs have increased with the exclusion of stock-based compensation expenses for the two periods. Stock-based compensation for the year ended December 31, 2017 totaled \$491,000 as compared to \$1.3 million for the year ended December 31, 2016. Excluding stock-based compensation selling, general and administrative expenses for the year ended December 31, 2017 totaled \$2.9 million as compared to \$2.4 million for the year ended December 31, 2016. The increase between the two periods relates to additional professional fees and costs associated with the Company's growing business development activities.

Research and development expenditures include costs associated with the Company's clinical development and preclinical programs including salaries, monitoring and other research costs, as well as amortization of non-AGGRASTAT® intangible assets. The Company expenses all research costs and has not had any development costs that meet the criteria for capitalization under IFRS. Prepaid research and development costs represent advance payments under contractual arrangements for clinical activity outsourced to research centers.

Net research and development expenditures for the year ended December 31, 2017 were \$5.1 million, compared to \$3.6 million for the comparable period in the prior year. Research and development expenditures include costs associated with the Company's on-going AGGRASTAT® development, clinical development and preclinical programs including salaries, research centered costs and monitoring costs, as well as research and development costs associated with the development projects being undertaken to develop additional cardiovascular products. The Company expenses research costs and has not had any development costs that meet the criteria for capitalization under IFRS. The increase in research and development expenditures, for the year ended December 31, 2017 as compared to the year ended December 31, 2016 is primarily related to the Company's development of additional cardiovascular drugs to add to its commercial portfolio of drugs, as well the \$1.2 million relating to a refund of the 2015 AGGRASTAT® sNDA STEMI filing fee, which was the result of the Company's successful application for waiver status under barrier to innovation provision of the United States Federal, Food, Drug, and Cosmetic Act that reduced research and development expenses in the year ended December 31, 2016. The original \$1.2 million filing fee was expensed through research and development expenses during the year ended December 31, 2015, with the refund recorded when received in 2016. Removing this refund, research and development expenses would have been \$4.8 million for the year ended December 31, 2016. The remaining increase relates to the additional research and development work relating to development projects being undertaken to develop additional cardiovascular products.

Intangible assets are reviewed for impairment on an ongoing basis whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

The Company recorded an impairment loss of \$636,000 for the year ended December 31, 2017 pertaining to a write-down in the value of the intangible assets relating to the license acquired for PREXXARTAN® due to the on-going litigation surrounding the product.

It is important to note that historical patterns of impairment charges or reversals cannot be taken as an indication of future impairments or reversals. The amount and timing of impairments and write-downs may vary substantially from period to period depending on the business and research activities being undertaken at any one time and changes in the Company's commercial strategy.

Finance expense for the year ended December 31, 2017 was \$837,000, compared to \$2.5 million in the comparable period in the prior year. The decrease in finance expense is primarily due to the Company recording a reduced finance expense relating to accretion on the Company's royalty obligation for the year ended December 31, 2017 of \$748,000 compared to \$2.3 million for the year ended December 31, 2016 relating to the lower revenues experienced during the year ended December 31, 2017. Interest expenses pertaining to the Crown Loan are recorded within income from discontinued operations.

The Company recorded a current income tax recovery of \$9.4 million for the year ended December 31, 2017 relating the use of Canadian tax losses and other credits offset by taxable income in the United States and deferred income tax expense of \$333,000 pertaining to changes in temporary differences.

The income from discontinued operations results from the Apicore Sale Transaction which was completed on October 2, 2017 and resulted in a significant gain for the Company on the sale. As well, the income from discontinued operations contains the operations of the Apicore business beginning on December 1, 2016. The income from discontinued operations for 2016 reflects only the results of Apicore for the month of December 2016 as the Company acquired Apicore on December 1, 2016, while the income from discontinued operations for 2017 includes Apicore's United States operations from January 1, 2017 to October 2, 2017, the date of the Apicore Sales Transactions and Apicore's Indian operations for the full 2017 year. As described, in note 5 to the Company's consolidated financial statements, the Company retained ownership in Apicore's Indian operations until the lapse of the Buyer Option and subsequent to December 31, 2017, Apicore's Indian operations were sold to a company owned by the former President and Chief Executive Officer of Apicore Inc. The income from discontinued operations for the year ended December 31, 2016 also includes the revaluation of the long-term derivative of \$0.6 million and a gain on the step acquisition of Apicore of \$4.9 million. Additionally, included within income from discontinued operations are finance expenses relating to the Crown Loan which was obtained to complete the acquisition of Apicore.

For the year ended December 31, 2017, the Company recorded consolidated net income from continuing operations of \$11.5 million or \$0.74 per share compared to \$3.6 million or \$0.24 per share for the year ended December 31, 2016. As discussed above, the main factors contributing to the higher net income was the income tax recovery, partially offset by lower revenues and higher research and development expenses during the year ended December 31, 2017. For the year ended December 31, 2017, the Company recorded net income from discontinued operations of \$31.9 million or \$2.04 per share related to the Apicore business and the Apicore Sale Transaction, compared to \$23.4 million or \$1.56 per share in the year ended December 31, 2016. For the year ended December 31, 2017, the Company recorded net income of \$43.4 million compared to \$27.0 million for the year ended December 31, 2016.

For the year ended December 31, 2017, the Company recorded a total comprehensive income of \$43.4 million compared to total comprehensive income of \$26.6 million for the year ended December 31, 2016. The change in comprehensive income results from the factors described above and the fluctuations experienced in the US dollar exchange rate during the third and fourth quarters of 2017.

The weighted average number of common shares outstanding used to calculate basic income per share for the year ended December 31, 2017 was 15,636,853. The weighted average number of common shares outstanding used to calculate basic income per share for the year ended December 31, 2016 was 15,002,005.

The weighted average number of common shares outstanding used to calculate diluted income per share for the year ended December 31, 2017 was 18,138,080. The weighted average number of common shares outstanding used to calculate diluted income per share for the year ended December 31, 2016 was 17,316,401.

As at December 31, 2017, the Company had 15,782,327 common shares outstanding, 900,000 warrants to purchase common shares and 1,602,127 stock options, of which 1,231,127 were exercisable, to purchase common shares outstanding. At April 30, 2018, the Company had 15,881,760 common shares outstanding, 900,000 warrants to purchase common shares and 1,671,794 stock options, of which 1,144,794 were exercisable, to purchase common shares outstanding.

### **B.** Liquidity and Capital Resources

Since the Company's inception, it has financed operations primarily from net revenue received from the sale of AGGRASTAT®, the sale of its equity securities, the issue and subsequent exercises of warrants and stock options, interest on excess funds held and the issuance of debt.

On October 3, 2017, the Company announced the completion of the Apicore Sale Transaction to the Buyer. Under the Apicore Sale Transaction, the Company received net proceeds of approximately U.S.\$105 million of which approximately U.S.\$55 million was received on October 3, 2017, with the remainder received in early 2018. There is also a holdback receivable of U.S. \$10 million that became due in 2019. These funds received and yet to be received by the Company were after payment of all transaction costs, the compensation paid to holders of Apicore's employee stock options, the redemption of the remaining shares of Apicore not owned by Medicure and other adjustments.

On February 1, 2018, the Company announced that it had received the deferred purchase price proceeds of approximately U.S.\$50 million from the Buyer as a result of the Apicore Sale Transaction. The U.S.\$50 million was included in the total net proceeds of U.S.\$105 million described earlier. The Company did not receive any contingent payments based on an earn out formula as certain financial results within the Apicore business were not met following the Apicore Sale Transaction. Additionally, up to U.S.\$10 million became payable in 2019 based on the release of certain holdback funds (Refer to "Update on Holdback Funds from Apicore Sale").

The funds received from the Apicore sales transaction will be invested and used for business and product development purposes and to fund operations as needed.

Cash provided by operating activities for the year ended December 31, 2018 was \$742,000 million compared to \$21.9 million for the comparable period in the prior year. The decrease in cash from operating activities is primarily due to the divesture of the Apicore business during the year ended December 31, 2017.

Cash from investing activities for the year ended December 31, 2018 totaled \$19.7 million and related to funds received from the Apicore Sale Transaction during the year ended December 31, 2018 of \$65.2 million, partially offset by \$44.1 million which was invested in short-term term deposits during the period, \$1.3 million paid in regards to the ZYPITAMAG<sup>TM</sup> license, which was recorded within intangible assets and \$197,000 spent on the acquisition of property and equipment. Cash flows from investing activities for the year ended December 31, 2017 totaled \$54.2 million and related to \$89.7 million from the proceeds from the Apicore Sale Transaction, \$31.6 million used to acquire Class C common shares of Apicore, \$2.6 million used to acquire Class E common shares of Apicore and \$1.2 million relating to the acquisition of property and equipment and \$127,000 relating to the PREXXARTAN® license.

Cash used in financing activities for the year ended December 31, 2018 totaled \$2.7 million and related to \$3.0 million of cash paid to acquire the Company's common shares under the normal course issuer bid, which is partially offset by cash received from the exercise of stock options totaling \$363,000. Cash used in financing activities for the year ended December 31, 2017 totaled \$83.0 million, including cash used in financing activities from discontinued operations of \$80.9 million which primarily related to the repayment of the Company's long-term debt with Crown and the MDC as well as the repayment of the note payable received from Apicore of \$18.5 million subsequent to the completion of the Apicore Sale Transaction. Additionally, the Company paid \$3.2 million to satisfy an amount due to the vendor from the 2016 Apicore Transaction. As well, the Company received \$520,000 from the exercise of stock options, \$422,000 from the exercise of Apicore stock options, \$92,000 from the exercise of warrants and had \$12.8 million released from escrow during the year ended December 31, 2017.

As at December 31, 2018, the Company had unrestricted cash totaling \$24.1 million compared to \$5.3 million as of December 31, 2017. Additionally, at December 31, 2018, the Company had short-term investments in the form of term deposits with maturities of greater than three months and less than one year which totaled \$47.7 million. As at December 31, 2018, the Company had working capital of \$73.0 million compared to \$70.9 million as at December 31, 2017.

During the year ended December 31, 2018 the Company repurchased and cancelled 441,400 common shares. The aggregate price paid for these common shares totaled \$3,021,340. As a result of the NCIB, during the year ended December 31, 2018 the Company recorded \$479,993 directly in its retained deficit representing the difference between the aggregate price paid for these common shares and a reduction of the Company's share capital totaling \$3,501,333.

Subsequent to December 31, 2018, the Company repurchased an additional 159,900 common shares to be cancelled for an aggregate cost of \$999,826.

The Company did not have any long-term debt recorded in its consolidated financial statements as at December 31, 2018.

C. Research and Development, Patents and Licenses, Etc.

Research and Development

The Company's research and development activities are predominantly conducted by its wholly-owned Barbadian subsidiary, Medicure International Inc.

## **AGGRASTAT®**

One of the primary ongoing research and development activities is the continued development and further implementation of a new regulatory, brand and life cycle management strategy for AGGRASTAT®. The extent to which the Company is able to invest in this plan is dependent upon the availability of sufficient finances and the expected returns from those investments.

An important aspect of the AGGRASTAT® strategy was the revision of its approved prescribing information. On October 11, 2013, the Company announced that the FDA approved the AGGRASTAT® HDB regimen, as requested under Medicure's sNDA. The AGGRASTAT® HDB regimen (25 mcg/kg within 5 minutes, followed by 0.15 mcg/kg/min) has become the recommended dosing for the reduction of thrombotic cardiovascular events in patients with NSTE ACS.

The Company believes that further expanded indications and dosing regimens could provide added value to further maximize the revenue potential for AGGRASTAT®. The Company is currently exploring the potential to make such changes, and the Company may need to conduct appropriate clinical trials, obtain positive results from those trials, or otherwise provide support in order to obtain regulatory approval for such proposed indications and dosing regimens.

On April 23, 2015, the Company announced that the FDA approved a revision to the duration of the bolus delivery for the AGGRASTAT® HDB regimen. The dosing change and label modification was requested by the Company to help health care professionals more efficiently meet patient-specific administration needs and to optimize the implementation of AGGRASTAT® at new hospitals. The newly approved labeling supplement now allows the delivery duration of the AGGRASTAT® HDB (25 mcg/kg) to occur anytime within 5 minutes, instead of the previously specified duration of 3 minutes. This change was part of the Company's ongoing regulatory strategy to expand the applications for AGGRASTAT®.

On September 10, 2015, the Company announced that it submitted a sNDA to the FDA to expand the label for AGGRASTAT® to include the treatment of patients presenting with ST-segment elevation myocardial infarction ("STEMI"). If approved for STEMI, AGGRASTA®Twould be the first in its class of GPIs to receive such a label in the United States.

In previous communication with the Company, the FDA's Division of Cardiovascular and Renal Drug Products indicated its willingness to review and evaluate this label change request based substantially on data from the On-TIME 2 study, with additional support from published studies and other data pertinent to the use of the AGGRASTAT® HDB regimen in the treatment of STEMI. The efficacy and safety of the HDB regimen in STEMI has been evaluated in more than 20 clinical studies involving over 11,000 patients and is currently recommended by the ACCF/AHA Guideline for the Management of STEMI.

On July 7, 2016, the Company received a Complete Response Letter ("CRL") from the FDA for its sNDA requesting an expanded indication for patients presenting with STEMI. The FDA issued the CRL to communicate that its initial review of the application was completed; however, it could not approve the application in its present form and requested additional information. The Company continues to work directly with the FDA to address these comments.

The sNDA filing was accompanied by a mandatory U.S.\$1.2 million user fee paid by Medicure International Inc. to the FDA. In December 2016, the Company received a waiver and full refund of the user fee which had been paid and expensed during fiscal 2015.

On September 1, 2016, the Company announced that it had received approval from the FDA for its bolus vial product format for AGGRASTAT®.

This product format is a concentrated, 15 ml vial containing sufficient drug to administer the FDA approved, HDB of 25 mcg/kg given at the beginning of treatment. AGGRASTAT® is also sold two other sizes, a 100 ml vial and a 250 ml bag. The existing, pre-mixed products continue to be available, providing a convenient concentration for administering the post-HDB maintenance infusion of 0.15 mcg/kg/min. (Approved Dosing: Administer intravenously 25 mcg/kg within 5 minutes and then 0.15 mcg/kg/min for up to 18 hours). Commercial launch of the bolus vial occurred during the fourth quarter of 2016 and the Company continues to believe this product format will have a positive impact on hospital utilization of AGGRASTAT®.

Another aspect of the AGGRASTAT® strategy is to advance studies related to the contemporary use and future regulatory positioning of the product. On May 10, 2012, the Company announced the commencement of enrolment in a clinical trial of AGGRASTAT® entitled "Shortened AGGRASTAT® Versus Integrilin in Percutaneous Coronary Intervention" ("SAVI-PCI"). SAVI PCI is a randomized, open-label study enrolling patients undergoing percutaneous coronary intervention ("PCI") at sites across the United States. The study was designed to evaluate whether patients receiving the HDB regimen of AGGRASTAT® (25 mcg/kg bolus over 3 minutes) followed by an infusion of 0.15 mcg/kg/min for a shortened duration of 1 to 2 hours will have outcomes that are similar, or "non-inferior," to patients receiving a 12 to 18-hour infusion of Integrilin® (eptifibatide) (Merck & Co., Inc.) at its FDA approved dosing regimen.

The primary objective of SAVI-PCI is to demonstrate AGGRASTAT® is non-inferior to Integrilin with respect to the composite endpoint of death, PCI-related myocardial infarction, urgent target vessel revascularization, or major bleeding within 48 hours following PCI or hospital discharge. The secondary objectives of this study include the assessment of safety as measured by the incidence of major bleeding.

The first patient was enrolled in June 2012. Enrolment was completed during the fourth quarter of 2018 and analysis of the results is currently under way.

#### **Cardiovascular Generic and Reformulation Products**

Through an ongoing research and development investment, the Company is exploring new product opportunities in the interest of developing future sources of revenue and growth.

On August 13, 2018, the Company announced that the FDA has approved its ANDA for SNP. SNP is indicated for the immediate reduction of blood pressure for adult and pediatric patients in hypertensive crisis. The product is also indicated for producing controlled hypotension in order to reduce bleeding during surgery and for the treatment of acute congestive heart failure. The filing of the ANDA was previously announced by the Company on December 13, 2016.

The Company's intention is that SNP will be launched using its existing commercial organization and infrastructure in mid 2019.

The Company is focused on the development of two additional cardiovascular generic drugs. When combined with the ANDA described above and the recent acquisition of an exclusive license for ZYPITAMAG<sup>TM</sup>, the Company expects to transform its commercial suite of products from two products as of August 15, 2018 to up to five approved products in 2020.

The Company had been devoting a modest amount of resources to its research and development programs, including, but not limited to the development of TARDOXAL<sup>TM</sup> (pyridoxal 5 phosphate ("**P5P**") formerly known as MC-1) for neurological conditions such as Tardive Dyskinesia. This work included, but was not limited to, working with the FDA to better understand and refine the next steps in development of the product. The advancement of TARDOXAL<sup>TM</sup> is currently on hold. The Company changed its focus from TARDOXAL<sup>TM</sup> to other uses of P5P and continues to devote time and resources to the advancement of P5P development.

## **Other Products**

The Company is investing in the research and development of other new product development opportunities. The Company is also exploring opportunities to grow the business through acquisition. The Company has evaluated and continues to evaluate the acquisition or license of other approved commercial products with the objective of further broadening its product portfolio and generating additional revenue.

As at December 31, 2018, the Company had numerous issued United States patents (see Item 5 – *Operating and Financial Review and Prospects – C. Research and Development, Patents and Licenses, Etc.* below).

#### Patents and Licenses

In addition to a number of pending patent applications, the Company has 3 issued patents from the United States Patent Office providing protection for AGGRASTAT® and related its current and historic development compounds. The Company will continue to file patents related to its research and development activities. The United States patents currently issued to the Company are as follows:

<b>Patent Number</b>	<b>Issue Date</b>	Title
5,965,581	October 12, 1999	Compositions for Inhibiting Platelet Aggregation
6,136,794	October 24, 2000	Platelet Aggregation Inhibition Using Low Molecular Weight Heparin in
		Combination with a GP IIb/IIIa Antagonist
6,770,660	August 3, 2004	Method for Inhibiting Platelet Aggregation

Patents 5,965,581, 5,972,967, 5,978,698, 6,136,794, 6,538,112 and 6,770,660 were purchased by the Company from MGI GP, INC. (a Delaware corporation doing business as MGI PHARMA and its Affiliate, Artery, LLC). Pursuant to an Asset Purchase Agreement dated August 8, 2006, MGI GP, INC. sold the exclusive use of the patents to the Company in the specified territory (the United States of America including the Commonwealth of Puerto Rico; Guam; and the United States Virgin Islands). Pursuant to the Asset Purchase Agreement the Company agreed to pay MGI GP, INC. a one-time fee for the procurement of the acquired assets. The Asset Purchase Agreement was executed August 8, 2006.

Much of the work, including some of the research methods, that is important to the success of the Company's business is germane to the industry and may not be patentable. For this reason, all employees, contracted researchers and consultants are bound by non-disclosure agreements.

Given that the patent applications for these technologies involve complex legal, scientific and factual questions, there can be no assurance that patent applications relating to the technology used by the Company will result in patents being issued, or that, if issued, the patents will provide a competitive advantage or will afford protection against competitors with similar technology, or will not be challenged successfully or circumvented by competitors.

The Company has filed patents in accordance with the Patent Cooperation Treaty (the "PCT"). The PCT is a multilateral treaty that was concluded in Washington in 1970 and entered into force in 1978. It is administered by the International Bureau of the World Intellectual Property Organization (the "WIPO"), headquartered in Geneva, Switzerland. The PCT facilitates the obtaining of protection for inventions where such protection is sought in any or all of the PCT contracting states (total of 104 at July 1999). It provides for the filing of one patent application (the "international application"), with effect in several contracting states, instead of filing several separate national and/or regional patent applications. At the present time, an international application may include designation for regional patents in respect of contracting states party to any of the following regional patent treaties: The Protocol on Patents and Industrial Designs within the framework of the African Regional Industrial Property Organization, the Eurasian Patent Convention, the European Patent Convention, and the Agreement Establishing the African Intellectual Property Organization. The PCT does not eliminate the necessity of prosecuting the international application in the national phase of processing before the national or regional offices, but it does facilitate such prosecution in several important respects by virtue of the procedures carried out first on all international applications during the international phase of processing under the PCT. The formalities check, the international search and (optionally) the international preliminary examination carried out during the international phase, as well as the automatic deferral of national processing which is entailed; give the applicant more time and a better basis for deciding whether and in what countries to further pursue the application. Further information may be obtained from the official WIPO internet website (http://www.wipo.int).

Although the Company is no longer developing MC-1 for cardiovascular indications, the Company does have a royalty bearing agreement with its subsidiary in regards to this development program. On June 1, 2000, the Company entered into the Medicure International Licensing Agreement whereby it licensed the world-wide development and marketing rights for MC-1, except for Canada, to its wholly owned subsidiary, Medicure International, Inc. As consideration for the grant of the license, Medicure International, Inc. agreed to pay the Company a fee of \$1.00 upon the completion of specified milestones in the development process, together with a variable royalty of 7% to 9% of net sales of MC-1 (if any sales are ever in fact made). The term of the Medicure International Licensing Agreement will expire on the date of expiration of the last to expire patent on MC-1, or in the absence of any such patent, on the 10th anniversary of the date of the first commercial sale of MC-1 in the country where it was last introduced (if it is ever so introduced). The Medicure International Licensing Agreement may be terminated under a number of circumstances and, in any event, by either party at any time by providing the other with at least 90 days prior written notice of its intention to terminate the Medicure International Licensing Agreement.

Medicure International, Inc. subsequently entered into a development agreement with CanAm on June 1, 2000 to perform research and development of MC-1 and other compounds at cost, plus a reasonable mark-up not to exceed ten percent of any amount invoiced. The parties to the development agreements have agreed that the aggregate amount of all invoiced expenditures shall not exceed \$30,000,000 over the term of each agreement. The term of the CanAm development agreement is to expire on the completion of all research and development activities by CanAm and the written acknowledgment by CanAm and Medicure International, Inc. that no further research projects will be undertaken. CanAm continues to perform work on AGGRASTAT®, TARDOXAL<sup>TM</sup> and other projects under this agreement, however there is no ongoing research activity related to MC-1.

The development agreements may be terminated under a number of circumstances and, in any event, by Medicure International, Inc. at any time by providing CanAm with at least 30 days prior written notice of its intention to terminate, or by CanAm at any time by providing Medicure International, Inc., with at least 90 days prior written notice of its intention to terminate the development agreement.

The agreements provide that all confidential information developed or made known during the course of the relationship with the Company is to be kept confidential except in specific circumstances.

#### **D.** Trend Information

Net AGGRASTAT® product sales for year ended December 31, 2018 were \$28.5 million compared to \$27.1 million during the year ended December 31, 2017.

The Company currently sells finished AGGRASTAT® to drug wholesalers. These wholesalers subsequently sell AGGRASTAT® to the hospitals where health care providers administer the drug to patients. Wholesaler management decisions to increase or decrease their inventory of AGGRASTAT® may result in sales of AGGRASTAT® to wholesalers that do not track directly with demand for the product at hospitals.

Hospital demand for AGGRASTAT® continued to increase compared to the prior year with the number of new hospital customers using AGGRASTAT® continuing to increase leading to patient market share held by the product increasing to over 50% during the year ended December 31, 2017 and to approximately 65% as at December 31, 2018. The Company's commercial team continues to work on expanding its customer base, however this continued increase in the customer base for AGGRASTAT® has not directly resulted in corresponding revenue increases as the Company continues to face increased competition resulting from further genericizing of the Integrilin market which has created pricing pressures on AGGRASTAT®. The Company continues to expect strong performance from the AGGRASTAT® brand, primarily its patient market share, but diversifying revenues away from a single product became increasingly important for the Company during 2018 and continues to occur during 2019.

The number of new customers reviewing and implementing AGGRASTAT® increased sharply since October 11, 2013 as a result of FDA approval of the High Dose Bolus ("**HDB**") regimen for AGGRASTA®Tand due to the increased marketing and promotional efforts of the Company.

As all of the Company's sales are denominated in U.S. dollars and the U.S. dollar improved in value against the Canadian dollar during the second half of 2018 when compared to the 2017, Canadian dollar revenue growth increased, however it was offset by the increasing price pressures facing AGGRASTAT® when comparing the two periods. Net revenue from AGGRASTAT® in U.S. dollars for 2018 totaled \$21.9 million compared to \$20.9 million in 2017.

ZYPITAMAG<sup>TM</sup> contributed \$652,000 of revenue to the Company during the year ended December 31, 2018 and although early into the commercial availability of the product the Company continues to work towards growing the ZYPITAMAG<sup>TM</sup> brand.

The Company is not aware of any other trends, uncertainties, demands, commitments or events which are reasonably likely to have a material effect upon the Company's net sales or revenues, income from continuing operations, profitability, liquidity or capital resources, or that would cause reported financial information not necessarily to be indicative of future operating results or financial condition.

### **E.** Off-balance Sheet Arrangements

As of December 31, 2018, the Company does not have any off-balance sheet arrangements, other than those disclosed below.

### F. Contractual Obligations

The following tables set forth the Company's contractual obligations as of December 31, 2018:

	Contractual Obligations Payment Due By Period						
(in thousands of CDN\$)	Total	2019	2020	2021	2022	2023	Thereafter
Accounts Payable and Accrued Liabilities	14,378	14,378	-	-	-	-	-
Income Taxes Payable	1,058	1,058	-	-	-	-	-
Other Long-term Liabilities	1,201	-	1,201	-	-	-	-
Purchase Agreement Commitments	9,225	4,006	2,240	1,275	1,294	205	205
Total	\$25,862	\$19,442	\$3,441	\$1,275	\$1,294	\$205	\$ 205

Payments in connection with the Company's royalty obligation, as described below, are excluded from the table above.

### **Commitments**

The Company has entered into a manufacturing and supply agreement to purchase a minimum quantity of AGGRASTAT® unfinished product inventory totaling U.S.\$150,000 annually (based on current pricing) until 2024 and a minimum quantity of AGGRASTAT® finished product inventory totaling U.S.\$197,900 annually (based on current pricing) until 2022 and between 400,000 and 525,000 euros annually (based on current pricing) until 2022.

Effective November 1, 2014, the Company entered into a sub-lease with Genesys Venture Inc. ("GVI") to lease office space at a rate of \$170,000 per annum for three years ending October 31, 2017. The lease was amended on May 1, 2016 and increased the leased area covered under the lease agreement at a rate of \$212,000 per annum until October 31, 2019. The leased area covered under the lease was again increased, effective November 1, 2018 at a rate of \$306,400 per annum until the end of the term of the lease.

Subsequent to December 31, 2018, effective January 1, 2019, the Company renewed its business and administration services agreement with GVI, under which the Company is committed to pay \$7,083 per month or \$85,000 per year for a one-year term.

Contracts with contract research organizations are payable over the terms of the associated agreements and clinical trials and timing of payments is largely dependent on various milestones being met, such as the number of patients recruited, number of monitoring visits conducted, the completion of certain data management activities, trial completion, and other trial related activities.

On October 31, 2017, the Company acquired an exclusive license to sell and market PREXXARTAN® (valsartan) oral solution in the United States and its territories with a seven-year term, with extensions to the term available, which has been granted tentative approval by the U.S. Food and Drug Administration ("FDA"), and which was converted to final approval during 2017. The Company acquired the exclusive license rights for an upfront payment of U.S.\$100,000, with an additional U.S.\$400,000 payable on final FDA approval and will be obligated to pay royalties and milestone payments from the net revenues of PREXXARTAN®. The U.S.\$400,000 payment is on hold pending resolution of the dispute between the licensor and the third-party manufacturer of PREXXARTAN® and is recorded within accounts payable and accrued liabilities on the consolidated statements of financial position.

On December 14, 2017 and subsequently updated on March 7, 2018, the Company announced it had acquired an exclusive license to sell and market a branded cardiovascular drug, ZYPITAMAG<sup>TM</sup> (pitavastatin magnesium) in the United States and its territories for a term of seven years with extensions to the term available. The Company has entered into a profit-sharing arrangement resulting in a portion of the net profits from ZYPITAMAG<sup>TM</sup> being paid to the licensor. To date, no amounts are due and/or payable pertaining to profit sharing on this product.

The Company periodically enters into research agreements with third parties that include indemnification provisions customary in the industry. These guarantees generally require the Company to compensate the other party for certain damages and costs incurred as a result of claims arising from research and development activities undertaken on behalf of the Company. In some cases, the maximum potential amount of future payments that could be required under these indemnification provisions could be unlimited. These indemnification provisions generally survive termination of the underlying agreement. The nature of the indemnification obligations prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay. Historically, the Company has not made any indemnification payments under such agreements and no amount has been accrued in the consolidated financial statements with respect to these indemnification obligations.

As a part of the Birmingham debt settlement described in note 11 to the consolidated financial statements, beginning on July 18, 2011, the Company is obligated to pay a royalty to Birmingham based on future commercial AGGRASTAT® sales until 2023. The royalty is based on 4% of the first \$2,000,000 of quarterly AGGRASTAT® sales, 6% on the portion of quarterly sales between \$2,000,000 and \$4,000,000 and 8% on the portion of quarterly sales exceeding \$4,000,000 payable within 60 days of the end of the preceding three-month periods ended February 28, May 31, August 31 and November 30. Birmingham has a one-time option to switch the royalty payment from AGGRASTAT® to a royalty on the sale of MC-1. Management has determined there is no value to the option to switch the royalty to MC-1 as the product is not commercially available for sale and the extended long-term development timeline associated with commercialization of the product. Royalties for the year ended December 31, 2018 totaled \$1,654,380 (2017 – \$1,242,587; 2016 – \$1,795,089) with payments made during the year ended December 31, 2018 of \$1,538,766, respectively (2017 – \$1,829,295; 2016 – \$1,712,390).

The Company is obligated to pay royalties on any future commercial net sales of  $PREXXARTAN^{\textcircled{@}}$  to the licensor of  $PREXXARTAN^{\textcircled{@}}$ . To date, no royalties are due and/or payable.

In the normal course of business, the Company may from time to time be subject to various claims or possible claims. Although management currently believes there are no claims or possible claims that if resolved would either individually or collectively result in a material adverse impact on the Company's financial position, results of operations, or cash flows, these matters are inherently uncertain and management's view of these matters may change in the future.

During 2018, the Company was named in a civil claim in Florida from the third-party manufacturer of PREXXARTAN® against the licensor. The claim disputed the rights granted by the licensor to the Company with respect to PREXXARTAN®. The claim against the Company has since been withdrawn, however the dispute between the licensor and the third-party manufacturer continues.

On September 10, 2015, the Company submitted a supplemental New Drug Application ("sNDA") to the FDA to expand the label for AGGRASTAT®. The label change is being reviewed and evaluated based substantially on data from published studies. If the label change submission were to be successful, the Company will be obligated to pay 300,000 Euros over the course of a three-year period in equal quarterly instalments following approval. On July 7, 2016, the Company announced it received a Complete Response Letter stating the sNDA cannot be approved in its present form and requested additional information. The payments are contingent upon the success of the filing and as such the Company has not recorded any amount in the consolidated statements of net income (loss) and comprehensive income (loss) pertaining to this contingent liability.

During 2015, the Company began a development project of a cardiovascular generic drug in collaboration with Apicore. The Company has entered into a supply and development agreement under which the Company holds all commercial rights to the drug. In connection with this project, the Company is obligated to pay Apicore 50% of net profit from the sale of this drug. On August 13, 2018, the Company announced that the FDA has approved its aNDA for SNP, a generic intravenous cardiovascular product and the Company intends to launch the product commercially in mid 2019. To date, no amounts are due and/or payable pertaining to profit sharing on this product.

#### Claims and Possible Claims

In the normal course of business, the Company may from time to time be subject to various claims or possible claims. Although management currently believes that aside from the information noted below, there are no claims or possible claims that if resolved would either individually or collectively result in a material adverse impact on the Company's financial position, results of operations, or cash flows, these matters are inherently uncertain and management's view of these matters may change in the future.

Subsequent to December 31, 2018, on February 13, 2019, the Company received notice from the Buyer in the Apicore Sales Transaction of potential claims against the holdback receivable in respect of representations and warranties under the Apicore Sales Transaction, with the maximum exposure of the claims being the total holdback receivable. The notice did not contain sufficiently detailed information to enable the Company to assess the merits of the claims. The Company will proceed diligently to investigate the potential claims and attempt to satisfactorily resolve them with a view to having the holdback receivable released.

During 2018, the Company was named in a civil claim in Florida from the third-party manufacturer of PREXXARTAN® against Carmel. The claim disputed the rights granted by Carmel to the Company with respect to PREXXARTAN®. The Company believed the claim against it was without merit and intended to defend itself against the claim. The claim against the Company has been subsequently withdrawn, however the dispute between the third-party manufacturer and Carmel continues.

### G. Safe Harbor

Statements in Item 5.E and Item 5.F of this Annual Report on Form 20-F that are not statements of historical fact, constitute "forward-looking statements." See "Forward-Looking Statements" on page 1 of this Annual Report. Our Company is relying on the safe harbor provided in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, in making such forward-looking statements.

### ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Α.	<b>Directors</b>	and	Senior	Mana	ogement
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### **Directors and Senior Management**

The members of the board of directors and senior officers of the Company including a brief biography of each are as follows:

# Dr. Albert D. Friesen, Winnipeg, Manitoba, Canada - Director, Chairman and Chief Executive Officer

The founder, President, CEO and Chair of the Board of Medicure Inc., Dr. Friesen holds a Ph.D. in protein chemistry from the University of Manitoba. Dr. Friesen played a key role in founding several health industry companies including the first employee and President of the Winnipeg Rh Institute for over 20 years, where he oversaw the development of WinRho (then acquired by Cangene Inc. and more recently by Emergent BioSolutions), ABI Biotechnology (acquired by Apotex Inc.), Viventia Biotech Inc., Genesys Pharma Inc., Waverley Pharma Inc. DiaMedica Inc, Miraculins Inc., Kane Biotech Inc. and KAM Scientific Inc. Dr. Friesen has experience in the establishment of pharmaceutical production facilities and has also managed and initiated the research and clinical development of several pharmaceutical candidates. Dr. Friesen is a founder of the Industrial Biotechnology Association of Canada (IBAC) and past Chairman of its board of directors and former member of the Industrial Advisory Committee to the Biotechnology Research Institute in Montreal. In addition to his role with the Company, Dr. Friesen is currently the President and Chairman of Genesys Venture Inc., a biotech incubator, based in Winnipeg and a member of the Board of Directors of Waverley Pharma Inc, a TSX-V listed company. Dr. Friesen provides his services to the Company through A.D. Friesen Enterprises Ltd., his private consulting corporation. Dr. Friesen served as both CEO and President of Medicure Inc. Dr. Friesen's date of birth is May 19, 1947.

#### Dr. Arnold Naimark, Winnipeg, Manitoba, Canada - Director

Dr. Arnold Naimark, O.C., O.M., M.D., L.L.D., F.R.C.P.(C), F.R.S.C, FCAHS, FAAAS,. has had a distinguished career in biomedical research, medicine and higher education. He is President Emeritus and Dean of Medicine Emeritus and Professor of Medicine and Physiology at the University of Manitoba. He is currently Director of the Centre for the Advancement of Medicine, Chair of Genome Prairie Immediate Past-Chair of CancerCare Manitoba. Dr. Naimark serves on the National Statistics Council of Canada and is Vice-Chair of the Statistics Canada Audit

Committee. He was formerly on the Research Council of the Canadian Institute for Advanced Research, Chair of Health Canada's Ministerial Science Advisory Board, Member of the International Advisory Committee on Research of the Alberta Cancer Board, Vice-Chair of the Manitoba Health Research Council and Director of the Robarts Research Institute. He is the founding Chairman of the North Portage Development Corporation, the Canadian Health Services Research Foundation and the Canadian Biotechnology Advisory Committee. He has served as President of several academic bodies including, the Canadian Physiological Society, the Canadian Society for Clinical Investigation, the Association of Canadian Medical Colleges, the Association of Universities and Colleges of Canada and as Chairman of the Association of Commonwealth Universities. Dr. Naimark is an Officer of the Order of Canada, a Member of the Order of Manitoba and a Fellow of the Royal College of Physicians and Surgeons of Canada, the Royal Society of Canada, and the Canadian Academy of Health Sciences. He is recipient of the G. Malcolm Brown Award of the Royal College of Physicians and Surgeons and Medical Research Council of Canada, the Osler Award, the Distinguished Service Award of Ben Gurion University, the Symons Award of the Association of Commonwealth Universities; and of honorary doctorates from Mount Allison University and the University of Toronto, and of several other awards and distinctions related to his professional, academic and civic activities. Date of birth is August 24, 1933.

## Gerald P. McDole, Mississauga, Ontario, Canada, MBA - Director

Mr. McDole is currently a director of one Canadian healthcare company. Mr. McDole is Past President of AstraZeneca Canada Inc. He was named President and CEO of AstraZeneca Canada Inc.'s pharmaceutical operations in 1999 and immediately led the merger of Astra Pharma and Zeneca Pharma Inc. Prior to this, Mr. McDole was president and CEO of Astra Pharma Inc., a position he assumed in 1985 after having served as Executive Vice-President. Mr. McDole is a member of the Canadian Healthcare Marketing Hall of Fame, and has been recognized by Canadian Healthcare Manager Magazine with the Who's Who in Healthcare Award in the pharmaceutical category. In recognition of Mr. McDole's outstanding contributions to the biotech and pharmaceutical industries, the University of Manitoba established The Gerry McDole Fellowship in Health Policy and Economic Growth. Mr. McDole holds a Bachelor of Science and a Certificate of Business Management from the University of Manitoba, an MBA from Simon Fraser University, and a Business Administration diploma from the University of Toronto. Date of birth is January 25, 1940.

#### Peter Quick, Mill Neck, New York, USA - Director

Peter Quick has over 30 years experience in the securities and financial services industries. He is a recognized leader in the securities industry with experience in the domestic and international equities market, equities market making, market structure reform, trading technology and clearing operations. Mr. Quick is a Partner of Burke and Quick Partners Holdings LLP, the parent company of Burke & Quick Partners LLC a broker dealer. Mr. Quick was President at the American Stock Exchange from 2000 to 2005. Prior to joining the American Stock Exchange, he served as President of Quick & Reilly Inc., a Quick & Reilly subsidiary and a national discount brokerage firm. He also served as President of Quick & Reilly/Fleet Securities. Mr. Quick is a graduate from the University of Virginia with a B.S. in Engineering and attended Stanford University's Graduate School of Petroleum Engineering. He served four years active duty from 1978 to 1982 as an Officer in the United States Navy. He is the former Chairman and a current member of the Board of Directors of Gain Capital (GCAP: NYSE) and a member of the Boards of Trustees of First of Long Island Corporation (FLIC: NASDAO) and First National Bank of Long Island. He is a member of the Board of Directors of Fund for the Poor. Mr. Quick serves as the Mayor of the Incorporated Village of Mill Neck, NY. He is a former member of the Board of Alliance Capital Money Market Fund, Chicago Stock Exchange Inc (CHX), The Depository Trust & Clearing Corporation (DTCC), The Midwest Trust Company, Securities Industry Automation Corporation (SIAC), National Security Clearing Corporation, The American Stock Exchange and the National Association of Security Dealers Inc), Quick & Reilly, Inc., (NYSE: BQR), Reckson Associates Realty Corp (NYSE: RX) and The Bear Stearns Current Yield Fund (AMEX:YYY). He is a former Chairman of the Board of Governors of St. Francis Hospital, Roslyn, NY and Mercy Medical Center, Rockville Centre, NY. Date of birth is February 11, 1956.

Brent Fawkes, Winnipeg, Manitoba, Canada - Director

Mr. Fawkes is a Chartered Professional Accountant with over 20 years of experience in accounting and finance. Mr. Fawkes is currently the Vice President of Finance with Standard Aero Limited, one of the world's largest independent providers of a variety of aerospace services serving a diverse array of customers in business and general aviation, airline, military, helicopter, components and energy markets. In his current role, Mr. Fawkes is responsible for the oversight of the finance department including external reporting, budgeting and planning and treasury management. Date of birth is December 21, 1969.

James Kinley – Chief Financial Officer

Effective September 21, 2011 Mr. James Kinley was appointed as CFO of the Company, replacing Dawson Reimer, who has served as Chief Financial Officer in an interim capacity since July 15, 2011 until Mr. Kinley's appointment. Mr. Kinley's services are provided to the Company through a Consulting Agreement. Previous to his time at Genesys Venture Inc. and the Company, he was Manager, Financial Reporting at Manitoba Telecom Services Inc. and was involved in all aspects of financial reporting, including publicly filed documents such as their financial statements. James is a CPA, CA and holds a Bachelor of Commerce (Hons.) degree from the University of Manitoba. Date of birth is July 9, 1978.

## Management

**Dr. Albert D. Friesen - Chairman, Chief Executive Officer and Director**: Dr. Friesen directs the overall business management of the Company (see "Directors and Senior Management" under this item).

**James Kinley - Chief Financial Officer**: Mr. Kinley is responsible for the Company's financial management and accounting practices (see "Directors and Senior Management" under this item).

## **B.** Compensation

Compensation paid to the directors, and executive officers of the Company during the year ended December 31, 2018, is described below and stock-based compensation described in Item 6(E) below:

The Company recorded \$47,350 in fees paid or payable to Board members for attendance at meetings between January 1, 2018 and December 31, 2018 and the chairs of the Audit and Finance Committee and executive compensation, nominating and corporate governance committee were paid an additional \$5,000 each for services as committee chairs.

On October 1, 2001, a compensation agreement was entered into between the Company and A.D. Friesen Enterprises Ltd., a corporation owned by Dr. Friesen and subsequently amended on October 1, 2003, October 1, 2005, October 1, 2006, October 1, 2007, July 18, 2011, July 18, 2016 and January 1, 2017. For the years ended December 31, 2017 and

2018, the Company recorded payable to A.D. Friesen Enterprises Ltd., \$315,000 in consulting compensation, including taxable benefits. Dr. Friesen is eligible for an annual bonus, if certain objectives of the Company are met, as determined by the Board of Directors. During the year ended December 31, 2017, a bonus of \$125,000 was accrued to Dr. Friesen, which was paid to him during the year ended December 31, 2018.

Dawson Reimer served as the Company's as President and Chief Operating Officer and received a salary of \$205,000 payable in equal semi-monthly installments and a bonus at the discretion of the Board of Directors of the Company. On May 9, 2016, the Company announced that the employment agreement with the Company's President and Chief Operating Officer had been terminated, effective immediately. Mr. Reimer was paid \$73,458 up to the date of his termination and \$222,478 pertaining to severance during the year ended December 31, 2016. All amounts pertaining to this severance were paid during 2016 and there is no additional liability in this regard.

Effective January 1, 2016, the business and administration services agreement with GVI no longer included the Chief Financial Officer's services and the Company signed a consulting agreement with its Chief Financial Officer, through JFK Enterprises Ltd., a company owned by the Chief Financial Officer, for a one-year term, at a rate of \$135,000 annually. During the year ended December 31, 2016, the Company recorded a bonus of \$10,000 to its Chief Financial Officer. Effective January 1, 2017, consulting agreement with the Chief Financial Officer, through JFK Enterprises Ltd., a company owned by the Chief Financial Officer, was renewed for a one-year term, at a rate of \$155,000 annually. During the year ended December 31, 2017, the Company recorded a bonus of \$200,000 to its Chief Financial Officer. Effective January 1, 2018, the Company renewed its consulting agreement with its Chief Financial Officer, through JFK Enterprises Ltd., for a one-year term, at a rate of \$155,000 annually. Effective June 1, 2018, this consulting agreement was converted into an employment agreement with the Chief Financial Officer.

Graeme Merchant served the Company as Vice President, Commercial Operations until the conclusion of his employment in September 2017 and received a salary of \$160,903 during the year ended December 31, 2016.

During the year ended December 31, 2018, the Company paid directors a total of Nil (December 31, 2017: Nil; December 31, 2016: Nil, December 31, 2015: Nil) for consulting fees.

The Company has agreed to provide its independent directors \$2,000 for each quarterly board meeting they personally attend (\$1,000 via telephone), and \$1,500 for each quarterly executive compensation, nominating and corporate governance committee meeting or audit and finance committee meeting they attend that is not held in conjunction with a regular Board meeting.

For fiscal 2011 and prior, due to the Company's financial position, the board had offered and committed not to request, and has therefore not received, any compensation for their services as independent directors. Subsequent to the debt settlement that occurred on July 18, 2011, the Company began paying the Board members this amount owing and had paid \$54,000 during fiscal 2013 relating to these accrued amounts. During fiscal 2013, the members of the Board of Directors agreed to further defer payments on amounts owing. Beginning on February 22, 2013 and until June 30, 2015, these amounts bore interest at a rate of 5.5% per annum. For the year ended December 31, 2015, \$4,517 (seven months ended December 31, 2014 –\$10,127 and year ended May 31, 2014 –\$14,918) was recorded within finance expense in relation to these amounts payable to the members of the Company's Board of Directors. No interest was paid or recorded pertaining to amounts owing to the Board of Directors for the year ended December 31, 2018. As at December 31, 2018, the Company has \$1,000 of accrued compensation owing to the independent members of the Board of Directors relating to Directors fees.

On July 11, 2014, the Company announced that, subject to all necessary regulatory approvals, it has entered into shares for debt agreements with certain members of the Board of Directors, pursuant to which the Company will issue 106,490 of its common shares at a deemed price of \$1.98 per common share to satisfy \$210,850 of outstanding

amounts owing to the Company's Board of Directors. The shares were issued on January 9, 2015.

On January 27, 2015, the Company announced that, subject to all necessary regulatory approvals, it has entered into shares for debt agreements with certain members of the Board of Directors, pursuant to which the Company will issue 75,472 of its common shares at a deemed price of \$1.44 per common share to satisfy \$108,680 of outstanding amounts owing to these individuals. The shares were issued on March 20, 2015.

The Company does not provide any cash compensation for its directors who are also officers of the Company for their services as directors.

No pension, retirement fund and other similar benefits have been set aside for the officers and directors of the Company.

#### C. Board Practices

The Board of Directors presently consists of five directors, who were all elected at the Company's annual general meeting of the shareholders held on June 27, 2018. Each director holds office until the next annual general meeting of the Company or until his successor is elected or appointed, unless his office is earlier vacated in accordance with the By-Laws of the Company, or pursuant to the provisions of the *Canada Business Corporations Act*.

Dr. Albert D. Friesen has served as a director of the Company since September 1997. Dr. Arnold Naimark has served as a director of the Company since March 2000. Gerald McDole has served as a director of the Company since January 2004. Peter Quick has served as a director of the Company since November 2005. Brent Fawkes has served as a director of the Company since January 2013.

As discussed in more detail below, the Board of Directors maintains an Audit and Finance Committee and an Executive Compensation, Nominating and Corporate Governance Committee.

#### Corporate Governance

The Canadian Securities Administrators (the "CSA") have adopted National Policy 58-201 *Corporate Governance Guidelines*, which provides non-prescriptive guidelines on corporate governance practices for reporting issuers such as the Company. In addition, the CSA have implemented National Instrument NI 58-101 *Disclosure of Corporate Governance Practices*, which prescribes certain disclosure by the Company of its corporate governance practices. The Company's approach to corporate governance is set forth below.

The Board believes that a clearly defined system of corporate governance is essential to the effective and efficient operation of the Company. The system of corporate governance should reflect the Company's particular circumstances,

having always as its ultimate objective, the best long-term interests of the Company and the enhancement of value for all shareholders.

Directors are considered to be independent if they have no direct or indirect material relationship with the Company. A "material relationship" is a relationship which could, in the view of the Company's board of directors, be reasonably expected to interfere with the exercise of a director's independent judgment.

The Executive Compensation, Nominating and Corporate Governance Committee has reviewed the independence of each director on the basis of the definition in section 1.4 of National Instrument 52-110 – *Audit Committees* ("**NI 52-110**"). The Board has determined, after reviewing the roles and relationships of each of the directors, that Dr. Arnold Naimark, Brent Fawkes, Gerald McDole and Peter Quick are independent from the Company. Only Dr. Albert Friesen is deemed to not be independent from the Company. As part of every regularly scheduled Board and committee meeting, the independent directors are given the opportunity to meet separately from management and the non-independent director. Board committees are entirely composed of independent directors who meet without management when required.

The Board has an orientation program in place for new directors which the Board feels is appropriate having regard to the current makeup of the Board. Each director receives relevant corporate and business information on the Company, the Board, and its committees. The directors regularly meet with Management and are given periodic presentations on relevant business issues and developments.

Presentations are made to the Board from time to time to educate and keep it informed of changes within the Company and of regulatory and industry requirements and standards.

The Company's Board has adopted a Code of Ethics applicable to directors, officers and employees, copies of which are available on the Company's website (www.medicure.com). A copy may also be obtained upon request to the Secretary of the Company at its head office, 2-1250 Waverley Street, Winnipeg, Manitoba, R3T 6C6. The ECNCG Committee regularly monitors compliance with the Code of Ethics and also ensures that Management encourages and promotes a culture of ethical business conduct.

#### Audit and Finance Committee

Pursuant to Section 171 of the *Canada Business Corporations Act* (the "Act"), the Company is required to have an Audit Committee. Section 171(1) of the Act requires the directors of a reporting corporation to elect from among their number a committee composed of not fewer than three directors, of whom a majority must not be officers or employees of the corporation or an affiliate of the corporation. Section 171(3) of the Act provides that, before financial statements are approved by the directors, they must be submitted to the audit committee for review. Section 171(4) of the Act provides that the auditor must be given notice of, and has the right to appear before and to be heard at, every meeting of the audit committee, and must appear before the audit committee when requested to do so by the committee. Finally, section 171(5) of the Act provides that on the request of the auditor, the audit committee must convene a meeting of the audit committee to consider any matters the auditor believes should be brought to the attention of the directors or members.

Pursuant to section 6.1 of NI 52-110, the Company is exempt from the requirements of Parts 3 and 5 of NI 52-110 for the year ended December 31, 2018, by virtue of the Company being a "venture issuer" (as defined in NI 52-110).

Part 3 of NI 52-110 prescribes certain requirements for the composition of audit committees of non-exempt companies that are reporting issuers under Canadian provincial securities legislation. Part 3 of NI 52-110 requires, among other things that an audit committee be comprised of at three directors, each of whom, is, subject to certain exceptions, independent and financially literate in accordance with the standards set forth in NI 52-110.

Part 5 of NI 52-110 requires an annual information form that is filed by a non-exempt reporting issuer under National Instrument 51-102 – *Continuous Disclosure Obligations*, as adopted the CSA, to include certain disclosure about the issuer's audit committee, including, among other things: the text of the audit committee's charter; the name of each audit committee member and whether or not the member is independent and financially literate; whether a recommendation of the audit committee to nominate or compensate an external auditor was not adopted by the issuer's board of directors, and the reasons for the board's decision; a description of any policies and procedures adopted by the audit committee for the engagement of non-audit services; and disclosure of the fees billed by the issuer's external auditor in each of the last two fiscal years for audit, tax and other services.

Notwithstanding the exemption available under section 6.1 of NI 52-110, as at the date hereof, the Audit and Finance Committee is comprised of four independent directors: Brent Fawkes (Chair), Gerald McDole, Dr. Arnold Naimark, and Peter Quick. The relevant experience of each member is described above. (See "Item 6 - *Directors, Senior Management and Employees*".)

As a result of their education and experience, each member of the audit committee has familiarity with, an understanding of, or experience in:

the accounting principles used by the Company to prepare its financial statements, and the ability to assess the general application of those principles in connection with estimates, accruals and reserves;

reviewing or evaluating financial statements that present a breadth and level of complexity of accounting issues that ·are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, and

• an understanding of internal controls and procedures for financial reporting.

Under the Sarbanes-Oxley Act of 2002, the independent auditor of a public Company is prohibited from performing certain non-audit services. The Audit and Finance Committee has adopted procedures and policies for the pre-approval of non-audit services, as described in the Audit and Finance Committee Charter reproduced below.

## AUDIT AND FINANCE COMMITTEE CHARTER

## GENERAL FUNCTIONS, AUTHORITY, AND ROLE

taken appropriate measures.

The purpose of the Audit and Finance Committee (the "Committee") is to oversee the accounting, financial reporting and disclosure processes of the Company and the audits of its financial statements, and thereby assist the Board of Directors of the Company (the "Board") in monitoring the following:
(1) the integrity of the financial statements of the Company;
(2) compliance by the Company with ethical policies and legal and regulatory requirements related to financial reporting and disclosure;
(3) the appointment, compensation, qualifications, independence and performance of the Company's internal and external auditors;
(4) the performance of the Company's independent auditors;
(5) performance of the Company's internal controls and financial reporting and disclosure processes; and

The Committee has the power to conduct or authorize investigations into any matters within its scope of responsibilities, with full access to all books, records, facilities and personnel of the Company, its auditors and its legal advisors. In connection with such investigations or otherwise in the course of fulfilling its responsibilities under this charter, the Committee has the authority to independently retain, and set and pay compensation to, special legal, accounting, or other consultants to advise it, and may request any officer or employee of the Company, its independent legal counsel or independent auditor to attend a meeting of the Committee or to meet with any members

(6) that management of the Company has assessed areas of potential significant financial risk to the Company and

of, or consultants to, the Committee. The Committee has the power to create specific sub-committees with all of the power to conduct or authorize investigations into any matters within the scope of the mandate of the sub-committee, with full access to all books, records, facilities and personnel of the Company, its auditors and its legal advisors.

In the course of fulfilling its specific responsibilities hereunder, the Committee has authority to, and must, maintain free and open communication between the Company's independent auditor, Board and Company management. The responsibilities of a member of the Committee are in addition to such member's duties as a member of the Board.

While the Committee has the responsibilities and powers set forth in this charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements are complete, accurate, and in accordance with International Financial Reporting Standards ("IFRS"). This is the responsibility of management and the independent auditor. Nor is it the duty of the Committee to conduct investigations, to resolve disagreements, if any, between management and the independent auditor or to assure compliance with laws and regulations and the Company's Code of Ethics. Any responsibilities that the Committee has the power to act upon, may be recommended to the Board to act upon.

#### **MEMBERSHIP**

The membership of the Committee will be as follows:

The Committee shall consist of a minimum of three members of the Board, appointed from time to time, each of whom is affirmatively confirmed as independent by the Board in accordance with the definition of independence for audit committee members set out in Appendix I hereto, with such affirmation disclosed in the Company's Management Information Circular for its annual meeting of shareholders. All members of the Committee should be "financially literate", as defined in Appendix I, and at least one of the members shall be an "audit committee financial expert" as defined in Appendix I.

The Board will elect, by a majority vote, one member as chairperson. In the absence of the Chair of the Committee, the members shall appoint an acting Chair.

The members of the Committee shall meet all independence and financial literacy requirements of The TSX Venture Exchange, and the requirements of such other securities exchange or quotations system or regulatory agency as may from time to time apply to the Company.

Any member of the Committee may be removed and replaced at any time by the Board and will automatically cease to be a member of the Committee as soon as such member ceases to be a Director. The Board may fill vacancies in the Committee by election from among the members of the Board. If and whenever a vacancy exists on the Committee, the remaining members may exercise all its powers so long as a quorum remains in office.

A quorum shall be a majority of the members provided that if the number of members is an even number, one half of the number plus one shall constitute a quorum.

A member of the Committee may not, other than in his or her capacity as a member of the Committee, the Board, or any other Board committee, accept any consulting, advisory, or other compensatory fee from the Company, and may not be an affiliated person of the Company or any subsidiary thereof.

## RESPONSIBILITIES

The responsibilities of the Committee shall be as follows:

#### **Frequency of Meetings**

Meet quarterly or more often as may be deemed necessary or appropriate in its judgment, either in person or telephonically.

The Committee will meet with the independent auditor at least annually, either in person or telephonically.

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Provide to the Board proper Committee minutes.

Report Committee actions to the Board with such recommendations as the Committee may deem appropriate.

## **Committee and Charter Evaluation**

The Committee shall annually review, discuss and assess its own performance. In addition, the Committee shall periodically review its role and responsibilities.

Annually review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.

## Whistleblower Mechanism

Adopt and review annually a procedure through which employees and others can confidentially and anonymously inform the Committee regarding any concerns about the Company's accounting, internal accounting controls or auditing matters. The procedure shall include responding to and the retention of, any such complaints.

## **Legal Responsibilities**

Perform such functions as may be assigned by law, by the Company's certificate of incorporation, memorandum, articles or similar documents, or by the Board.

## INDEPENDENT AUDITOR

# Nomination, Compensation and Evaluation

The Company's independent auditor is ultimately accountable to the Committee and the Board and shall report directly to the Committee. The Committee shall review the independence and performance of the auditor and annually recommend to the Board the appointment and compensation of the independent auditor or approve any discharge of auditor when circumstances warrant.

#### **Review of Work**

The Committee is directly responsibility for overseeing the work of the independent auditor engaged to prepare or issue an audit report or perform other audit, review or attest services for the Company, including the resolution of disagreements between management and the independent auditor regarding financial reporting.

#### **Approval in Advance of Related Party Transactions**

Pre-approval of all "related party transactions," which are transactions or loans between the Company and a related party involving goods, services, or tangible or intangible assets that are:

(1) material to the Company or the related party; or

(2) unusual in their nature or conditions.

A related party includes an affiliate, major shareholder, officer, other key management personnel or director of the Company, a company controlled by any of those parties or a family member of any of those parties.

#### **Engagement Procedures for Audit and Non-Audit Services**

Approve in advance all audit services to be provided by the independent auditor. Establish policies and procedures that establish a requirement for approval in advance of the engagement of the independent auditor to provide permitted non-audit services provided to the Company or its subsidiary entities and to prohibit the engagement of the independent auditor for any activities or services not permitted by any of the Canadian provincial securities commissions, the Securities Exchange Commission ("SEC") or any securities exchange on which the Company's shares are traded including any of the following non-audit services:

- · Bookkeeping or other services related to accounting records or financial statements of the Company;
  - Financial information systems design and implementation consulting services;
  - Appraisal or valuation services, fairness opinions, or contributions-in-kind reports;

Actuarial services;

· Internal audit outsourcing services;
· Any management or human resources function;
· Broker, dealer, investment advisor, or investment banking services;
Legal services;
· Expert services related to the auditing service; and
Any other service the Board determines is not permitted.
Hiring Practices
Review and approve the Company's hiring policy regarding the partners, employees and former partners and employees of the present and former independent auditor of the Company. Ensure that no individual who is, or in the past three years has been, affiliated with or employed by a present or former auditor of the Company or an affiliate, is hired by the Company as a senior officer until at least three years after the end of either the affiliation or the auditing relationship.
Independence Test
Take reasonable steps to confirm the independence of the independent auditor, which shall annually include:
Ensuring receipt from the independent auditor of a formal written statement delineating all relationships between the independent auditor and the Company, consistent with the Independence Standards Board Standard No. 1 and related Canadian regulatory body standards;
Considering and discussing with the independent auditor any relationships or services provided to the Company, including non-audit services, that may impact the objectivity and independence of the independent auditor; and

As necessary, taking, or recommending that the Board take, appropriate action to oversee the independence of the independent auditor and evaluate whether it is appropriate to rotate the independent auditor on a regular basis.

# **Audit and Finance Committee Meetings**

Notify the independent auditor of every Committee meeting and permit the independent auditor to appear and speak at those meetings.

At the request of the independent auditor, convene a meeting of the Committee to consider matters the auditor believes should be brought to the attention of the directors or shareholders.

Keep minutes of its meetings and report to the Board for approval of any actions taken or recommendations made.

#### Restrictions

Confirm with management and the independent auditor that no restrictions are placed on the scope of the auditors' review and examination of the Company's accounts.

## OTHER PROFESSIONAL CONSULTING SERVICES

## **Engagement Review**

As necessary, consider with management the rationale and selection criteria for engaging professional consulting services firms.

Ultimate authority and responsibility to select, evaluate and approve professional consulting services engagements.

## AUDIT AND REVIEW PROCESS AND RESULTS

## **Scope**

Consider, in consultation with the independent auditor, the audit scope, staffing and planning of the independent auditor.

## **Review Process and Results**

Consider and review with the independent auditor the matters required to be discussed by such auditing standards as may be applicable.

Review and discuss with management and the independent auditor at the completion of annual and quarterly examinations, if any:

The Company's audited and unaudited financial statements and related notes;

The Company's management certifications of the financial statements and accompanying MD&A as required under applicable securities laws;

- The Company's annual information form ("AIF"), if one is prepared and filed.
- The independent auditor's audit of the financial statements and its report thereon;
  - Any significant changes required in the independent auditor's audit plan;
- The appropriateness of the presentation of any non-IFRS related financial information;
- Any serious difficulties or disputes with management encountered during the course of the audit; and

Other matters related to the conduct of the audit, which are to be communicated to the Committee under generally accepted auditing standards.

Review the management letter, if any, delivered by the independent auditor in connection with the audit.

Following such review and discussion, if so determined by the Committee, recommend to the Board that the annual financial statements be included in the Company's annual report.

Review and discuss with management and the independent auditor the adequacy of the Company's internal accounting and financial controls that management and the Board have established and the effectiveness of those systems, and inquire of management and the independent auditor about significant financial risks or exposures and the steps management has taken to minimize such risks to the Company.

Meet separately with the independent auditor and management, as necessary or appropriate, to discuss any matters that the Committee or any of these groups believe should be discussed privately with the Committee.

Review and discuss with management and the independent auditor the accounting policies which may be viewed as critical, including all alternative treatments for financial information within IFRS that have been discussed with management, and review and discuss any significant changes in the accounting policies of the Company and industry accounting and regulatory financial reporting proposals that may have a significant impact on the Company's financial reports.

Review with management and the independent auditor the effect of regulatory and accounting initiatives as well as off-balance sheet structures, if any, on the Company's financial statements.

Review with management and the independent auditor any correspondence with regulators or governmental agencies and any employee complaints or published reports which raise material issues regarding the Company's financial statements or accounting policies.

Review with the Company's legal counsel legal matters that may have a material impact on the financial statements, the Company's financial compliance policies and any material reports or inquiries received from regulators or governmental agencies related to financial matters.

#### SECURITIES REGULATORY FILINGS

Review filings with the Canadian provincial securities commissions and the SEC and other published documents containing the Company's financial statements.

Review, with management, prior to public disclosure, the Company's financial statements and MD&A and related press releases. The chairperson of the Committee may represent the entire Committee for purposes of this review.

Ensure that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements, other than the disclosure stated above, and periodically assess the adequacy of those procedures.

#### RISK ASSESSMENT

Meet periodically with management to review the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures.

Assess risk areas and policies to manage risk including, without limitation, environmental risk, insurance coverage and other areas as determined by the Board from time to time.

Review and discuss with management, and approve changes to, the Company's Corporate Investment Policy.

## LIMITATION ON DUTIES OF AUDIT AND FINANCE COMMITTEE

In contributing to the Committee's discharging of its duties under this charter, each member of the Committee shall be obliged only to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Nothing in this charter is intended, or may be construed, to impose on any member of the Committee a standard of care or diligence that is in any way more onerous or extensive than the standard to which all Board members are subject.

#### ADOPTION OF CHARTER

This charter was originally adopted by the Board on August 23, 2004 and revised on January 17, 2012.

#### APPENDIX I

## **GLOSSARY OF TERMS**

"Independent" means a director who has no direct or indirect material relationship with the Company or its subsidiaries.

A "material relationship" is a relationship which could, in the view of the Board of the Company, be reasonably expected to interfere with the exercise of the person's independent judgment.

For greater certainty, certain individuals will be deemed not to be independent:

- a) an individual who is, or has been within the last three years, an employee or executive officer of the Company;
- an individual whose immediate family member is, or has been within the last three years, an executive officer of the Company;
- an individual who is a partner of, or employed by the Company's internal or external auditor or who was, within the c)last three years, a partner or employee of that audit firm and personally worked on the Company's audit within that time. For this purpose, "partner" does not include a fixed income partner;

an individual whose child or stepchild shares a home with the individual or whose spouse, is a partner of the Company's internal or external auditor, or is an employee of the audit firm and participates in its audit, assurance or d)tax compliance practice or who was within the last three years a partner or employee of the audit firm and personally worked on the Company's audit within that time. For this purpose, "partner" does not include a fixed income partner;

an individual who, or whose immediate family member, is or has been within the last three years, an executive e)officer of an entity if any of the Company's current executive officers serve or served at the same time on the entity's compensation committee; and

an individual who received, or whose immediate family member who is employed as an executive officer of the Company received, more than \$75,000 in direct compensation from the Company during any 12 month period within the last three years. For purposes hereof, direct compensation does not include remuneration for acting as a member of the Board or of any Board committee or remuneration consisting of fixed amounts of compensation under a retirement plan for prior service provided that such compensation is not contingent on any way on continued service.

For purposes hereof, "Company" includes Medicure Inc. and any subsidiaries thereof.

Notwithstanding the foregoing, a person will not be considered to have a material relationship with the Company solely because he or she:

a) has previously acted as an interim chief executive officer of the issuer, or

b) acts, or has previously acted, as a chair or vice-chair of the Board or any Board committee, on a part-time basis.

## Meaning Of "Independence" For Audit Committees

In addition to the requirement of being an Independent Director as described above, members of the Audit Committee will not be considered "independent" for that purpose where the individual:

accepts, directly or indirectly, any consulting, advisory or other compensatory fee from the Company or subsidiary a) of the Company, other than as remuneration for acting in his or her capacity as a member of the Board or any Board committee, or as a part-time or vice-chair of the Board or any Board Committee; or

b) is an affiliated entity (as defined in National Instrument 52-110 Audit Committees) of the Company or any of its subsidiaries.

For purposes hereof, indirect acceptance by an individual of any consulting, advisory or other compensatory fee includes acceptance of a fee by (i) an individual's spouse, minor child or stepchild, or child or stepchild who shares the individual's home, or (ii) an entity in which such individual is a partner, member, executive officer or managing director (or comparable position) and which provides accounting, consulting, legal, investment banking or financial advisory services to the Company or any subsidiary of the Company. Notwithstanding the foregoing, compensatory fees do not include receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.

## Meaning of "financially literate"

For purposes hereof, an individual is financially literate if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

#### Meaning of "audit committee financial expert"

An "audit committee financial expert" means a person who has the following attributes:

(1) An understanding of generally accepted accounting principles and financial statements;
(2) The ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves;
(3) Experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising one or more persons engaged in such activities;
(4) An understanding of internal controls over financial reporting;
(5) An understanding of audit committee functions.
A person shall have acquired such attributes through:
(1) Education and experience as a principal financial officer, principal accounting officer, controller, public accountant or auditor or experience in one or more positions that involve the performance of similar functions;
(2) Experience actively supervising a principal financial officer, principal accounting officer, controller, public accountant, auditor or person performing similar functions;
82

(3) Experience	overseeing	or assessing the	performance	of compar	nies or public	accountants	with respec	et to the
preparation, au	iditing or eva	aluation of finar	ncial statement	ts; or				

(4) Other relevant experience.

## Executive Compensation, Nominating and Corporate Governance Committee

The Executive Compensation, Nominating and Corporate Governance Committee is responsible for determining the compensation of executive officers of the Company. The current members of the Committee are Dr. Arnold Naimark (Chair), Gerald McDole, Peter Quick and Brent Fawkes, none of whom is a current or former executive officer of the Company. The Committee meets at least once a year.

The Committee has developed a policy to govern the Company's approach to corporate governance issues and provides a forum for concerns of individual directors about matters not easily or readily discussed in a full board meeting, e.g., the performance of management. The Committee ensures there is a clear definition and separation of the responsibilities of the Board, the Committees of the Board, the Chief Executive Officer and other management employees. It also ensures there is a process in place for the orientation and education of new directors and for continuing education of the Board. The Committee also assesses the effectiveness of the Board and its committees on an ongoing ad hoc basis. It also reviews at least annually the Company's responsiveness to environmental impact, health and safety and other regulatory standards.

The Committee reviews the objectives, performance and compensation of the Chief Executive Officer at least annually and makes recommendations to the Board for change. The Committee makes recommendations based upon the Chief Executive Officer's suggestions regarding the salaries and incentive compensation for senior officers of the Company. The Committee also reviews significant changes to compensation, benefits and human resources policies and compliance with current human resource management practices, such as pay equity, performance review and staff development. The Committee is responsible for reviewing and recommending changes to the compensation of directors as necessary.

The charter of the Executive Compensation, Nominating and Corporate Governance Committee can be found on the Company's website at <a href="https://www.medicure.com">www.medicure.com</a>.

## D. Employees

In addition to the individuals disclosed in Section A. Directors and Senior Management of this item, the Company has 64 employees through Medicure as at December 31, 2018. During the year ended December 31, 2018, the Company increased its total employment and plans to continue to increase total employment during 2019.

## E. Share Ownership

The following table discloses the number of shares (each share possessing identical voting rights), stock options and percent of the shares outstanding held by the directors and officers of the Company, and their respective affiliates, directly and indirectly, at December 31, 2018.

Title of Class	Identity of Person or Group	Amount Owned	Percentage of Clas	S
Common shares	Dr. Albert D. Friesen <sup>(1)</sup>	2,397,955 (1)	15.42	%
Common shares	Dr. Arnold Naimark	38,527	0.25	%
Common shares	Gerald P. McDole	48,283	0.31	%
Common shares	Peter Quick	43,611	0.28	%
Common shares	Brent Fawkes	12,376	0.08	%
Common shares	James Kinley	47,100	0.30	%

Dr. Albert D. Friesen holds 781,267 shares personally or in an RRSP, a Canadian individual retirement plan. The rest of the shares are held by ADF Family Holding Corp. ADF Enterprises Inc., his wife Mrs. Leona M. Friesen, and CentreStone Ventures Limited Partnership Fund. Dr. Friesen is the General Partner of CentreStone Ventures Limited Partnership Fund.

#### **Incentive Stock Options**

The Company has established an Incentive Stock Option Plan (the "**Plan**") for its directors, key officers, employees and consultants. Options granted pursuant to the Plan will not exceed a term of ten years and are granted at an option price and on other terms which the directors determine is necessary to achieve the goal of the Plan and in accordance with regulatory requirements, including those of the TSX Venture Exchange. Each option entitles the holder thereof to purchase one (1) Common Share of the Company on the terms set forth in the Plan and in such purchaser's specific stock option agreement. The option price may be at a discount to market price, which discount will not, in any event, exceed that permitted by any stock exchange on which the Company's Common Shares are listed for trading.

The number of Common Shares allocated to the Plan, the exercise period for the options, and the vesting provisions for the options will be determined by the board of directors of the Company from time to time. The Company's stock option plan allowed for the issuance of stock options to purchase up to a maximum of 20% of the outstanding common shares at the time of approval of the stock option plan, which resulted in a fixed number of stock options allowed to be granted totaling 2,934,403. The Plan was adopted by the shareholders of the Company on June 22, 2016.

The Common Shares issued pursuant to the exercise of options, when fully paid for by a participant, are not included in the calculation of Common Shares allocated to or within the Plan. Should a participant cease to be eligible due to the loss of corporate office (being that of an officer or director) or employment, the option shall cease for varying periods not exceeding 90 days. Loss of eligibility for consultants is regulated by specific rules imposed by the directors when the option is granted to the appropriate consultant. The Plan also provides that estates of deceased participants can exercise their options for a period not exceeding one year following death.

The following table discloses the stock options beneficially held by the directors and officers of the Company, and their respective affiliates, directly and indirectly, as of December 31, 2018. The stock options are subject to the Plan and are for shares of Common Stock of the Company.

	Number of	Exercise	
Name of Person	Shares Subject	Price per	Expiry Date
	to Issuance	Share	
Dr. Albert D. Friesen	5,000	\$ 6.16	April 7, 2021
	414,000	\$ 1.50	July 18, 2021
	15,000	\$ 7.20	December 19, 2022
	100,000	\$ 7.30	January 31, 2023
	7,500	\$ 1.90	July 7, 2024
	9,000	\$ 1.90	March 27, 2025
Dr. Arnold Naimark	667	\$ 0.60	April 16, 2019
	4,000	\$ 6.16	April 7, 2021
	5,000	\$ 7.20	December 19, 2022
	45,000	\$ 0.30	May 10, 2023
	4,500	\$ 1.90	July 7, 2024
	7,200	\$ 1.90	March 27, 2025
Gerald P. McDole	667	\$ 0.60	April 16, 2019
	4,000	\$ 6.16	April 7, 2021
	5,000	\$ 7.20	December 19, 2022
	45,000	\$ 0.30	May 10, 2023
	4,500	\$ 1.90	July 7, 2024
	7,200	\$ 1.90	March 27, 2025
Peter Quick	667	\$ 0.60	April 16, 2019
	4,000	\$ 6.16	April 7, 2021
	5,000	\$ 7.20	December 19, 2022
	45,000	\$ 0.30	May 10, 2023
	4,500	\$ 1.90	July 7, 2024
	7,200	\$ 1.90	March 27, 2025
Brent Fawkes	4,000	\$ 6.16	April 7, 2021
	5,000	\$ 7.20	December 19, 2022
	45,000	\$ 0.30	May 10, 2023
	4,500	\$ 1.90	July 7, 2024
	7,200	\$ 1.90	March 27, 2025

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James Kinley	4,000	\$ 6.16	April 7, 2021
	100,000	\$ 7.20	December 19, 2022
	7,500	\$ 1.90	July 7, 2024
	7,200	\$ 1.90	March 27, 2025

On February 1, 2018, the Company announced that its Board of Directors had approved the grant of 100,000 stock options to an officer of the Company pursuant to its stock option plan. These options, which were subject to the approval of the TSX-V, are set to expire on the fifth anniversary of the date of grant and were issued at an exercise price of \$7.30 per share.

During the year ended December 31, 2018, James Kinley exercised 45,000 stock options to acquire 45,000 common shares of the Company at an exercise price of \$0.30.

#### ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

## A. Major Shareholders

As of December 31, 2018, the following table sets forth the beneficial ownership of the Company's common shares by each person known by the Company to own beneficially more than 5% of the issued and outstanding common shares of the Company. Information as to shares beneficially owned, directly or indirectly, by each nominee or over which each nominee exercises control or direction, not being within the knowledge of the Company, has been furnished by the respective nominees individually. The Company does not know the majority of the ultimate beneficial owners of these common shares.

Title of Class	Identity of Person or Group	Amount Owned (3)	Percentage of Class	3
Common shares	Dr. Albert D. Friesen Winnipeg, Manitoba	2,397,955	15.42	%
Common shares	MM Asset Management Inc. Toronto, Ontario	3,977,145	25.58	%
Common shares	PenderFund Capital Management Ltd	1,899,150	12.21	%

#### Notes:

Dr. Albert Friesen holds 781,267 shares personally or in an RRSP. The rest of the shares are held by ADF Family (1) Holding Corp., his wife Mrs. Leona M. Friesen, and CentreStone Ventures Limited Partnership Fund. Dr. Friesen is the General Partner of CentreStone Ventures Limited Partnership Fund.

To the best of the Company's knowledge, it is not owned or controlled, directly or indirectly, by another Company, by any foreign government or by any other natural or legal person severally or jointly.

As of December 31, 2018, the total number of issued and outstanding common shares of the Company beneficially owned by the directors and executive officers of the Company as a group was 2,587,852 (or 16.64% of common shares).

To the best of the Company's knowledge, there are no arrangements, the operation of which at a subsequent date will result in a change in control of the Company.

The major shareholders do not have any special voting rights.

Insider Reports under Canadian Securities Legislation

Since the Company a reporting issuer under the Securities Acts of each of the provinces of Canada, certain "insiders" of the Company (including its directors, certain executive officers, and persons who directly or indirectly beneficially own, control or direct more than 10% of its common shares) are generally required to file insider reports of changes in their ownership of the Company's common shares five days following the trade under National Instrument 55-104 – *Insider Reporting Requirements and Exemptions*, as adopted by the Canadian Securities Administrators. Insider reports must be filed electronically five days following the date of the trade at <a href="www.sedi.ca">www.sedi.ca</a>. The public is able to access these reports at <a href="www.sedi.ca">www.sedi.ca</a>.

The U.S. rules governing the ownership threshold above which shareholder ownership must be disclosed are more stringent than those discussed above. Section 13 of the Exchange Act imposes reporting requirements on persons who acquire beneficial ownership (as such term is defined in the Rule 13d-3 under the Exchange Act) of more than 5 per cent of a class of an equity security registered under Section 12 of the Exchange Act. In general, such persons must file, within 10 days after such acquisition, a report of beneficial ownership with the Securities and Exchange Commission containing the information prescribed by the regulations under Section 13 of the Exchange Act. This information is also required to be sent to the issuer of the securities and to each exchange where the securities are traded.

#### **B. Related Party Transactions**

Except as disclosed below, the Company has not, since January 1, 2015, and does not at this time propose to:

enter into any transactions which are material to the Company or a related party or any transactions unusual in their (1) nature or conditions involving goods, services or tangible or intangible assets to which the Company or any of its former subsidiaries was a party;

- (2) make any loans or guarantees directly or through any of its former subsidiaries to or for the benefit of any of the following persons:
  - (a) enterprises directly or indirectly through one or more intermediaries, controlling or controlled by or under common control with the Company;

(b)

associates of the Company (unconsolidated enterprises in which the Company has significant influence or which has significant influence over the Company) including shareholders beneficially owning 10% or more of the outstanding shares of the Company;

(c) individuals owning, directly or indirectly, shares of the Company that gives them significant influence over the Company and close members of such individuals families;

key management personnel (persons having authority in responsibility for planning, directing and controlling the (d) activities of the Company including directors and senior management and close members of such directors and senior management); or

(e) enterprises in which a substantial voting interest is owned, directly or indirectly, by any person described in (c) or (d) or over which such a person is able to exercise significant influence.

On July 18, 2011, the Company entered into a consulting agreement with A.D. Friesen Enterprises Ltd. pursuant to which Dr. Albert Friesen serves the Company as its Chief Executive Officer. The agreement is for a term of five years, at a rate of \$180,000 annually. Dr. Friesen is also eligible for a yearly merit/performance bonus, if any, that the Company's board of directors, in its sole discretion, may authorize. Effective July 18, 2016, the Company renewed its consulting agreement with its Chief Executive Officer, through A.D. Friesen Enterprises Ltd., a company owned by the Chief Executive Officer. for a term of five years, at a rate of \$300,000 annually, increasing to \$315,000 annually, effective January 1, 2017. The Company may terminate this agreement at any time upon 120 days' written notice. As at December 31, 2018 and 2017, there were no amounts included in accounts payable and accrued liabilities payable to A. D. Friesen Enterprises Ltd. as a result of this consulting agreement. Any amounts payable to A. D. Friesen Enterprises Ltd. are unsecured, payable on demand and non-interest bearing.

During the year ended December 31, 2017, the Company recorded a bonus of \$125,000 to its Chief Executive Officer which is recorded within the gain on the sale of Apicore, which was paid during fiscal 2018. During the year ended December 31, 2016, the Company recorded a bonus of \$54,380 to its Chief Executive Officer which is recorded within selling, general and administrative expenses. During the year ended December 31, 2015, the Company recorded a bonus of \$100,000 to its Chief Executive Officer which is recorded within selling, general and administrative expenses.

On July 11, 2014, the Company announced that, subject to all necessary regulatory approvals, it has entered into shares for debt agreements with its Chief Executive Officer, Dr. Albert Friesen and certain members of the Board of Directors, pursuant to which the Company will issue 205,867 of its common shares at a deemed price of \$1.98 per common share to satisfy \$407,617 of outstanding amounts owing to CEO and members of the Company's Board of Directors. The shares were issued on January 9, 2015.

The Company may terminate the consulting agreement with the CEO for any reason and at any time upon 120 days' written notice. In relation to the consulting agreement with A.D. Friesen Enterprises Ltd. the Company recorded consulting fees payable to A.D. Friesen Enterprises Ltd. During the year ended December 31, 2018 and 2017, the Company recorded a total of \$315,000, respectively, to A.D. Friesen Enterprises Ltd. During the year ended December 31, 2016, the Company recorded a total of \$300,000 to A.D. Friesen Enterprises Ltd. During the year ended December 31, 2015, the Company recorded a total of \$186,000 to A.D. Friesen Enterprises Ltd.

Dr. Friesen, a director, the Chairman and the Chief Executive Officer of the Company is also the majority shareholder in a management services company, Genesys Venture Inc. ("GVI") which entered into a management services agreement with the Company as of October 1, 2010. Effective January 1, 2012, the Company entered into a new business and administration services agreement with GVI under which the Company is committed to pay \$15,833.33 per month or \$190,000 per annum along with an additional \$500 per month for each office space it requests and is given access to by GVI. The agreement was for an initial term of one year and shall be automatically renewed for succeeding terms of one year. Either party may terminate the agreement at any time after June 30, 2012, upon 90 days written notice to the other party. The Chief Financial Officer's services, accounting, payroll, human resources, and

information technology are provided pursuant to this agreement. The agreement was renewed for the 2013 and 2014 calendar years. Effective November 1, 2014, the business and administration services agreement was renegotiated for a further 14 month term ending December 31, 2015 at a rate of \$17,917 per month, or \$215,000 per year. Effective January 1, 2016, the Company entered into a new business and administration services agreement with GVI, under which the Company is committed to paying \$7,083 per month or \$85,000 per year for a one year term and the agreement no longer includes the services of the Chief Financial Officer. Effective January 1, 2017, the Company renewed its business and administration services agreement with GVI, under which the Company is committed to pay \$7,083 per month or \$85,000 per year for a one-year term and effective January 1, 2018, this agreement was renewed for an additional one-year term.

During the year ended December 31, 2018 the Company paid GVI, a company controlled by the Chief Executive Officer, a total of \$85,000 (2017 – \$85,000; 2016 – \$85,000; 2015 – \$215,000, seven months ended December 31, 2014 – \$115,000) for business administration services, \$227,733 (2017 – \$212,000; 2016 – \$222,500; 2015 - \$176,051, seven months ended December 31, 2014 – \$36,500) in rental costs and \$46,950 (2017 – \$43,800; 2016 – \$41,975; 2015 – \$33,575, seven months ended December 31, 2014 – \$25,115) for commercial and information technology support services. As described in note 16(b) to the Company's audited consolidated financial statements included in this annual report, the business administration services summarized above are provided to the Company through a consulting agreement with GVI. The business administration services summarized above are provided to the Company through a consulting agreement with GVI. Until December 31, 2015, the GVI agreement included the Chief Financial Officer's services to the Company, as well as accounting, payroll, human resources and some information technology services. The business and administration services agreement entered into effective January 1, 2016 and subsequently no longer includes the Chief Financial Officer's services, which effective January 1, 2016, will be paid directly by the Company through a consulting agreement.

Dr. Friesen, a director, the Chairman and the Chief Executive Officer of the Company also owns a clinical research organization, GVI Clinical Development Solutions Inc. ("GVI CDS") which entered into the following clinical research contracts with the Company;

Nature of Agreement	Effective Date	Terms						
Regulatory affairs support	June 22, 2009	Services provided as needed on an hourly basis						
Pharmacovigilance and medical	January 1,	Monthly retainer of \$2,000, plus hourly charges for						
affairs support	2014	pharmacovigilance services outside base services.						
Pharmacovigilance and medical	January 1,	Monthly retainer of \$1,250, plus hourly charges for						
affairs support	2014	pharmacovigilance services outside base services.						
Quality assurance support	June 1, 2010	Services provided as needed on an hourly basis.						
Clincial services	May 1, 2010	Services provided as needed on an hourly basis.						

During the year ended December 31, 2018, the Company paid GVI CDS \$857,917 (2017 – \$715,623; 2016 – \$592,464, 2015 - \$330,764, seven months ended December 31, 2014 – \$56,904) for clinical research services.

The Company also has a consulting agreement with CanAm Bioresearch Inc. ("CanAm"), a company controlled by a close family member of Dr. Friesen's to provide contract research services. During the year ended December 31, 2018, the Company paid CanAm \$393,021 (2017 – \$458,424; 2016 – \$560,205; 2015 - \$399,580, seven months ended December 31, 2014 – \$233,938) for research and development services.

These transactions have been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Beginning on February 22, 2013 and until June 30, 2015, the amounts owing to GVI, GVI CDS and CanAm bore interest at a rate of 5.5% per annum. For the year ended December 31, 2017 and 2016, there was no interest charged on these amounts payable to related. For the year ended December 31, 2015, seven months ended December 31, 2014 and the year ended May 31, 2014, \$4,517, \$10,127 and \$14,918, respectively, was recorded within finance expense in relation to these amounts payable to related parties.

Beginning with the acquisition of Apicore (the "Acquisition") on December 1, 2016 and ending with the Apicore Sales Transaction on October 2, 2017, as described in note 5 of the consolidated financial statements, the Company incurred rental charges pertaining to leased manufacturing facilities and office space from Dap Dhaduk II LLC ("Dap Dhaduk"), an entity controlled by a minority shareholder and member of the board of directors of Apicore Inc. Included within discontinued operations on the consolidated statements of net income and comprehensive income is payments to Dap Dhaduk totaling \$263,493 and \$29,869 for the years ended December 31, 2017 and 2016, respectively.

Beginning with the Acquisition on December 1, 2016 and ending with the Apicore Sales Transaction on October 2, 2017, as described in note 5 of the consolidated financial statements, the Company purchased inventory from Aktinos Pharmaceuticals Private Limited and Aktinos HealthCare Private Limited (together, "Aktinos"), an entity significantly influenced by a close family member of the Chief Executive Officer of Apicore Inc. For the year ended December 31, 2017, the Company paid Aktinos \$1,599,056 (2016 – \$217,382) for purchases of inventory, which were included in assets of the Apicore business sold (note 5) in connection with the Apicore Sales Transaction.

Beginning with the Acquisition on December 1, 2016 and ending with the Apicore Sales Transaction on October 2, 2017, as described in note 5 of the consolidated financial statements, the Company incurred research and development charges from Omgene Life Sciences Pvt. Ltd. ("Omgene"), an entity significantly influenced by a close family member of the Chief Executive Officer of Apicore Inc. Included within discontinued operations on the consolidated statements of net income and comprehensive income is payments to Omgene totaling \$26,465 and nil for the years ended December 31, 2017 and 2016, respectively.

Beginning with the Acquisition on December 1, 2016 and ending with the Apicore Sales Transaction on October 2, 2017, as described in note 5 of the consolidated financial statements,, the Company incurred pharmacovigilance charges from 4C Pharma Solutions LLC ("4C Pharma"), an entity significantly influenced by a close family member of the Chief Executive Officer of Apicore Inc. Included within discontinued operations on the consolidated statements of net income and comprehensive income is payments to 4C Pharma totaling \$5,690 and nil for the years ended December 31, 2017 and 2016, respectively.

As at December 31, 2018, included in accounts payable and accrued liabilities is \$16,843 (2017 – \$67,704) payable to GVI, \$134,461 (2017 – \$118,973) payable to GVI CDS, and \$40,452 (2017 – \$36,606) payable to CanAm. These amounts are unsecured, payable on demand and non-interest bearing. In addition, the other long-term liability totaling

\$1,200,608 (2017 - \$1,135,007) is payable to the former President and Chief Executive Officer of Apicore upon receipt of the holdback receivable.

As at December 31, 2018, the Company has \$4,683 (2017 – \$1,000; 2016 – \$13,279) recorded within accounts payable and accrued liabilities relating to amounts payable to the members of the Company's Board of Directors for services provided.

Effective July 18, 2016, the Company renewed its consulting agreement with its Chief Executive Officer, through A.D. Friesen Enterprises Ltd., a company owned by the Chief Executive Officer, for a term of five years, at a rate of \$300,000 annually, increasing to \$315,000 annually, effective January 1, 2017. The Company may terminate this agreement at any time upon 120 days' written notice. As at December 31, 2018, there were no amounts included in accounts payable and accrued liabilities (2017 – \$125,000) payable to A.D. Friesen Enterprises Ltd. as a result of this consulting agreement. Any amounts payable to A.D. Friesen Enterprises Ltd. are unsecured, payable on demand and non-interest bearing.

On July 11, 2014, the Company announced that, subject to all necessary regulatory approvals, it had entered into a shares for debt agreement with its Chief Executive Officer, pursuant to which the Company will issue common shares at a deemed price of \$1.98 per common share to satisfy outstanding amounts owing to the Chief Executive Officer. Of the amount payable to the Chief Executive Officer as at December 31, 2014, \$297,808 was included in this shares for debt agreement. The shares were issued on January 9, 2015.

Effective January 1, 2018, the Company renewed its consulting agreement with its Chief Financial Officer, through JFK Enterprises Ltd., a company owned by the Chief Financial Officer of the Company, for a one-year term, at a rate of \$155,000 annually. The agreement could have been terminated by either party, at any time, upon 30 days written notice. Any amounts payable to JFK Enterprises Ltd. were unsecured, payable on demand and non-interest bearing. Effective June 1, 2018, this consulting agreement was converted into an employment agreement with the Chief Financial Officer.

C. Interests	of Experts	ana	Counsel
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Not applicable

### ITEM 8. FINANCIAL INFORMATION

#### A. Consolidated Statements or Other Financial Information

#### financial Statements

The consolidated financial statements of the Company for the years ended December 31, 2018, 2017 and 2016 have been prepared in accordance with IFRS, as issued by the IASB, and are included under Item 18 of this Annual Report. The consolidated financial statements including related notes are accompanied by the report of the Company's independent registered public accounting firm, PricewaterhouseCoopers LLP as at and for the year ended December 31, 2018 and Ernst & Young LLP as at December 31, 2017 and for the years ended December 31, 2017 and December 31, 2016.

Legal Proceedings

Subsequent to December 31, 2018, on February 13, 2019, the Company received notice from the Buyer in the Apicore Sales Transaction of potential claims against the holdback receivable in respect of representations and warranties under the Apicore Sales Transaction, with the maximum exposure of the claims being the total holdback receivable. The notice did not contain sufficiently detailed information to enable the Company to assess the merits of the claims. The Company will proceed diligently to investigate the potential claims and attempt to satisfactorily resolve them with a view to having the holdback receivable released.

On November 16, 2018, the Company announced that it had filed a patent infringement action against Gland Pharma Ltd. ("Gland") in the U.S. District Court for the District of New Jersey, alleging infringement of U.S. Patent No. 6,770,660 ("the '660 patent").

The patent infringement action was in response to Gland's filing of an ANDA seeking approval from the FDA to market a generic version of AGGRASTAT® before the expiration of the '660 patent. The '660 patent is listed in FDA's Orange Book for AGGRASTAT®. Medicure will vigorously defend the '660 patent and will pursue the patent infringement action against Gland and all other legal options available to protect its patent rights.

During 2018, the Company was named in a civil claim in Florida from the third-party manufacturer of PREXXARTAN® against Carmel. The claim disputed the rights granted by Carmel to the Company with respect to PREXXARTAN®. The Company believed the claim against it was without merit and intended to defend itself against the claim. The claim against the Company has been subsequently withdrawn, however the dispute between the third-party manufacturer and Carmel continues.

Aside from the above, there are no additional legal or arbitration proceedings, including those relating to bankruptcy, receivership or similar proceedings and those involving any third party, which may have, or have had in the recent past, significant effects on the Company's financial position or profitability. There are no additional significant legal proceedings to which the Company is a party, nor to the best of the knowledge of the Company's management are any legal proceedings contemplated.

### **Dividend Policy**

The Company has not paid dividends in the past and it has no present intention of paying dividends on its shares as it anticipates that all available funds will be invested to finance the growth of its business. The directors of the Company will determine if and when dividends should be declared and paid in the future based upon the Company's financial position at the relevant time. All of the Company's Shares are entitled to an equal share of any dividends declared and paid.

### **B. Significant Changes**

There have been no significant changes to the accompanying financial statements since December 31, 2018, except as disclosed in this Annual Report on Form 20-F.

### ITEM 9. THE OFFERING AND LISTING

### A. Listing Details

On October 24, 2011, the Company's common shares commenced trading on the TSX-V under the symbol "MPH".

By Articles of Amendment filed by the Company under the *Canada Business Corporations Act* on November 1, 2012, the Company's issued and outstanding common shares were consolidated on the basis of one post-consolidation common share for every fifteen pre-consolidation common shares. The Company's name and trading symbol did not change as a result of the consolidation. The Company's common shares were reduced from 182,947,595 to 12,196,508 issued and outstanding as a result of the consolidation. The trading prices presented here have not been adjusted to reflect the consolidation.

The following table sets forth for the periods indicated the price history of the Company's common shares on the TSX-V.

	TSX-V	TSX-V
	High (\$)	Low (\$)
Fiscal Quarter Ended		
December 31, 2018	7.15	5.71
September 30, 2018	7.38	6.60
June 30, 2018	7.55	5.90
March 31, 2018	7.40	6.70
December 31, 2017	8.71	6.90
September 30, 2017	8.45	7.50
June 30, 2017	9.82	6.50
March 31, 2017	10.55	8.52
December 31, 2016	10.67	5.48
September 30, 2016	7.20	5.49
June 30, 2016	6.98	4.73
March 31, 2016	7.29	4.18
December 31, 2015	4.35	3.00
September 30, 2015	3.94	2.35
June 30, 2015	2.74	1.91
March 31, 2015	2.39	1.20

### **B. Plan of Distribution**

Not applicable.

### C. Markets

The Company's common shares are listed for trading on the TSX-V under the symbol "MPH". Certain market makers also trade the Company's common shares on the OTC Pink Market, under the symbol "MCUJF".

### **D. Selling Shareholders**

Not applicable.		
E. Dilution		
Not applicable.		

F. Expenses of the Issue
Not applicable.
ITEM 10. ADDITIONAL INFORMATION
A. Share Capital
Not applicable
B. Memorandum and Articles of Association
1. Objects and Purposes of the Company
The Articles of Continuance (as amended, the "Articles") and the By-Laws of the Company place no restrictions upon the Company's objects and purposes.
2. Directors
Under applicable Canadian law, the directors and officers of the Company, in exercising their powers and discharging their duties, must act honestly and in good faith with a view to the best interests of the Company. The directors and officers must also exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances.
Section 4.18 of By-Law No.1A of the Company (the " <b>By-Law</b> ") provides that a director shall not be disqualified by reason of his office from contracting with the Company or a subsidiary thereof. Subject to the provisions of the

Canada Business Corporations Act (the "Act"), a director shall not by reason only of his office be accountable to the

Company or its shareholders for any profit or gain realized from a contract or transaction in which he has an interest. Such contract or transaction shall not be voidable by reason only of such interest, or by reason only of the presence of a director so interested at a meeting, or by reason only of his presence being counted in determining a quorum at a meeting of the directors at which such a contract or transaction is approved, provided that a declaration and disclosure of such interest shall have been made at the time and in the manner prescribed by section 120 of the Act, and the director so interested shall have refrained from voting as a director on the resolution approving the contract or transaction (except as permitted by the Act) and such contract shall have been reasonable and fair to the Company and shall have been approved by the directors or shareholders of the Company as required by section 120 of the Act.

The Company's Articles provide that the Company's board shall consist of a minimum of one and a maximum of 15 directors. The exact number of directors to form the board, between the minimum and maximum number of directors prescribed by the Articles, is determined from time to time by the board. Section 4.01 of the By-Law states that the quorum of the board shall be a majority of the board, or such other number of directors as the board may from time to time determine. No business shall be transacted at a meeting unless a quorum is present.

Section 3.01 of the By-Law states that the board may, without the authorization of the shareholders:

- i)borrow money upon the credit of the Company;
- ii) issue, reissue, sell or pledge debt obligations of the Company, including bonds, debentures, notes or other evidences of indebtedness or guarantees, whether secured or unsecured;

- subject to section 44 of the Act, give a guarantee on behalf of the Company to secure performance of any present or future indebtedness, liability or obligation of any person; and
- iv) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Company, owned or subsequently acquired, to secure any obligation of the Company.

The borrowing powers of the directors can be varied by amending the By-Law of the Company.

There is no provision in the By-Law imposing a requirement for retirement or non-retirement of directors under an age limit requirement.

Section 4.02 of the By-law states that a director need not be a shareholder to be qualified as a director. However, section 4.02 also provides that at least 25% of the directors shall be resident Canadians unless the Company has less than four directors, in which case at least one director must be a resident Canadian.

Under section 4.03 of the By-law, directors are to be elected yearly by ordinary resolution to hold office until the close of the next annual meeting of shareholder. If directors fail to be elected at any such meeting of shareholders, then the incumbent directors continue in office until their successors are elected.

#### 3. Shares

The Articles of the Company provide that the Company is authorized to issue an unlimited number of shares designated as Common Shares, Class A Common Shares and Preferred Shares. Except for meetings at which only holders of another specified class or series of shares of the Company are entitled to vote separately as a class or series, each holder of the Common and Class A shares is entitled to receive notice of, to attend and to vote at all meetings of the shareholders of the Company. Subject to the rights, privileges, restrictions and conditions attached to any other class of shares of the Company, the holders of the Common and Class A shares are also entitled to receive dividends if, as and when declared by the directors of the Company and are entitled to share equally in the remaining property of the Company upon liquidation, dissolution or winding-up of the Company.

The Preferred Shares may from time to time be issued in one or more series and, subject to the following provisions, and subject to the sending of articles of amendment in respect thereof, the directors may fix from time to time and before issue a series of Preferred Shares, the number of shares which are to comprise that series and the designation, rights, privileges, restrictions and conditions to be attached to that series of Preferred Shares including, without limiting the generality of the foregoing, the rate or amount of dividends or the method of calculating dividends, the

dates of payment of dividends, the redemption, purchase and/or conversion, and any sinking fund or other provisions.

The Preferred Shares of each series shall, with respect to the payment of dividends and the distribution of assets or return of capital in the event of liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, or any other return of capital or distribution of the assets of the Company among its shareholders for the purpose of winding-up its affairs, rank on a parity with the Preferred Shares of every other series and be entitled to preference over the Common and Class A Common Shares and over any other shares of the Company ranking junior to the Preferred Shares. The Preferred Shares of any series may also be given other preferences, not inconsistent with these articles, over the Common Shares and Class A Common Shares and any other shares of the Company ranking junior to the Preferred Shares of a series as may be fixed in accordance with terms outlined above.

If any cumulative dividends or amounts payable on the return of capital in respect of a series of Preferred Shares are not paid in full, all series of Preferred Shares shall participate rateably in respect of accumulated dividends and return of capital.

Unless the directors otherwise determine in the articles of amendment designating a series of Preferred Shares, the holder of each share or a series of Preferred Shares shall not, as such, be entitled to receive notice of or vote at any meeting of shareholders, except as otherwise specifically provided in the Act.

### 4. Rights of Shareholders

Under the Act, shareholders of the Company are entitled to examine, during its usual business hours, the Company's articles and by-laws, notices of directors and change of directors, any unanimous shareholder agreements, the minutes of meetings and resolutions of shareholders and the list of shareholders.

Shareholders of the Company may obtain a list of shareholders upon payment of a reasonable fee and sending an affidavit to the Company or its transfer agent stating, among other things, that the list of shareholders will not be used by any person except in connection with an effort to influence the voting of shareholders of the Company, an offer to acquire shares of the Company or any other matter relating to the affairs of the Company.

Under the Act, shareholders of the Company may apply to a court having jurisdiction directing an investigation to be made of the Company. If it appears to the court that the formation, business or affairs of the Company were conducted for fraudulent or unlawful purposes, or that the powers of the directors were exercised in a manner that is oppressive or unfairly disregards the interests of the shareholders, the court may order an investigation to be made of the Company.

To change the rights of holders of stock, where such rights are attached to an issued class or series of shares, requires the consent by a separate resolution of the holders of the class or series of shares, as the case may be, requiring a majority of two-thirds of the votes cast.

The Company is organized under the laws of Canada. The majority of the Company's directors, officers, and affiliates of the Company, as well as the experts named in this registration statement, are residents of Canada and, to the best of the Company's knowledge, all or a substantial portion of their assets and all of the Company's assets are located outside of the United States. As a result, it may be difficult for shareholders of the Company in the United States to effect

service of process on the Company or these persons above within the United States, or to realize in the United States upon judgments rendered against the Company or such persons. Additionally, a shareholder of the Company should not assume that the courts of Canada (i) would enforce judgments of U.S. courts obtained in actions against the Company or such persons predicated upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States, or (ii) would enforce, in original actions, liabilities against the Company or such persons predicated upon the U.S. federal securities laws or other laws of the United States.

Laws in the United States and judgments of U.S. courts would generally be enforced by a court of Canada unless such laws or judgments are contrary to public policy in Canada, are or arise from foreign penal laws or laws that deal with taxation or the taking of property by a foreign government and are not in compliance with applicable laws in Canada regarding the limitation of actions. Further, a judgment obtained in a U.S. court would generally be recognized by a court of Canada, except under the following examples:

- i) the judgment was rendered in a U.S. court that had no jurisdiction according to applicable laws in Canada; the judgment was subject to ordinary remedy (appeal, judicial review and any other judicial proceeding which ii) renders the judgment not final, conclusive or enforceable under the laws of the applicable state) or not final, conclusive or enforceable under the laws of the applicable state;
  - the judgment was obtained by fraud or in any manner contrary to natural justice or rendered in contravention of fundamental principles of procedure; and
- a dispute between the same parties, based on the same subject matter has given rise to a judgment rendered in a iv)court of Canada or has been decided in a third country and the judgment meets the necessary conditions for recognition in a court of Canada.

### 5. Meetings

Subject to the provisions of the Act, the annual general meeting of the shareholders shall be on such date in each year as the board of directors may determine, and a special meeting of the shareholders may be convened at any time by order of the President or by the board on their own motion or on the requisition of shareholders as provided for in the Act. Notice of the time and place of each meeting of shareholders shall be given not less than 21 days nor more than 60 days before the date of the meeting to each director and shareholder. A meeting of shareholders may be held without notice at any time and at any place provided a waiver of notice is obtained in accordance with section 136 of the Act. The quorum for the transaction of business at meetings of the shareholders shall consist of not less than two shareholders present or represented by proxy and holding in all not less than 10% percent of the outstanding shares entitled to vote at the meeting. At any meeting of shareholders, every person shall be entitled to vote who, at the time of the taking of a vote (or, if there is a record date for voting, at the close of business on such record date) is entered in the register of shareholders as the holder of one or more shares carrying the right to vote at such meeting, subject to the provisions of the Act.

#### 6. Ownership of Securities

There are no limitations imposed by the Act, or by the Articles or By-Law or any other constituent document of the Company on the right of non-resident or foreign shareholders to own or vote securities of the Company. However, the Investment Canada Act (Canada) will prohibit implementation, or if necessary, require divestiture of an investment deemed "reviewable" under the *Investment Canada Act* (Canada) by an investor that is not a "Canadian" as defined in the *Investment Canada Act* (Canada), unless after review the Minister responsible for the *Investment Canada Act* (Canada) is satisfied that the "reviewable" investment is likely to be of net benefit to Canada.

The following discussion summarizes the principal features of the Investment Canada Act for a non-Canadian who proposes to acquire common shares of the Company. The discussion is general only; it is not a substitute for independent legal advice from an investor's own adviser; and, except where expressly noted, it does not anticipate statutory or regulatory amendments.

The Investment Canada Act is a federal statute of broad application regulating the establishment and acquisition of Canadian businesses by non-Canadians, including individuals, governments or agencies thereof, corporations, partnerships, trusts or joint ventures, Investments by non-Canadians to acquire control over existing Canadian businesses or to establish new ones are either reviewable or notifiable under the Investment Canada Act. If an investment by a non-Canadian to acquire control over an existing Canadian business is reviewable under the Investment Canada Act, the Investment Canada Act generally prohibits implementation of the investment unless, after review, the Minister of Industry is satisfied that the investment is likely to be of net benefit to Canada.

An investment in the Company's common shares by a non-Canadian, who is not a resident of a World Trade Organization ("WTO") member, would be reviewable under the *Investment Canada Act* (Canada) if it was an investment to acquire control of the Company and the value of the assets of the Company was CAN \$5 million or more. An investment in common shares of the Company by a resident of a WTO member would be reviewable only if it was an investment to acquire control of the Company and the enterprise value of the assets of the Company was equal to or greater than a specified amount, which is published by the Minister after its determination for any particular year. This amount is currently CAN \$1 billion (unless the WTO member is party to one of a list of certain free trade agreements, in which case the amount is currently CAN \$1.5 billion); beginning January 1, 2019, both thresholds will be adjusted annually by a GDP (Gross Domestic Product) based index.

A non-Canadian would be deemed to acquire control of the Company for the purposes of the Investment Canada Act if the non-Canadian acquired a majority of the outstanding common shares (or less than a majority but controlled the Company in fact through the ownership of one-third or more of the outstanding common shares) unless it could be established that, on the acquisition, the Company is not controlled in fact by the acquirer through the ownership of such common shares. Certain transactions in relation to the Company's common shares would be exempt from review under the Investment Canada Act, including, among others, the following:

a) the acquisition of voting shares or other voting interests by any person in the ordinary course of that person's business as a trader or dealer in securities;

the acquisition of control of the Company in connection with the realization of security granted for a loan or other financial assistance and not for any purpose related to the provisions of the *Investment Canada Act* (Canada), if the acquisition is subject to approval under the *Bank Act* (Canada), the *Cooperative Credit Associations Act* (Canada), the *Insurance Companies Act* (Canada) or the *Trust and Loan Companies Act* (Canada); and

the acquisition of control of the Company by reason of an amalgamation, merger, consolidation or corporate reorganization following which the ultimate direct or indirect control of the Company, through the ownership of voting interests, remains unchanged.

### 7. Change in Control of Company

No provision of the Company's Articles or By-Law would have the effect of delaying, deferring, or preventing a change in control of the Company, and operate only with respect to a merger, acquisition or corporate restructuring of the Company or any of its subsidiaries. The Company no longer has a shareholder rights plan.

#### C. Material Contracts

The following are the material contracts of the Company, other than those mentioned elsewhere in this Form, to which
the Company or any member of the group is a party, for the two years immediately preceding publication of this
registration statement.

None

### **D. Exchange Controls**

There is no law or governmental decree or regulation in Canada that restricts the export or import of capital, or affects the remittance of dividends, interest or other payments to a non-resident holder of Common Shares, other than withholding tax requirements. Any such remittances to United States residents are generally subject to withholding tax, however no such remittances are likely in the foreseeable future. (See "Item 10E - Taxation", below.)

Except as provided in the Investment Canada Act (Canada), which has rules regarding certain acquisitions of shares by non-residents, there is no limitation imposed by Canadian law, or by the Company's Articles or By-Law, or by any other constituent documents of the Company, on the right of a non-resident to hold or vote the Company's common shares. Investment Canada Act is a Canadian federal statute of broad application regulating the establishment and acquisition of Canadian businesses by non-Canadians, including individuals, governments or agencies thereof, corporations, partnerships, trusts or joint ventures, . Investments by non-Canadians to acquire control over existing Canadian businesses or to establish new ones are either reviewable or notifiable under the Investment Canada Act. If an investment by a non-Canadian to acquire control over an existing Canadian business is reviewable under the Investment Canada Act, the Investment Canada Act generally prohibits implementation of the investment unless, after review, the Minister of Industry is satisfied that the investment is likely to be of net benefit to Canada.

#### E. Taxation

#### **Material U.S. Federal Income Tax Considerations**

The following is a summary of the anticipated material U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of the Company's common shares ("Common Shares").

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder as a result of the acquisition, ownership, and disposition of Common Shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares for such U.S. Holder. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any particular U.S. Holder. Except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and non-U.S. tax consequences of the acquisition, ownership, and disposition of Common Shares.

No opinion from U.S. legal counsel or ruling from the Internal Revenue Service (the "**IRS**") has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership and disposition of Common Shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, or contrary to, any position taken in this summary. In addition, because the authorities upon which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the positions taken in this summary.

### **Scope of this Summary**

#### **Authorities**

This summary is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations (whether final, temporary, or proposed), published rulings of the IRS, published administrative positions of the IRS, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the "Canada-U.S. Tax Convention"), and U.S. court decisions that are applicable and, in each case, as in effect and available, as of the date of this Annual Report. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive basis, which could affect the U.S. federal income tax consequences described in this summary. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive basis.

#### U.S. Holders

For purposes of this summary, a "U.S. Holder" is a beneficial owner of Common Shares that, for U.S. federal income tax purposes, is (a) an individual who is a citizen or resident of the U.S., (b) a corporation, or any other entity classified as a corporation for U.S. federal income tax purposes, that is created or organized in or under the laws of the U.S., any state in the U.S., or the District of Columbia, (c) an estate if the income of such estate is subject to U.S. federal income tax regardless of the source of such income, or (d) a trust if (i) such trust has validly elected to be treated as a U.S. person for U.S. federal income tax purposes or (ii) a U.S. court is able to exercise primary supervision over the administration of such trust and one or more U.S. persons have the authority to control all substantial decisions of such trust.

### Non-U.S. Holders

For purposes of this summary, a "**non-U.S. Holder**" is a beneficial owner of Common Shares other than a U.S. Holder. This summary does not address the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares to non-U.S. Holders. Accordingly, a non-U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and non-U.S. tax consequences (including the potential application of and operation of any tax treaties) of the acquisition, ownership, and disposition of Common Shares.

# U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares to U.S. Holders that are subject to special provisions under the Code, including the following U.S. Holders: (a) U.S. Holders that are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) U.S. Holders that are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) U.S. Holders that are dealers in securities or currencies or U.S. Holders that are traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) U.S. Holders that have a "functional currency" other than the U.S. dollar; (e) U.S. Holders that are liable for the alternative minimum tax under the Code; (f) U.S. Holders that own Common Shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (g) U.S. Holders that are subject to Section 451(b) of the Code; (h) U.S. Holders that acquired Common Shares in connection with the exercise of employee stock options or otherwise as compensation for services; (i) U.S. Holders that hold Common Shares other than as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (j) U.S. Holders who are U.S. expatriates or former long-term residents of the United States; (k) U.S. Holders that own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or value of the outstanding shares of the Company; or (1) corporations that accumulate earnings to avoid U.S. federal income tax. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal, U.S. state and local, and non-U.S. tax consequences of the acquisition, ownership, and disposition of Common Shares.

If an entity that is classified as a partnership (or other "pass-through" entity) for U.S. federal income tax purposes holds Common Shares, the U.S. federal income tax consequences to such partnership (or other "pass-through" entity) and the partners of such partnership (or owners of such other "pass-through" entity) generally will depend on the activities of the partnership (or other "pass-through" entity) and the status of such partners (or owners). This summary does not address the U.S. federal income tax consequences for any such partner or partnership (or other "pass-through" entity or owner). Partners of entities that are classified as partnerships (or owners of other "pass-through" entities) for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal tax consequences of the acquisition, ownership, and disposition of Common Shares.

#### Tax Consequences Other than U.S. Federal Income Tax Consequences Not Addressed

This summary does not address the U.S. state and local, U.S. federal estate and gift, U.S. Medicare contribution, or non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of Common Shares. Each U.S. Holder should consult its own tax advisor regarding the U.S. state and local, U.S. federal estate and gift, U.S. Medicare contribution, and non-U.S. tax consequences of the acquisition, ownership, and disposition of Common Shares. (See "Taxation—Canadian Federal Income Tax Considerations for U.S. Residents" below).

U.S.	Federal	Income '	Tax (	Conseq	uences	of the	Acq	uisition,	Ownership	, and I	Dispo	sition	of (	Common	Shares

**Distributions on Common Shares** 

General Taxation of Distributions

Subject to the "passive foreign investment company" rules discussed below, a U.S. Holder that receives a distribution, including a constructive distribution, with respect to Common Shares will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of the current or accumulated "earnings and profits" of the Company, as computed for U.S. federal income tax purposes. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated (a) first, as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the Common Shares, and (b) thereafter, as gain from the sale or exchange of such Common Shares. (See more detailed discussion at "Disposition of Common Shares" below). The Company may not maintain calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder should therefore assume that any distribution by the Company with respect to Common Shares will constitute a dividend.

Reduced Tax Rates for Certain Dividends

A dividend paid by the Company generally will be taxed at the preferential tax rates applicable to long-term capital gains if (a) the Company is a "qualified foreign corporation" (as defined below), (b) the U.S. Holder receiving such dividend is an individual, estate, or trust, and (c) such dividend is paid on Common Shares that have been held by such U.S. Holder for at least 61 days during the 121-day period beginning 60 days before the "ex-dividend date." The Company generally will be a "qualified foreign corporation" under Section 1(h)(11) of the Code (a "QFC") if (a) the Company is eligible for the benefits of the Canada-U.S. Tax Convention, or (b) Common Shares are readily tradable on an established securities market in the U.S.

However, even if the Company satisfies one or more of such requirements, the Company will not be treated as a QFC if the Company is a "passive foreign investment company," or "PFIC" (as defined below) for the taxable year during which the Company pays a dividend or for the preceding taxable year.

As discussed below, the Company does not believe that it was a PFIC for the taxable year ended December 31, 2018, and does not expect that it will be a PFIC for the taxable year ending December 31, 2019. (See more detailed

discussion at "Additional Rules that May Apply to U.S. Holders" below). However, there can be no assurance that the IRS will not challenge the determination made by the Company concerning its PFIC status or that the Company will not be a PFIC for the current taxable year or any subsequent taxable year.

Accordingly, although the Company expects that it may be a QFC for the taxable year ending December 31, 2019, there can be no assurance that the IRS will not challenge the determination made by the Company concerning its QFC status, or that the Company will be a QFC for the taxable year ending December 31, 2019, or any subsequent taxable year.

If the Company is not a QFC, subject to the PFIC rules discussed below, a dividend paid by the Company to a U.S. Holder, including a U.S. Holder that is an individual, estate, or trust, generally will be taxed at ordinary income tax rates (and not at the preferential tax rates applicable to long-term capital gains). The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the dividend rules.

Distributions Paid in Foreign Currency

The amount of a distribution paid to a U.S. Holder in foreign currency generally will be equal to the U.S. dollar value of such distribution based on the exchange rate applicable on the date of receipt. A U.S. Holder that does not convert foreign currency received as a distribution into U.S. dollars on the date of receipt generally will have a tax basis in such foreign currency equal to the U.S. dollar value of such foreign currency on the date of receipt. Such a U.S. Holder generally will recognize ordinary income or loss on the subsequent sale or other taxable disposition of such foreign currency (including an exchange for U.S. dollars).

Dividends Received Deduction

Dividends paid on Common Shares generally will not be eligible for the "dividends received deduction." The availability of the dividends received deduction is subject to complex limitations that are beyond the scope of this discussion, and a U.S. Holder that is a corporation should consult its own tax advisor regarding the dividends received deduction.

### **Disposition of Common Shares**

Subject to the PFIC rules discussed below, a U.S. Holder will recognize capital gain or loss on the sale or other taxable disposition of Common Shares in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in the Common Shares sold or otherwise disposed of. A U.S. Holder's tax basis in Common Shares generally will be such U.S. Holder's U.S. dollar cost for such Common Shares. Such gain or loss will be long-term capital gain or loss if the Common Shares have been held for more than one year at the time of sale or other taxable disposition. Gain or loss recognized by a U.S. Holder on the sale or other taxable disposition of Common Shares generally will be treated as "U.S. source" for purposes of applying the U.S. foreign tax credit rules.

Preferential tax rates apply to long-term capital gains of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gains of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

The amount realized on a sale or other taxable disposition of Common Shares for an amount in foreign currency will generally be the U.S. dollar value of this amount on the date of sale or disposition. On the settlement date, the U.S. Holder will recognize U.S. source foreign currency gain or loss (taxable as ordinary income or loss) equal to the difference (if any) between the U.S. dollar value of the amount received based on the exchange rates in effect on the date of sale or other disposition and the settlement date.

# Foreign Tax Credit

A U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on Common Shares or gain from the sale or other taxable disposition of Common Shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." In addition, this limitation is calculated separately with respect to specific categories of income. Dividends paid by the Company generally will constitute "foreign source" income and generally will be categorized as "passive income." The foreign tax credit rules are complex, and each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules.

### Information Reporting; Backup Withholding Tax

Payments made within the U.S., or by a U.S. payor or U.S. middleman, of distributions with respect to, or proceeds arising from the sale or other taxable disposition of, Common Shares generally will be subject to information reporting and backup withholding tax, at the rate of 24%, if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, U.S. Holders that are corporations generally are excluded from these information reporting and backup withholding tax rules. Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding tax rules.

#### Additional Rules that May Apply to U.S. Holders

The Company believes it was a PFIC in one or more previous taxable years. If the Company is or becomes a PFIC, or U.S. Holders held Common Shares while the Company was a PFIC, the preceding sections of this summary may not describe the U.S. federal income tax consequences to U.S. Holders of the acquisition, ownership, and disposition of Common Shares.

# Passive Foreign Investment Company

The Company generally will be a PFIC if, for a taxable year, (a) 75% or more of the gross income of the Company for such taxable year is passive income ("income test") or (b) on average for such taxable year, 50% or more of the assets held by the Company either produce passive income or are held for the production of passive income ("asset test"), based on the fair market value of such assets. Passive income includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions. Passive income does not include any interest, dividends, rents, or royalties that are received or accrued by the Company from a "related person" (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income. Assets that produce or are held for the production of passive income generally include cash, even if held as working capital or raised in a public offering, marketable securities and other assets that may produce passive income.

For purposes of the income test and asset test, if the Company owns, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, the Company will be treated as if it (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, if the Company is a PFIC and owns shares of another foreign corporation that also is a PFIC ("subsidiary PFIC"), a disposition of the shares of such other foreign corporation or a distribution received from such other foreign corporation generally will be treated as an indirect disposition by a U.S. Holder or an indirect distribution received by a U.S. Holder, subject to the rules of Section 1291 of the Code discussed below. Accordingly, U.S. Holders should be aware that they could be subject to tax even if no distributions are received and no redemptions or other dispositions of Common Shares are made. To the extent that gain recognized on the actual disposition by a U.S. Holder of Common Shares or income recognized by a U.S. Holder on an actual distribution received on Common Shares was previously subject to U.S. federal income tax under these indirect ownership rules, such amount generally should not be subject to U.S. federal income tax.

If the Company is a PFIC, or a U.S. Holder held Common Shares while the Company was a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the acquisition, ownership, and disposition of Common Shares will depend on whether such U.S. Holder makes an election to treat the Company and any subsidiary PFIC as a "qualified electing fund" or "QEF" under Section 1295 of the Code (a "QEF Election") or a mark-to-market election for the Company under Section 1296 of the Code (a "Mark-to-Market Election"). A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election is referred to in this summary as a "Non-Electing U.S. Holder."

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of Common Shares, and any "excess distribution" (as defined in Section 1291(b) of the Code) paid on the Common Shares, must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the Common Shares. The amount of any such gain or excess distribution allocated to the current year and any year prior to the first year in which the Company was a PFIC generally will be subject to U.S. federal income tax as ordinary income in the current year. The amount of any such gain or excess distribution allocated to other years generally will be subject to U.S. federal income tax in the

current year at the highest tax rate applicable to ordinary income in each such prior year, and a Non-Electing U.S. Holder will be required to pay interest on the resulting tax liability for each such prior year, calculated as if such tax liability had been due in each such prior year.

A U.S. Holder that makes a QEF Election generally will not be subject to the rules of Section 1291 of the Code discussed above. Instead, a U.S. Holder that makes a QEF Election generally will be subject to U.S. federal income tax on such U.S. Holder's pro rata share of (a) the "net capital gain" of the Company, which will be taxed as long-term capital gain to such U.S. Holder, and (b) the "ordinary earnings" of the Company, which will be taxed as ordinary income to such U.S. Holder. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each taxable year in which the Company is a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by the Company. Taxable gains on the disposition of Common Shares by a U.S. Holder that has made a timely and effective QEF Election are generally capital gains. Each U.S. Holder should consult its own tax advisor regarding the availability and desirability of, and procedure for, making a timely and effective QEF Election for the Company and any subsidiary PFIC.

A U.S. Holder that makes a Mark-to-Market Election generally will not be subject to the rules of Section 1291 of the Code discussed above. A U.S. Holder may make a Mark-to-Market Election only if Common Shares are "marketable stock" (as defined in Section 1296(e) of the Code). A U.S. Holder that makes a Mark-to-Market Election will include in gross income, as ordinary income, for each taxable year in which the Company is a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the Common Shares as of the close of such taxable year over (b) such U.S. Holder's tax basis in such Common Shares. A U.S. Holder that makes a Mark-to-Market Election will, subject to certain limitations, be allowed a deduction in an amount equal to the excess, if any, of (a) such U.S. Holder's adjusted tax basis in the Common Shares over (b) the fair market value of such Common Shares as of the close of such taxable year. Any gain recognized upon a disposition of Common Shares by a U.S. Holder who has made a Mark-to-Market Election generally will be treated as ordinary income, and any loss recognized upon a disposition generally will be treated as an ordinary loss to the extent of net mark-to-market income recognized for all prior taxable years. Any loss recognized in excess thereof will be taxed as a capital loss. Capital losses are subject to significant limitations under the Code. A Mark-to-Market election may not be made with respect to the stock of any subsidiary PFIC because such stock is not "marketable stock." Hence, a Mark-to-Market Election will not be effective to eliminate the application of the default rules of Section 1291 of the Code, described above, with respect to deemed dispositions of subsidiary PFIC stock or excess distributions with respect to a subsidiary PFIC. Each U.S. Holder should consult its own tax advisor regarding the availability and desirability of, and procedure for, making a timely and effective Mark-to-Market Election with respect to Common Shares.

The Company believes it was a PFIC in one or more prior taxable years but does not believe that it was a PFIC for the taxable years ended December 31, 2018 and December 31, 2017, and, based on current operations and financial projections, does not expect that it will be a PFIC for the taxable year ending December 31, 2019. The determination of whether the Company was, or will be, a PFIC for a taxable year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether the Company will be a PFIC for the taxable year ending December 31, 2019, and each subsequent taxable year depends on the assets and income of the Company over the course of each such taxable year and, as a result, cannot be predicted with certainty as of the date of this Annual Report. Accordingly, there can be no assurance that the IRS will not challenge the determination made by the Company concerning its PFIC status or that the Company was not, or will not be, a PFIC for any taxable year.

If the Company meets the income test or asset test for any taxable year during which a U.S. Holder owns Common Shares, the Company will be treated as a PFIC with respect to such U.S. Holder for that taxable year and for all subsequent taxable years, regardless of whether the Company meets the PFIC income test or asset test for such subsequent taxable years, unless the U.S. Holder elects to recognize any unrealized gain in the Common Shares or makes a timely and effective QEF Election or Mark-to-Market Election.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisor regarding the PFIC rules and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares.

THE ABOVE SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL U.S. FEDERAL INCOME TAX CONSIDERATIONS APPLICABLE TO U.S. HOLDERS WITH RESPECT TO THE ACQUISITION, OWNERSHIP, AND DISPOSITION OF COMMON SHARES. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN THEIR PARTICULAR CIRCUMSTANCES.

#### **Canadian Federal Income Tax Considerations for United States Residents**

The following, as of the date hereof, is a summary of the principal Canadian federal income tax considerations generally applicable to the holding and disposition of common shares by a holder (a) who, for the purposes of the Income Tax Act (Canada) (the "Tax Act") and at all relevant times, is not resident or deemed to be resident in Canada, deals at arm's length and is not affiliated with the Company, holds the common shares as capital property and does not use or hold, and is not deemed to use or hold, the common shares in the course of carrying on, or otherwise in connection with, a business in Canada, and (b) who, for the purposes of the *Canada - United States Income Tax Convention* (the "Convention") and at all relevant times, is a resident solely of the United States, has never been a resident of Canada, has not held or used (and does not hold or use) common shares in connection with a permanent establishment or fixed base in Canada, and who otherwise qualifies for the full benefits of the Convention. The Canada Revenue Agency has introduced special forms to be used in order to substantiate eligibility for benefits under the Convention, and affected holders should consult with their own advisers with respect to these forms and all relevant compliance matters.

Holders who meet all such criteria in clauses (a) and (b) above are referred to in this summary as a "U.S. Holder" or "U.S. Holders", and this summary only addresses such U.S. Holders. The summary does not deal with special situations, such as particular circumstances of traders or dealers, limited liability companies, tax-exempt entities, insurers, financial institutions (including those to which the mark-to-market provisions of the Tax Act apply), entities considered fiscally transparent under applicable law, or otherwise.

This summary is based on the current provisions of the Tax Act, and the regulations thereunder, all proposed amendments to the Tax Act and regulations publicly announced by the Minister of Finance (Canada) to the date hereof, the current provisions of the Convention and our understanding of the current administrative practices of the Canada Revenue Agency. It has been assumed that all currently proposed amendments to the Tax Act and regulations will be enacted as proposed and that there will be no other relevant change in any governing law, the Convention or administrative policy, although no assurance can be given in these respects. This summary does not take into account

provincial, U.S. or other foreign income tax considerations, which may differ significantly from those discussed herein.

This summary is not exhaustive of all possible Canadian income tax consequences. It is not intended as legal or tax advice to any particular U.S. Holder and should not be so construed. The tax consequences to a U.S. Holder will depend on that U.S. Holder's particular circumstances. All holders, including U.S. Holders or prospective U.S. Holders as defined above, should consult their own tax advisors with respect to the tax consequences applicable to them having regard to their own particular circumstances. The discussion below is qualified accordingly.

For the purposes of the Tax Act, all amounts relating to the acquisition, holding or disposition of the common shares must be converted into Canadian dollars based on the relevant exchange rate applicable thereto.

Dividends

Dividends paid or deemed to be paid or credited by the Company to a U.S. Holder are subject to Canadian withholding tax. In general terms, the Tax Act provides for withholding at the rate of 25% unless the holder is able to substantiate a reduced rate under an applicable tax treaty or convention.

The rate of withholding tax on dividends paid to a U.S. Holder who can substantiate eligibility for benefits under the Convention is generally limited to 15% of the gross amount of the dividends (or 5%, if the beneficial owner of the dividends is a company that owns at least 10% of the voting stock of the Company).

Dispositions

A U.S. Holder is generally not subject to tax under the Tax Act in respect of a capital gain realized on the disposition of a common share in the open market, unless the share is "taxable Canadian property" to the holder thereof and the U.S. Holder is not entitled to relief under the Convention.

Provided that the Company's common shares are listed on a "designated stock exchange" for purposes of the Tax Act (which currently includes the TSX Venture) at the time of disposition, a common share will generally not constitute taxable Canadian property to a U.S. Holder unless, at any time during the 60 month period ending at the time of disposition, (i) the U.S. Holder, persons with whom the U.S. Holder did not deal at arm's length, partnerships in which the U.S. Holder or such non-arm's length persons holds a membership interest directly or indirectly, or the U.S. Holder together with any of the foregoing, owned 25% or more of the issued shares of any class or series of the Company AND (ii) more than 50% of the fair market value of the share was derived directly or indirectly from certain types of assets, including real or immoveable property situated in Canada, Canadian resource properties or timber resource properties, and options, interests or rights in respect of any of the foregoing. Common shares may also be deemed to be taxable Canadian property under the Tax Act in certain other circumstances. A U.S. Holder who may hold common shares as taxable Canadian property should consult with the U.S. Holder's own tax advisors in advance of any disposition or deemed disposition of common shares under the Tax Act in order to determine whether any relief from tax under the Tax Act may be available by virtue of the Convention, and any related compliance procedures.

While intended to address material Canadian federal income tax considerations relevant to the holding or disposition of common shares by U.S. Holders, this summary is for general information purposes only, and is not intended to be, nor should it be construed to be, legal or tax advice to any holder or prospective holder of common shares. No opinion was requested by the Company, or is provided by its legal counsel and/or auditors. Accordingly, holders and prospective holders of common shares (including U.S. Holders as defined above) should consult their own tax advisors regarding the consequences of purchasing, owning, and disposing of common shares of the Company.

F. I	Dividends	and	Paving	Agents
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Not applicable

G. Statement by Experts
Not applicable
H. Documents on Display
Exhibits attached to this Annual Report are available for viewing on EDGAR, or may be inspected at the head office of Company at 2 – 1250 Waverley Street, Winnipeg, Manitoba, Canada R3T 6C6, during normal business hours. Copies of the Company's financial statements and other continuous disclosure documents required under Canadian securities legislation are available for viewing on the internet at <a href="https://www.sedar.com">www.sedar.com</a> .
I. Subsidiary Information
Not applicable
ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK
INTEREST RATE RISK
The primary objective of the Company's investment activities is to preserve principal by maximizing the income the Company receives from such activities without significantly increasing risk. Securities that the Company invests in are generally highly liquid short-term investments such as term deposits with terms to maturity of less than one year.
Interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is not exposed to any significant interest rate risk as it does not have any variable rate borrowings.

#### FOREIGN EXCHANGE RISK

The Company's primary currency of operations is the US dollar. The Company has expenditures and holds investments denominated in US dollars. During the year ended December 31, 2018, it is estimated that approximately 70% of the Company's consolidated expenditures were denominated in a foreign currency, primarily being the US dollar and 100% of the Company's consolidated product revenues were denominated in the US dollar. To date the Company has not entered into any future or forward contracts, or other derivative instruments, for either hedging or speculative purposes, to mitigate the impact of foreign exchange fluctuations on these costs, revenues or on U.S. dollar denominated debt. A 10% change in foreign exchange rates for the year ended December 31, 2018 would have impacted loss for the year by 10%.

10% change in foreign exchange rates for the year ended December 31, 2018 would have impacted loss for the year by 10%.
ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES
Not applicable
PART II
ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES
Not applicable
109

# ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable

#### **ITEM 15. CONTROLS AND PROCEDURES**

#### Disclosure Controls and Procedures

The Company's disclosure controls and procedures, as such term is defined in Rules 13(a)-13(e) and 15(d)-15(e) of the Exchange Act are designed to provide reasonable assurance that all relevant information is communicated to senior management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), to allow timely decisions regarding required disclosure. We carried out an evaluation, under the supervision and with the participation of our management, including our CEO and CFO. Based on this evaluation these officers concluded that as of the end of the period covered by this Annual Report on Form 20-F, our disclosure controls and procedures were not effective to ensure that the information required to be disclosed by our company in reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. These disclosure controls and procedures include controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management, including our company's principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure. The conclusion that the disclosure controls and procedures were not effective was due to the presence of a material weakness in internal control over financial reporting as identified below under the heading "Internal Controls over Financial Reporting Procedures". Management anticipates that such disclosure controls and procedures will not be effective until the material weakness is remediated.

#### Management's Annual Report on Internal Control over Financial Reporting

The management of the Company, including the CEO and CFO, is responsible for establishing and maintaining adequate internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). The Company's internal control system was designed to provide reasonable assurance to the Company's management and the board of directors regarding the reliability of financial reporting and preparation and fair presentation of published financial statements for external purposes in accordance with IFRS. Internal control over financial reporting includes those policies and procedures that:

- 1. pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial 2. statements in accordance with IFRS, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- 3. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the design and operation of internal control over financial reporting as of December 31, 2018, based on the framework set forth in Internal Control – Integrated Framework, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the Company's ICFR was not effective as at December 31, 2018 due to the following material weaknesses:

Due to the limited number of staff with an appropriate level of technical accounting knowledge, experience and training and the inability to attract outside expert advice on a cost effective basis, there is a risk of material misstatements related to the accounting and reporting for complex accounting and income tax transactions. This control deficiency creates a reasonable possibility that a material misstatement of the annual financial statements would not have been prevented or detected in a timely manner.

#### Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report is not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report.

#### Changes in Internal Control over Financial Reporting and Planned Remediation Activities

There have been no changes in the Company's internal controls identified in connection with the evaluation described in the preceding paragraph that occurred during the period covered by this Annual Report on Form 20-F which have materially affected, or are reasonably likely to materially affect, the Company's internal controls over financial reporting.

No remediation activities have been undertaken to date in fiscal 2019. Due to resource constraints and the present stage of the Company's development the Company does not have sufficient size and scale to warrant the hiring of additional staff to correct this material weakness at this time.

#### **ITEM 16. RESERVED**

Not applicable

#### ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

As of December 31, 2018, Mr. Brent Fawkes CPA, CA, a non-employee director, was a member of the audit committee of the Company. The board of directors of the Company has determined that Mr. Fawkes (i) qualifies as an audit committee financial expert pursuant to Items 16A(b) and (c) of Form 20-F and (ii) is independent as defined in section 803 of the NYSE American Company Guide and Rule 10A-3 of the Exchange Act. In addition, all members of the audit committee are considered financially literate under applicable Canadian laws.

#### **ITEM 16B. CODE OF ETHICS**

On August 23, 2004, the Company adopted a written Code of Business Conduct and Ethics ("Code of Ethics") that applies to the Company's principal executive officer, principal financial officer and to all its other employees. These standards are a guide to help ensure that all of the Company's employees live up to high ethical standards. A copy of the Code of Ethics is maintained on the Company's website at <a href="https://www.medicure.com">www.medicure.com</a>.

During the most recently completed fiscal year, the Company has neither: (a) amended its Code of Ethics; nor (b) granted any waiver (including any implicit waiver) form any provision of its Code of Ethics.

#### ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

On November 21, 2018, the Company changed its auditors from Ernst & Young LLP to PricewaterhouseCoopers LLP.

In accordance with the requirements of the Sarbanes-Oxley Act of 2002 and the Audit Committee's charter, all audit and audit-related work and all non-audit work performed by the chartered accountants, Ernst & Young LLP and PricewaterhouseCoopers LLP, is approved in advance by the Audit Committee, including the proposed fees for such work. The Audit Committee is informed of each service actually rendered that was approved through its pre-approval process.

The Company incurred the following fees to Ernst & Young LLP for the previous two fiscal years. For the fiscal year ended December 31, 2018, the Company did not incur any fees from PricewaterhouseCoopers LLP, however \$140,000 of audit fees were accrued at December 31, 2018.

The Company incurred the following fees to Ernst & Young LLP for the previous two fiscal years. As at December 31, 2017, the Company had accrued \$327,000 relating to Ernst & Young LLP audit fees.

(a) Audit fees 2018 2017 \$ - \$254,000

Audit fees consist of fees billed for the audit of the Company's annual financial statements.

(b) Audit-related fees 2018 2017 \$ - \$ -

Audit-related fees consist of fees billed for accounting consultations.

- (c) Tax fees 2018 2017 \$ - \$ -
- (d) All other fees 2018 2017 \$ - \$ -
- (e) Audit Committee's Pre-approval Policies

All PricewaterhouseCoopers LLP and Ernst & Young LLP services and fees are approved by the Audit Committee.

#### ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable

#### ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

On May 16, 2018, the Company announced that the TSX Venture Exchange ("TSXV") accepted the Company's notice of intention to make a normal course issuer bid ("NCIB"). In the opinion of the Company, its common shares have been trading at prices that do not reflect its underlying value. Accordingly, the Company believes that purchasing its common shares for cancellation, at present pricing, represents an opportunity to enhance value for its shareholders.

Under the terms of the NCIB, the Company may acquire up to an aggregate of 794,088 common shares. The NCIB commenced on May 28, 2018 and will end on May 27, 2019, or on such earlier date as the Company may complete its maximum purchases under the NCIB. The actual number of common shares which will be purchased, if any, and the timing of such purchases will be determined by the Company. All common shares purchased by the Company will be purchased on the open market through the facilities of TSXV by PI Financial Corp. ("PI") acting on behalf of the Company in accordance with the policies of the TSXV and will be surrendered by the Company to its transfer agent for cancellation. The prices that the Company will pay for common shares purchased will be the market price of the shares at the time of purchase.

The Company also announced that it has entered into an automatic share purchase plan with PI (the "**Plan**") in order to facilitate repurchases of its common shares under the NCIB. Under the Plan, PI may purchase common shares under the NCIB at times when the Company would ordinarily not be permitted to do so, due to regulatory restrictions or self-imposed blackout periods.

Purchases under the Plan will be made by PI based upon parameters prescribed by the TSXV, applicable Canadian securities laws and terms of the Plan.

During the year ended December 31, 2018 the Company repurchased and cancelled 441,400 common shares. The aggregate price paid for these common shares totaled \$3,021,340. As a result of the NCIB, during the year ended December 31, 2018 the Company recorded \$479,993 directly in its retained deficit representing the difference between the aggregate price paid for these common shares and a reduction of the Company's share capital totaling \$3,501,333.

Subsequent to December 31, 2018, the Company repurchased an additional 159,900 common shares to be cancelled for an aggregate cost of \$999,826.

# ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.
ITEM 16G. CORPORATE GOVERNANCE
Not applicable.
ITEM 16H. MINE SAFETY DISCLOSURE
Not applicable.
113

#### **PART III**

#### **ITEM 17. FINANCIAL STATEMENTS**

Not applicable. See "Item 18 – Financial Statements".

#### **ITEM 18. FINANCIAL STATEMENTS**

The consolidated financial statements were prepared in accordance with IFRS, as issued by the IASB, and are presented in Canadian dollars.

The consolidated financial statements are in the following order:

Reports of Independent Registered Public Accounting Firms;
 Consolidated Statements of Financial Position;
 Consolidated Statements of Net Income and Comprehensive Income;
 Consolidated Statements of Changes in Deficiency
 Consolidated Statements of Cash Flows; and
 Notes to Consolidated Financial Statements.

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Consolidated Financial Statements

(Expressed in Canadian Dollars)

# MEDICURE INC.

Year ended December 31, 2018

#### MANAGEMENT REPORT

The accompanying consolidated financial statements have been prepared by management and approved by the Board of Directors of Medicure Inc. (the "Company"). Management is responsible for the information and representations contained in these consolidated financial statements.

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. The significant accounting policies, which management believes are appropriate for the Company, are described in note 3 to these consolidated financial statements. The Company maintains a system of internal control and processes intended to provide reasonable assurance that assets are safeguarded and to ensure that relevant and reliable financial information is produced.

The Board of Directors is responsible for reviewing and approving these consolidated financial statements and overseeing management's performance of its financial reporting responsibilities. An Audit Committee of non-management Directors is appointed by the Board. The Audit Committee reviews the consolidated financial statements, audit process and financial reporting with management and with the external auditors and reports to the Board of Directors prior to the approval of the audited consolidated financial statements for publication.

PricewaterhouseCoopers LLP, the Company's external auditors for the year ended December 31, 2018, who are appointed by the shareholders, audited the consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) to enable them to express to the shareholders their opinion on these consolidated financial statements as at and for the year ended December 31, 2018. Ernst & Young LLP, the Company's external auditors for the years ended December 31, 2017 and 2016, who were appointed by the shareholders, audited the consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) to enable them to express to the shareholders their opinion on these consolidated financial statements as at December 31, 2017 and for the years ended December 31, 2017 and 2016. Their reports follow.

/s/ Albert Friesen /s/ James Kinley

**Dr. Albert D. Friesen** Mr. James F. Kinley CA Chief Executive Officer Chief Financial Officer

April 29, 2019

Rei	port	of	Inde	pendent	Regis	tered I	Public	Account	ting	Firm

To the board of directors and shareholders of Medicure Inc.

#### Opinion on the Financial Statements

We have audited the accompanying consolidated statement of financial position of Medicure Inc. and its subsidiaries (the Company) as of December 31, 2018, and the related statements of net income and comprehensive income, changes in equity and cash flows for the year then ended. In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for year then ended in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

#### Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
Winnipeg, Canada
April 29, 2019
We have served as the Company's auditor since 2018.
117

Report of independent registered public accounting firm
To the Shareholders of  Medicure Inc.
Opinion on the consolidated financial statements
We have audited the accompanying consolidated financial statements of <b>Medicure Inc.</b> [the "Company"], which comprise the consolidated statement of financial position as at December 31, 2017, the consolidated statements of net income and comprehensive income, changes in equity and cash flows for each of the years in the two-year period ended December 31, 2017, and the related notes, comprising a summary of significant accounting policies and other explanatory information.
In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as at December 31, 2017, and its consolidated financial performance and its consolidated cash flows for each of the years in the two-year period ended December 31, 2017, in accordance with International Financial Reporting Standards ["IFRSs"] as issued by the International Accounting Standards Board.
Restatement of consolidated financial statements
Without modifying our opinion, we draw attention to note 21 to the consolidated financial statements for the year ended December 31, 2017 which explains that the consolidated financial statements have been restated.
Basis for opinion
Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards ["IFRSs"] as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States) ["PCAOB"]. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement, whether due to error or fraud. Those standards also require that we comply with ethical requirements, including independence. We are required to be independent with respect to the Company in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We are a public accounting firm registered with the PCAOB.

An audit includes performing procedures to assess the risks of material misstatements of the consolidated financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included obtaining and examining, on a test basis, audit evidence regarding the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Accordingly, we express no such opinion.

An audit also includes evaluating the appropriateness of accounting policies and principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a reasonable basis for our audit opinion.

We served as the Company's auditor from 2013 to 2017.

Winnipeg, Canada

May 1, 2018

# **Consolidated Statements of Financial Position**

# (expressed in Canadian dollars)

As at December 31	Note	2018	2017
Assets			
Current assets:			
Cash and cash equivalents		\$24,139,281	\$5,260,480
Short-term investments		47,747,000	-
Accounts receivable	6	10,764,579	8,588,255
Consideration receivable	5	-	82,678,366
Inventories	7	4,239,267	3,075,006
Prepaid expenses		2,696,693	903,914
Assets held for sale	5	-	14,052,861
Total current assets		89,586,820	114,558,882
Non-current assets:			
Property, plant and equipment	8	316,013	221,622
Intangible assets	9	1,705,250	1,756,300
Holdback receivable	5 & 10	11,909,368	12,068,773
Other assets		116,786	-
Deferred tax assets	13	127,176	326,108
Total non-current assets		14,174,593	14,372,803
Total assets		\$103,761,413	\$128,931,685
Liabilities and Equity			
Current liabilities:			
Accounts payable and accrued liabilities	9, 15(a), 16(a) & 16(b)	\$14,378,215	\$10,371,103
Accrued transaction costs	5	-	22,360,730
Current income taxes payable	13	1,058,487	2,428,560
Current portion of royalty obligation	11	1,495,548	1,537,202
Liabilities held for sale	5	-	6,976,313
Total current liabilities		16,932,250	43,673,908
Non-current liabilities			
Royalty obligation	11	2,035,010	2,911,810
License fee payable	9	-	501,800
Other long-term liabilities	10	1,200,608	1,135,007
Total non-current liabilities		3,235,618	4,548,617
Total liabilities		20,167,868	48,222,525
Equity:			

Share capital	12(b)	122,887,105	125,733,727
Warrants	12(d)	1,948,805	1,948,805
Contributed surplus		7,628,188	6,897,266
Accumulated other comprehensive	e income	1,267,717	673,264
Deficit		(50,138,270)	(54,543,902)
Total Equity		83,593,545	80,709,160
Total liabilities and equity		\$103.761.413	\$128.931.685

Commitments and contingencies 15(a) & 15(d)
Subsequent events 10, 12(b), 15(a) & 21

On behalf of the board

"Dr. Albert D. Friesen" "Mr. Brent Fawkes"

Director Director

See accompanying notes to the consolidated financial statements

# Consolidated Statements of Net Income and Comprehensive Income

# (expressed in Canadian dollars)

For the year ended December 31 Revenue, net	Note	2018	2017	2016
Product sales, net		\$29,109,365	\$27,132,832	\$29,304,800
Cost of goods sold	7 & 9	4,152,238	3,464,686	3,721,191
Gross profit		24,957,127	23,668,146	25,583,609
		, ,	, ,	, ,
Expenses				
Selling, general and administrative		19,502,337	14,867,635	15,417,604
Research and development		6,681,013	5,148,233	3,630,079
•		26,183,350	20,015,868	19,047,683
(Loss) income before the undernoted		(1,226,223)	3,652,278	6,535,926
Other expense (income):				
Revaluation of holdback receivable	10	1,472,999	(82,489)	-
Impairment loss	9	-	635,721	-
		1,472,999	553,232	-
Finance (income) costs:				
Finance (income) expense, net	14	(1,060,932)	837,461	2,478,914
Foreign exchange (gain) loss, net		(6,460,805)	(175,459)	262,469
		(7,521,737)	662,002	2,741,383
Net income before income taxes		\$4,822,515	\$2,437,044	\$3,794,543
Income tax (expense) recovery				
Current	13	(677,900)	9,392,836	(501,315)
Deferred	13	(218,976)	(333,187)	331,095
		(896,876)	9,059,649	(170,220)
Net income before discontinued operations		\$3,925,639	\$11,496,693	\$3,624,323
Net income from discontinued operations, net of tax	5	-	31,924,191	23,358,318
Net income		\$3,925,639	\$43,420,884	\$26,982,641
Translation adjustment, attributable to:				
Continuing operations		594,453	(30,295)	(400,829)
Discontinued operations		-	21,567	(21,567)
Comprehensive income		\$4,520,092	\$43,412,156	\$26,560,245

Earnings per share from continuing operations

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Basic	12(e)	\$0.25	\$0.74	\$0.24
Diluted	12(e)	\$0.24	\$0.63	\$0.21
Earnings per share from discontinued operations Basic Diluted	12(e) 12(e)	\$- \$-	\$2.04 \$1.76	\$1.56 \$1.35
Earnings per share Basic Diluted	12(e)	\$0.25	\$2.78	\$1.80
	12(e)	\$0.24	\$2.39	\$1.56

See accompanying notes to the consolidated financial statements.

# **Consolidated Statements of Changes in Equity**

# (expressed in Canadian dollars)

# Attributable to shareholders of the Company

#### Accumulated

		Share		Contributed	other			Noi	n-
	Note	Capital	Warrants	Surplus	comprehen income	Deficit sive	Total	Conf <b>Foliah</b> g Interest <b>Equity</b>	
					(loss)				1 0
Balance, December 31, 2017		\$125,733,727	\$1,948,805	\$6,897,266	\$673,264	\$(54,543,902)	\$80,709,160	\$-	\$80,709,160
Net income for the year ended December 31, 2018		-	-	-	-	3,925,639	3,925,639	-	3,925,639
Other comprehensive income for the year ended December 31, 2018		-	-	-	594,453	-	594,453	-	594,453
Transactions with owners, recorded directly in equity Buy-back of									
common shares	12(b)	(3,501,333 )	) -	-	-	479,993	(3,021,340)	-	(3,021,340
Stock options exercised	12(c)	654,711	-	(291,253)	-	-	363,458	-	363,458
Share-based compensation	12(c)	-	-	1,022,175	-	-	1,022,175	-	1,022,175
		(2,846,622)	) -	730,922	-	479,993	(1,635,707)	-	(1,635,707

Total transactions with owners Balance,

December 31, \$122,887,105 \$1,948,805 \$7,628,188 \$1,267,717 \$(50,138,270) \$83,593,545 \$- \$83,593,545

2018

(continued on next page)

See accompanying notes to the consolidated financial statements.

# **Consolidated Statements of Changes in Equity (continued)**

# (expressed in Canadian dollars)

# Attributable to shareholders of the Company

#### Accumulated

	Note	Share Capital	Warrants	Contributed Surplus	other compreher income	Deficit <b>nsive</b>	Total	Non- Controlling Interest	Tot Equ
Balance,					(loss)				
December 31, 2016		\$124,700,345	\$2,020,152	\$6,756,201	\$681,992	\$(97,964,786)	\$36,193,904	\$2,090,000	\$38
Net income for the year ended December 31, 2017 Other		-	-	-	-	43,420,884	43,420,884	-	43
comprehensive loss for the year ended December 31, 2017		-	-	-	(8,728 )	-	(8,728	· -	(8
Disposition of non-controlling interests Transactions with owners, recorded directly in	5	-	-	-	-	-	-	(2,090,000)	(2
equity Stock options exercised	12(c)	869,703	-	(349,704)	-	-	519,999	-	51
Warrants exercised	12(d)	163,679	(71,347)	_	-	-	92,332	-	92
CACICISCU	12(c)	-	-	490,769	-	-	490,769	-	49

Share-based compensation Total								
transactions with owners	1,033,382	(71,347)	141,065	-	-	1,103,100	-	1,
Balance, December 31, 2017	\$125,733,727	\$1,948,805	\$6,897,266	\$673,264	\$(54,543,902)	\$80,709,160	\$-	\$80

# Attributable to shareholders of the Company

# Accumulated

Note											
Balance,			Note		Warrants		other	Deficit	Total	Controlling	7
December 31, 2015   State							-	sive		mieresi	E
the year ended December 31, 2016 Other comprehensive loss for the year ended December 31, 2016 Other comprehensive loss for the year ended December 31, 2016 Acquisition of non-controlling interests Transactions with owners, recorded directly in equity Issuance of warrants Stock options exercised Warrants exercised Warrants exercised Share-based compensation Total transactions with owners and the stock of the part of the pa	Decement 2015 Net into the year Decement 2016 Other compressions for ended Decement 2016 Acquisinon-continueres Transa with or	December 31, 2015		121,413,777	\$101,618	\$6,789,195	\$1,104,388	\$(124,947,427)	\$4,461,551	\$-	\$
Comprehensive   Closs for the year ended   Clo		the year ended December 31, 2016		-	-	-	-	26,982,641	26,982,641	-	
Acquisition of non-controlling non-controlling interests  Transactions with owners, recorded directly in equity  Issuance of warrants Stock options exercised  Warrants exercised  Share-based compensation Total  transactions with owners		comprehensive loss for the year ended December 31,		-	-	-	(422,396)	-	(422,396 )	-	
directly in equity Issuance of warrants Stock options exercised Warrants 12(d) 69,443 (30,271) 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,340,001 - 1,3		Acquisition of non-controlling interests Transactions with owners,		-	-	-	-	-	-	2,090,000	
warrants       12(d) -       1,948,805 -       -       -       1,948,805 -       -       -       1,948,805 -       -       -       1,948,805 -       -       -       1,948,805 -       -       -       -       1,948,805 -       -       -       1,948,805 -       -       -       -       1,844,130 -       -       -       -       -       -       -       39,172 -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -		directly in									
exercised Warrants exercised 12(c) 3,217,125 - (1,372,995) 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,844,130 - 1,8			12(d)	-	1,948,805	-	-	-	1,948,805	-	
exercised Share-based compensation Total transactions 3,286,568 1,918,534 (32,994) 5,172,108 - with owners 5,172,108	exercised Warrants exercised Share-bas compensa Total transactio		12(c)	3,217,125	-	(1,372,995)	-	-	1,844,130	-	
compensation Total transactions 3,286,568 1,918,534 (32,994 ) 5,172,108 - with owners			12(d)	69,443	(30,271)	-	-	-	39,172	-	
transactions 3,286,568 1,918,534 (32,994 ) 5,172,108 - with owners		compensation	12(c)	-	-	1,340,001	-	-	1,340,001	-	
		transactions		3,286,568	1,918,534	(32,994 )	-	-	5,172,108	-	
		with owners		124,700,345	\$2,020,152	\$6,756,201	\$681,992	\$(97,964,786)	\$36,193,904	\$2,090,000	\$

Balance, December 31, 2016

See accompanying notes to the consolidated financial statements.

#### **Consolidated Statements of Cash Flows**

# (expressed in Canadian dollars)

For the year ended December 31 Cash (used in) provided by: Operating activities:	Note	2018	2017	2016
Net income from continuing operations for the year		\$3,925,639	\$11,496,693	\$3,624,323
Net income from discontinued operations for the year	5	-	31,924,191	23,358,318
The modern from the second operations for the year		3,925,639	43,420,884	26,982,641
Adjustments for:		- , ,	- , - ,	- , ,-
Gain on sale of Apicore	5	-	(55,254,236)	-
Current income tax expense (recovery)	13	677,900	(9,392,836)	504,586
Deferred income tax expense (recovery)	13	218,976	(1,513,868)	301,512
Impairment loss	9	-	635,721	-
Revaluation of holdback receivable	10	1,472,999	(82,489)	-
Revaluation of long-term derivative		-	-	(20,560,440)
Gain on step acquisition		-	-	(4,895,573)
Amortization of property, plant and equipment	8	103,207	1,173,019	189,008
Amortization of intangible assets	9	195,977	6,633,957	2,192,024
Share-based compensation	12(c)	1,022,175	623,115	1,400,241
Write-down (write-up) of inventories	7	94,517	385,289	(108,817)
Finance (income) expense, net		(1,060,932)	837,461	3,416,678
Unrealized foreign exchange (gain) lossa		(5,322,916)	270,663	215,386
Change in the following:				
Accounts receivable		(1,340,746)	(3,713,375)	(4,174,691)
Inventories		(1,258,778)	145,339	2,520,499
Prepaid expenses		(1,792,779)	76,724	1,706,109
Other assets		-	33,130	(1,229)
Accounts payable and accrued liabilities		7,131,998	48,398,200	143,257
Deferred revenue		-	(621,455)	(382,727)
Other long-term liabilities		-	77,467	(102,828)
Interest received (paid), net	14	255,119	(7,485,956)	(1,223,664)
Income taxes paid		(2,041,317)	(894,327)	-
Royalties paid	11	(1,538,766)	(1,829,295)	(1,712,390)
Cash flows from operating activities		742,273	21,923,132	6,409,582
Investing activities:				
Proceeds from Apicore Sale Transaction	5	65,234,555	89,719,599	-
Purchase of short-term investments		(44,100,000)	-	-
Acquisition of Class C common shares of Apicore		-	(31,606,865)	-

Acquisition of Class E common shares of Apicore		-	(2,640,725)	-
Acquisition of Apicore, net of cash acquired		-	-	(41,711,546)
Acquisition of property, plant and equipment	8	(197,494)	(1,194,703)	(464,208)
Acquisition of intangible assets	9	(1,280,540)	(127,144)	-
Cash flows from (used in) investing activities		19,656,521	54,150,162	(42,175,754)

(continued on next page)

See accompanying notes to the consolidated financial statements.

# **Consolidated Statements of Cash Flows (Continued)**

# (expressed in Canadian dollars)

For the year ended December 31	Note	2018	2017	2016
Financing activities:				
Repurchase of common shares under normal course issuer bid		(3,021,340)	-	-
Proceeds from exercise of stock options	12(c)	363,458	519,999	1,844,130
Proceeds from exercise of Apicore stock options	12(c)	-	421,942	-
Proceeds from exercise of warrants	12(d)	-	92,332	39,172
Issuance of long-term debt		-	-	56,781,184
Repayment of long-term debt		-	(75,180,908)	(1,666,666)
Repayment of note payable to Apicore	5	-	(18,507,400)	-
Increase in short-term borrowings		-	161,923	332,555
Decrease (increase) in cash held in escrow		-	12,809,072	(12,809,072)
Finance lease payments		-	(101,946)	(10,463)
Payment of due to vendor	4	-	(3,185,945)	-
Cash flows (used in) from financing activities		(2,657,882)	(82,970,931)	44,510,840
Foreign exchange (loss) gain on cash held in foreign currency		1,137,889	(108,060 )	(47,083)
Increase (decrease) in cash		18,878,801	(7,005,697)	8,697,585
Cash and cash equivalents, beginning of period		5,260,480	12,266,177	3,568,592
Cash and cash equivalents, end of period		\$24,139,281	\$5,260,480	\$12,266,177

See accompanying notes to the consolidated financial statements.

1.

### Reporting entity

Medicure Inc. (the "Company") is a company domiciled and incorporated in Canada and as of October 24, 2011, its Common Shares are listed on the TSX Venture Exchange ("TSX-V"). Prior to October 24, 2011 and beginning on March 29, 2010, the Company's Common Shares were listed on the NEX board of the TSX-V. Prior to March 29, 2010, the Company's Common Shares were listed on the Toronto Stock Exchange. Additionally, the Company's shares were listed on the American Stock Exchange (later called NYSE Amex and now called NYSE MKT) on February 17, 2004 and the shares ceased trading on the NYSE Amex effective July 3, 2008. The Company remains a U.S. Securities and Exchange Commission registrant. The address of the Company's registered office is 2-1250 Waverley Street, Winnipeg, Manitoba, Canada, R3T 6C6.

The Company is a biopharmaceutical company engaged in the research, development and commercialization of human therapeutics. Through its subsidiary Medicure International, Inc., the Company has rights to the commercial product AGGRASTAT® Injection (tirofiban hydrochloride) in the United States and its territories (Puerto Rico, U.S. Virgin Islands, and Guam). AGGRASTAT®, a glycoprotein GP IIb/IIIa receptor antagonist, is used for the treatment of acute coronary syndrome including unstable angina, which is characterized by chest pain when one is at rest, and non-Q-wave myocardial infarction.

On December 14, 2017, the Company announced, through its subsidiary Medicure International, Inc., it had acquired an exclusive license to sell and market a branded cardiovascular drug, ZYPITAMAG<sup>TM</sup> (pitavastatin magnesium), in the United States and its territories for a term of seven years with extensions to the term available. ZYPITAMAG<sup>TM</sup> is used for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia and was approved in July 2017 by the U.S. Food and Drug Administration ("FDA") for sale and marketing in the United States. On May 1, 2018 the Company announced the commercial availability of ZYPITAMAG<sup>TM</sup> in retail pharmacies throughout the United States.

The Company's ongoing research and development activities include the continued development and further implementation of a new regulatory, brand and life cycle management strategy for AGGRASTAT® and the development of additional cardiovascular products. The Company is actively seeking to acquire or license additional cardiovascular products.

During 2017, the Company, through Apicore, was involved in the manufacturing, development, marketing, and selling of *Active Pharmaceutical Ingredients* ("API") to generic pharmaceutical customers and providing custom synthesis for

early phase pharmaceutical research of branded products. Through these subsidiaries, the Company also participated in collaborations with other parties in the research and development stages of specific products. In October 2017 and January 2018, respectively, the Company sold its interests in Apicore's U.S. business and Apicore's Indian business and the Company no longer participates in this line of business.

2. Basis of preparation of financial statements

(a) Statement of compliance

These consolidated financial statements of the Company and its subsidiaries were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements were authorized for issue by the Board of Directors on April 29, 2019.

(b) Basis of presentation

The consolidated financial statements have been prepared on the historical cost basis except for the following items:

- ·Derivative financial instruments are measured at fair value.
- ·Financial instruments at fair value through profit or loss ("FVTPL") are measured at fair value.

Assets and liabilities of Apicore's Indian business which are held for sale at December 31, 2017 are recorded at fair value.

### 2. Basis of preparation of financial statements (continued)

## (c) Functional and presentation currency

The consolidated financial statements are presented in Canadian dollars, which is the Company's functional currency. All financial information presented has been rounded to the nearest dollar except where indicated otherwise.

### (d) Use of estimates and judgments

The preparation of these consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenue and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Areas where management has made critical judgments in the process of applying accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements include the determination of the Company's and its subsidiaries' functional currencies.

Information about key assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next financial year are included in the following notes to the consolidated financial statements for the year ended December 31, 2018:

- ·Note 3(c)(i): The valuation of the holdback receivable
- ·Note 3(c)(ii): The valuation of the royalty obligation
- ·Note 3(e): The provisions for returns, chargebacks, rebates and discounts

·Note 3(k): The measurement of intangible assets

Note 3(q): The measurement of the amount and assessment of the recoverability of income tax assets and income tax provisions

### 3. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements, unless otherwise indicated.

### (a) Basis of consolidation

These consolidated financial statements include the accounts of the Company and its subsidiaries. Subsidiaries are entities controlled by the Company. Control exists when the Company has power over the investee and when the Company is exposed, or has the rights, to variable returns from the investee. Subsidiaries are included in the consolidated financial results of the Company from the effective date of acquisition up to the effective date of disposition or loss of control and include wholly owned subsidiaries, Medicure International Inc., Medicure Pharma Inc., Medicure U.S.A. Inc., Medicure Mauritius Limited, Medicure Pharma Europe Limited and Apigen Investments Limited. Additionally, the December 31, 2016 comparative figures include, from the date of acquisition (note 4), the accounts of subsidiaries that are controlled by the Company including, Apicore Inc., Apicore US LLC, Apicore LLC and Apicore Pharmaceuticals Private Limited. These additional subsidiaries were classified as discontinued operations for 2017 and Apicore Inc. and Apicore US LLC were sold during 2017 as described in note 5. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intercompany transactions and balances and unrealized gains and losses from intercompany transactions have been eliminated.

**3.** Significant accounting policies (continued)

(b) Foreign currency

Items included in the financial statements of each of the Company's consolidated subsidiaries are measured using the currency of the primary economic environment in which the subsidiary operates (the functional currency). The consolidated financial statements are presented in Canadian dollars, which is the Company's functional and presentation currency.

Foreign currency transactions are translated into the respective functional currencies of the Company and its subsidiaries using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at period-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in profit or loss. Non-monetary items that are not carried at fair value are translated using the exchange rates as at the date of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

The results and financial position of the Company's foreign operations that have a functional currency different from the Company's functional and presentation currency are translated into Canadian dollars as follows:

- (i) assets and liabilities of foreign operations are translated at the closing rate at the date of the consolidated statement of financial position;
- (ii) revenue and expenses of foreign operations for each year are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case revenue and expenses are translated at the dates of the transactions); and
- (iii) all resulting exchange differences for foreign operations are recognized in other comprehensive income in the cumulative translation account.

When a foreign operation is disposed of, the component of other comprehensive income relating to that particular foreign operation is recognized in the consolidated statements of net income and comprehensive income, as part of the gain or loss on sale where applicable.

(c) Financial instruments

(i) Financial assets

The Company initially recognizes a financial asset on the trade date at which the Company becomes a party to the contractual provisions of the instrument.

Upon recognition of a financial asset, classification is made based on the business model for managing the asset and the asset's contractual cash flow characteristics. The financial asset is initially recognized at its fair value and subsequently measured as (i) amortized cost; (ii) fair value through other comprehensive income ("FVOCI"); or (iii) fair value through profit or loss ("FVTPL"). Financial assets are classified as FVTPL if they have not been classified and measured at amortized cost or FVOCI. Upon initial recognition of an equity instrument that is not held-for-trading, the Company may irrevocably designate the presentation of subsequent changes in the fair value of such equity instrument as FVTPL.

The Company derecognizes a financial asset when the contractual cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

Financial assets and liabilities are offset and the net amount presented in the consolidated statements of financial position when, and only when, the Company has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Company has classified all of its non-derivative financial assets as financial assets measured at amortized cost, except for the consideration receivable and the holdback receivable, which are classified as FVTPL. The Company has not classified any financial assets as FVOCI.

3.	Significant accounting policies (continued)

- (c) Financial instruments (continued)
  - (i) Financial assets (continued)

#### Financial assets measured at amortized cost

A non-derivative financial asset is measured at amortized cost when both of the following conditions are met: (i) the asset is held within a business model whose objective is to hold assets in order to collect the contractual cash flows; and (ii) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Such assets are recognized initially at fair value plus any directly attributable transaction costs and measured at amortized cost using the effective interest method subsequent to initial recognition. Financial assets measured at amortized cost are cash and cash equivalents, short-term investments and accounts receivable.

(ii) Financial liabilities

All financial liabilities are recognized initially on the trade date at which the Company becomes a party to the contractual provisions of the instrument. Such financial liabilities are recognized initially at fair value plus any directly attributable transaction costs. All financial liabilities are measured at amortized cost, except for any financial liabilities measured at FVTPL. A financial liability may no longer be reclassified subsequent to initial recognition. Subsequent to initial recognition, financial liabilities are measured at amortized cost using the effective interest method. The Company decognizes a financial liability when its contractual obligations are discharged, cancelled or when they expire.

The royalty obligation was recorded at its fair value at the date at which the liability was incurred and subsequently measured at amortized cost using the effective interest rate method at each reporting date. Estimating fair value for this liability required determining the most appropriate valuation model which was dependent on its underlying terms and conditions. This estimate also required determining expected revenue from AGGRASTAT® sales and an appropriate discount rate and making assumptions about them.

### (d) Impairment of financial assets

Impairment of financial assets is recognized in accordance with a stage-based approach. The first stage begins upon recognition of a financial asset upon which time a loss allowance is recorded and 12-month expected credit losses are recognized in profit or loss. A financial asset is in the second stage of impairment when the credit risk increases significantly and is not considered low upon which time full lifetime expected credit losses are recorded in profit or loss. A financial asset is in the third stage of impairment when the credit risk increases to the point that it is credit impaired. Applicable interest revenue is calculated on the gross carrying amount of financial assets that are in the first or second stage of impairment and on the amortized carrying amount of a financial asset of a financial asset in the third stage of impairment.

Impairment losses on financial assets carried at amortized cost are reversed in subsequent periods if the amount of the loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized.

### (e) Revenue from contracts with customers

The Company has two commercially available products, AGGRASTAT® and ZYPITAMAG<sup>TM</sup> (the "**Products**") which it provides to United States customers. The Products are sold to wholesalers for resale; with AGGRASTAT® sold by the wholesalers to hospitals, while ZYPITAMAG<sup>TM</sup> is sold by wholesalers to pharmacies. Revenue from the sale of Products is recognized upon the receipt of goods by a wholesaler, the point in time in which title and control of the transferred goods pass from the Company to the wholesale customer. At this point in time, the wholesaler has gained the sole ability to route the goods, and there are no unfulfilled obligations that could affect the wholesaler's acceptance of the goods. Delivery of the product occurs when the goods have been shipped to the wholesaler and the wholesaler has accepted the products in accordance with the terms of the sale.

Notes to the Consolidated Financial	Statements
(expressed in Canadian dollars)	

3. Significant accounting policies (continued)

(e) Revenue from contracts with customers (continued)

Sales are made subject to certain discounts available for prompt payment, volume discounts, rebates or chargebacks. Revenue from these sales is recognized based on the price specified per the pricing terms of the sales invoices, net of the estimated discounts. Variable consideration is based on historical information, using the expected value method. Revenue is only recognized to the extent that it is highly probable that a significant reversal will not occur. A liability is included within accounts payable and accrued liabilities and is measured for expected payments that will be made to the customers for the discounts in which they are entitled. Sales do not contain an element of financing as sales are made with credit terms within the normal operating cycle of the date of the invoice, which is consistent with market practice.

(f) Cash and cash equivalents

The Company considers all liquid investments purchased with a maturity of three months or less at acquisition to be cash and cash equivalents, which are carried at amortized cost and are classified at amortized cost.

(g) Short-term investments

The Company considers all liquid investments purchased with a maturity greater than three months and less than one year at acquisition to be short-term investments, which are carried and classified at amortized cost.

(h) Inventories

Inventories consist of unfinished product (raw material in the form of API and packaging materials) and finished commercial product, which are available for sale and are measured at the lower of cost and net realizable value.

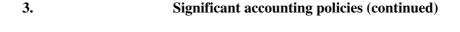
The cost of inventories is based on the first-in first-out principle, and includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition.

Inventories are written down to net realizable value when the cost of inventories is estimated to be unrecoverable due to obsolescence, damage, or declining selling prices. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses. When the circumstances that previously caused inventories to be written down below cost no longer exist, or when there is clear evidence of an increase in selling prices, the amount of the write-down previously recorded is reversed.

- (i) Property plant and equipment
- (i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated amortization and accumulated impairment losses and reversals. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment. The costs of the day-to-day servicing of property, plant and equipment are recognized in the consolidated statements of net income and comprehensive income in the period in which they are incurred.

]	Notes to the Cons	solidated Financial	Statements
(	(expressed in Car	nadian dollars)	



(i) Property plant and equipment (continued)

(ii) Amortization

Amortization is recognized in profit or loss over the estimated useful lives of each part of an item of property, plant and equipment in a manner that most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. The estimated useful lives for the current and comparative periods are as follows:

Asset	Basis	Rate
Computers, office equipment, furniture and fixtures	Straight-line/Diminishing balance	20% to 25%
Leasehold improvements	Straight-line	Term of lease

Amortization methods, useful lives and residual values are reviewed at each period end and adjusted if appropriate.

(j) Leases

The determination of whether an arrangement is a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfillment of the arrangement is dependent on the use of specific assets and the arrangement conveys a right to use the assets, even if those assets are not explicitly specified in an arrangement.

A lease is classified at inception date as a finance or operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Company is classified as a finance lease.

Finance leases are capitalized at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance expense and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the

liability. Finance charges are recognized in finance costs in the consolidated statements of net income and comprehensive income.

Leased assets are depreciated over the useful life of each asset. However, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

An operating lease is a lease other than a finance lease. Operating lease payments are recognized as an operating expense in the consolidated statements of net income and comprehensive income on a straight-line basis over the lease term.

3. Significant accounting policies (continued)

(k) Intangible assets

Intangible assets that are acquired separately are measured at cost less accumulated amortization and accumulated impairment losses. Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are recognized in profit or loss as incurred.

Licenses are amortized on a straight-line basis over the contractual term of the acquired license. Patents are amortized on a straight-line basis over the legal life of the respective patent, ranging from five to twenty years, or its economic life, if shorter. Trademarks are amortized on a straight-line basis over the legal life of the respective trademark, being ten years, or its economic life, if shorter. Customer lists are amortized on a straight-line basis over approximately twelve years, or its economic life, if shorter.

Amortization on licenses commences when the intangible asset is available for use, which would typically be in connection with the commercial launch of the associated product under the license.

Following initial recognition, intangible assets are carried at cost less accumulated amortization and accumulated impairment losses. The cost of servicing the Company's patents and trademarks are expensed as incurred.

The amortization method and amortization period of an intangible asset with a finite useful life are reviewed at least annually. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates in the consolidated statements of net income and comprehensive income.

(l) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. No development costs have been capitalized to date.

Research and development expenses include all direct and indirect operating expenses supporting the products in development.

Clinical trial expenses are a component of the Company's research and development costs. These expenses include fees paid to contract research organizations, clinical sites, and other organizations who conduct research and development activities on the Company's behalf. The amount of clinical trial expenses recognized in a period related to clinical agreements are based on estimates of the work performed using an accrual basis of accounting. These estimates incorporate factors such as patient enrolment, services provided, contractual terms, and prior experience with similar contracts.

#### (m) Government assistance

Government assistance, in the form of grants, is recognized at fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. Government assistance toward current expenses is recorded as a reduction of the related expenses in the period the expenses are incurred. Government assistance towards property, plant and equipment is deducted from the cost of the related property, plant and equipment. The benefits of investment tax credits for scientific research and experimental development expenditures ("SR&ED") incurred directly by the Company are recognized in the period the qualifying expenditure is made, provided there is reasonable assurance of recoverability. SR&ED investment tax credits receivable are recorded at their net realizable value.

3. Significant accounting policies (continued)

(n) Impairment of non-financial assets

The Company assesses at each reporting period whether there is an indication that a non-financial asset may be impaired. An impairment loss is recognized when the carrying amount of an asset, or its CGU, exceeds its recoverable amount. Impairment losses are recognized in net income and comprehensive income. A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The recoverable amount is the greater of the asset's or CGU's fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. In determining fair value less costs to sell, an appropriate valuation model is used. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the CGU to which the asset belongs.

For assets other than goodwill, impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of amortization, if no impairment loss had been recognized.

Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired. Impairment is determined for goodwill by assessing the recoverable amount of each CGU to which the goodwill relates. When the recoverable amount of the CGU is less than its carrying amount, an impairment loss is recognized. Impairment losses relating to goodwill are not reversed in future periods.

(o) Employee benefits

(i) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

### (ii) Share-based payment transactions

The grant date fair value of share-based payment awards granted to employees is recognized as a personnel expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Share-based payment arrangements in which the Company receives goods or services as consideration for its own equity instruments are accounted for as equity-settled share-based payment transactions. In situations where equity instruments are issued and some or all of the goods or services received by the entity as consideration cannot be specifically identified, they are measured at fair value of the share-based payment.

For share-based payment arrangements with non-employees, the expense is recorded over the service period until the options vest. Once the options vest, services are deemed to have been received.

Where the terms of an equity-settled transaction award are modified, the minimum expense recognized is the expense as if the terms had not been modified, if the original terms of the award are met. An additional expense is recognized for any modification that increases the total fair value of the share-based payment transaction or is otherwise beneficial to the employee as measured at the date of modification.

Notes to the Consolidated Financial Statemen	ıts
(expressed in Canadian dollars)	

3.	Significant accounting policies (continued)		
(0)	Employee benefits (continued)		
(ii)	Share-based payment transactions (continued)		

Where an equity-settled award is cancelled, it is treated as if it vested on the date of the cancellation and any expense not yet recognized for the award [being the total expense as calculated at the grant date] is recognized immediately. This includes any awards where vesting conditions within the control of either the Company or the employee are not met. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled award and new awards are treated as if they were a modification of the original awards.

## (p) Finance income and finance costs

Finance costs comprise interest expense on borrowings which are recognized in net income and comprehensive income using the effective interest rate method, accretion on the royalty obligation, prepayment fees on the early repayment of long-term debt and amortization of deferred debt issue costs using the effective interest rate method, offset by any finance income which is comprised of interest income on funds invested and is recognized as it accrues in net income and comprehensive income, using the effective interest rate method.

Foreign currency gains and losses are reported on a net basis.

(q) Income taxes

The Company and its subsidiaries are generally taxable under the statutes of their country of incorporation.

Income tax expense comprises current and deferred taxes. Current taxes and deferred taxes are recognized in profit or loss except to the extent that they relate to a business combination, or items recognized directly in equity or in other

comprehensive income.

Current taxes are the expected tax receivable or payable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax receivable or payable in respect of previous years.

The Company follows the liability method of accounting for deferred taxes. Under this method, deferred taxes are recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred taxes are not recognized for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred taxes are not recognized for taxable temporary differences arising on the initial recognition of goodwill. Deferred taxes are measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the tax laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax assets and liabilities on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

The Company has provided for income taxes, including the impacts of tax legislation in various jurisdictions, in accordance with guidance issued by accounting regulatory bodies, the Canada Revenue Agency, the U.S. Internal Revenue Service, the Barbados Revenue Authority, the Mauritius Revenue Authority, as well as other state and local governments through the date of the issuance of these consolidated financial statements. Additional guidance and interpretations can be expected and such guidance, if any, could impact future results. While management continues to monitor these matters, the ultimate impact, if any, as a result of the application of any guidance issued in the future cannot be determined at this time.

The Company and its subsidiaries file federal income tax returns in Canada, the United States, Barbados and other foreign jurisdictions, as well as various provinces and states in Canada and the United States. The Company and its subsidiaries have open tax years, primarily from 2009 to 2018, with significant taxing jurisdictions, including Canada, the United States and Barbados. These open years contain certain matters that could be subject to differing interpretations of applicable tax laws and regulations and tax treaties, as they relate to the amount, timing or inclusion of revenues and expenses, or the sustainability of income tax positions of the Company and its subsidiaries. Certain of these tax years may remain open indefinitely.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, would be recognized subsequently if information about facts and circumstances changed. The adjustment would either be treated as a reduction to goodwill if it occurred during the measurement period or in profit or loss, when it occurs subsequent to the measurement period.

3. Significant accounting policies (continued)

(r) Earnings per share

The Company presents basic earnings per share ("EPS") data for its common voting shares. Basic EPS is calculated by dividing the profit or loss attributable to common voting shareholders of the Company by the weighted average number of common voting shares outstanding during the period, adjusted for the Company's own shares held. Diluted EPS is computed similar to basic EPS except that the weighted average shares outstanding are increased to include additional shares for the assumed exercise of stock options and warrants, if dilutive. The number of additional shares is calculated by assuming that outstanding stock options and warrants were exercised and that the proceeds from such exercise were used to acquire common shares at the average market price during the reporting periods.

### (s) Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration for an acquisition is measured at the fair values of the assets transferred, the liabilities assumed and the equity interests issued at the acquisition date. Transaction costs that are incurred in connection with a business combination, other than costs associated with the issuance of debt or equity securities, are expensed as incurred. Identified assets acquired and liabilities and contingent liabilities assumed are measured initially at fair values at the date of acquisition. On an acquisition-by-acquisition basis, any non-controlling interest is measured either at fair value of the non-controlling interest or at the fair value of the proportionate share of the net assets acquired.

Contingent consideration is measured at fair value on acquisition date and is included as part of the consideration transferred. The fair value of the contingent consideration liability is remeasured at each reporting date with the corresponding gain or loss being recognized in profit or loss.

Goodwill is initially measured at cost, being the excess of fair value of the cost of the business combinations over the Company's share in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities. Any negative difference is recognized directly in the consolidated statements of net income and comprehensive income. If the fair values of the assets, liabilities and contingent liabilities can only be calculated on a provisional basis, the business combination is recognized using provisional values. Any adjustments resulting from the completion of the measurement process are recognized within twelve months of the date of the acquisition.

### 4. New standards and interpretations

The Company has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Set out below is the impact of the mandatory adoption of new standards:

### IFRS 9, Financial Instruments: Classification and Measurement ("IFRS 9")

Effective January 1, 2018, the Company has adopted IFRS 9 retrospectively. Prior periods were not restated and no material changes resulted from adoption of this new standard. IFRS 9 introduced a revised model for classification and measurement, which has resulted in several financial instrument reclassification changes by the Company. There were no quantitative impacts from adoption of IFRS 9.

Upon recognition of a financial asset, classification is made based on the business model for managing the asset and the asset's contractual cash flow characteristics. The financial asset is initially recognized at its fair value and subsequently classified and measured as (i) amortized cost; (ii) fair value through other comprehensive income ("FVOCI"); or (iii) fair value through profit or loss ("FVTPL"). Financial assets are classified as FVTPL if they have not been classified as measured at amortized cost or FVOCI. Upon initial recognition of an equity instrument that is not held-for-trading, the Company may irrevocable designate the presentation of subsequent changes in the fair value of such equity instrument as FVTPL.

The Company recognizes a financial liability on the trade date in which it becomes a party to the contractual provisions of the instrument at fair value plus any directly attributable costs. Financial liabilities are subsequently measured at amortized cost or FVTPL, and are not subsequently reclassified.

An "expected credit loss" impairment model applies which requires a loss allowance to be recorded on financial assets measured at amortized cost based on their expected credit losses. An estimate is made to determine the present value of future cash flows associated with the asset, and if required, an impairment loss is recorded. The impairment loss

reduces the carrying value of the impaired financial asset to the value of the estimated present value of the future cash flows associated with the asset, discounted at the financial asset's original effective interest rate is recorded either directly or through the use of an allowance account and the resulting impairment loss is recorded in profit or loss.

Below is a summary showing the classification and measurement basis for the Company's financial instruments as a result of the adoption of IFRS on January 1, 2018 with a comparison to the previous classification under IAS 39:

Financial instrument	Classification under IAS 39	Classification under IFRS 9
Financial assets		
Cash and equivalents	Loans and receivables	Amortized cost
Short-term investments	Loans and receivables	Amortized cost
Accounts receivable	Loans and receivables	Amortized cost
Consideration receivable	Loans and receivables	FVTPL
Holdback receivable	Loans and receivables	FVTPL
Financial liabilities		
Accounts payable and accrued liabilities	Other financial liabilities	Amortized cost
Accrued transaction costs	Other financial liabilities	Amortized cost
Current portion of royalty obligation	Other financial liabilities	Amortized cost
Royalty obligation	Other financial liabilities	Amortized cost
License fee payable	Other financial liabilities	Amortized cost
Other long-term liability	Other financial liabilities	Amortized cost

4. New standards and interpretations (continued)

IFRS 15, Revenue from Contracts with Customers ("IFRS 15")

Effective January 1, 2018, the Company has adopted IFRS 15 retrospectively. Prior periods were not restated and no material changes resulted from adoption of this new standard. IFRS 15 and provides a model for the recognition and measurement of gains or losses from sales of some non-financial assets. The core principle is that revenue is recognized 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 goods or services. The adoption of the standard will also result in enhanced disclosures about revenue, provide guidance for transactions that were not previously addressed comprehensively (for example, service revenue and contract modifications) and improve guidance for multiple-element arrangements. There were no quantitative impacts from adoption of IFRS 15.

#### IFRS 2, Share-based Payments ("IFRS 2")

Effective January 1, 2018, the Company has adopted the required amendments to IFRS 2, which provides requirements on the accounting for the effects of vesting and non-vesting conditions on the measurement of cash-settled share-based payments, share-based payment transactions with a net settlement feature for withholding tax obligations, and a modification to the terms and conditions of a share-based payment that changes the classification of the transaction from cash-settled to equity settled. There were no quantitative impacts from adoption of the amendments to IFRS 2.

#### New standard not yet adopted

As at December 31, 2018, the following standard has been issued but is not yet effective:

IFRS 16, Leases ("IFRS 16")

In January 2016, the IASB issued IFRS 16 which requires lessees to recognize assets and liabilities for most leases. Lessees will have a single accounting model for all leases, with certain exemptions. The new standard is effective January 1, 2019, with limited early application permitted. The new standard permits lessees to use either a full retrospective or a modified retrospective approach on transition for leases existing at the date of transition, with options to use certain transition reliefs. The Company has evaluated the standard and does not expect a material impact on its consolidated financial statements as a result of its adoption.

#### 5.

### **Discontinued operations**

On October 2, 2017, the Company sold its interests in Apicore (the "Apicore Sale Transaction") to an arm's-length, pharmaceutical company (the "Buyer"). The Company acquired Apicore in a series of transactions occurring between July 3, 2014 and July 12, 2017

Under the Apicore Sale Transaction, the Company received a payment of U.S. \$57,623,125 (Cdn - \$72,057,718) upon the closing of the transaction. Additional working capital and deferred payments of U.S. \$52,886,588 (Cdn - \$65,234,555) were received subsequent to December 31, 2017 as part of the Apicore Sales Transaction and were recorded as consideration receivable as at December 31, 2017. Additionally, a contingent payment in the form of an earn-out based on the achievement of certain financial results by Apicore for the year ended December 31, 2017 could have been received, however the financial results specified under the Apicore Sales Transaction were not achieved. As a result, no amount has been recorded in the consolidated financial statements pertaining to this potential earn-out payment. Additionally, under the Apicore Sale Transaction, the Buyer held an option to acquire Apicore's Indian operations for a fixed price until December 31, 2017. This option lapsed without exercise and the Company sold Apicore's Indian operations, to a company owned by the former President and Chief Executive Officer of Apicore Inc. in January of 2018 with the net assets held for sale being released from accounts payable and accrued liabilities at that time.

Set out below is the financial performance for years ended December 31, 2018, 2017 and 2016 relating to the Apicore business:

Year ended December 31	2018	2017	2016
Revenue	\$ -	\$22,759,385	\$7,798,838
Expenses	-	(47,936,485)	(9,263,926)
Revaluation of long-term derivative	-	-	20,560,440
Gain on step acquisition	-	-	4,895,573
(Loss) income from discontinued operations	\$ -	\$(25,177,100)	\$23,990,925
Income tax recovery (expense)	-	1,847,055	(632,607)
Loss (income) after income tax recovery (expense)	\$ -	(23,330,045)	23,358,318
Gain on disposition of the Apicore business	-	55,254,236	-
Income from discontinued operations	\$ -	\$31,924,191	\$23,358,318

Set out below is the cash flow information for the years ended December 31, 2018, 2017 and 2016 relating to the Apicore business:

Year ended December 31	2018	2017	2016
Net cash flows used in operating activities	\$ -	\$5,210,341	\$(1,295,487)
Net cash flows from (used in) investing activities	-	54,326,360	(421,077)
Net cash flows from (used in) financing activities	-	(80,944,373)	44,294,204
Net cash flows used in discontinued operations	\$ -	\$(21,407,672)	\$42,577,640

As previously described, the Company retained ownership in Apicore's Indian operations until the lapse of the Buyer Option and during January of 2018, Apicore's Indian operations were sold to a company owned by the former President and Chief Executive Officer of Apicore Inc.

Immediately before the classification as discontinued operations, the recoverable amount was estimated for certain items and no impairment loss was identified. As at December 31, 2017, a write-down of \$1,791,484 was recognized to reduce the carrying amount of the assets in the disposal group to their fair value less costs to sell, which totaled \$7,076,548. This impairment was recognized in discontinued operations in the statements net income and comprehensive income for the year ended December 31, 2017.

6.

### Accounts receivable

As at December 31 2018 2017 Trade accounts receivable \$9,677,847 \$8,496,281 Other accounts receivable 1,086,732 91,974 \$10,764,579 \$8,588,255

As at December 31, 2018, there were three customers with amounts owing greater than 10% of the Company's accounts receivable which totaled 91% in aggregate (Customer A - 47%, Customer B - 22%, Customer C - 22%).

As at December 31, 2017, there were three customers with amounts owing greater than 10% of the Company's accounts receivable which totaled 96% in aggregate (Customer A - 41%, Customer B - 32%, Customer C - 23%).

7. Inventories

As at December 31 2018 2017

Finished product available-for-sale \$2,936,883 \$2,058,776

Unfinished product and packaging materials 1,302,384 1,016,230
\$4,239,267 \$3,075,006

Inventories expensed as part of cost of goods sold during the year ended December 31, 2018 amounted to \$3,861,745 (2017 – \$3,079,397; 2016 – \$2,482,986). During the year ended December 31, 2018, the Company wrote-off inventory of \$94,517 (2017 – \$385,289; 2016 – recovery of \$108,817) that had expired or was otherwise unusable.

#### Property, plant and equipment 8.

Cost At December 31, 2016 Additions	Land \$2,316,979	Building \$2,122,687 82,163	Computer and office equipment \$2,439,071 675,788	Machinery and equipment \$2,798,482 298,754	Leasehold improvements \$ 1,003,490	Total \$10,680,709 1,056,705
Transfers to assets held for	(2,317,273	,	,		- ) (790,814 )	
resale Effect of movements in	(2,317,273	) (2,900,204	) (3,319,296)	) (4,372,003)	) (790,814 )	(13,699,734)
exchange rates	294	695,434	632,604	1,474,829	(56,333)	2,746,828
At December 31, 2017	\$-	\$-	\$428,165	\$-	\$ 156,343	\$584,508
Additions Effect of movements in	-	-	185,682	-	11,812	197,494
exchange rates	-	-	12,078	-	-	12,078
Dispositions	-	-	(156,280	,	-	(156,280 )
At December 31, 2018	\$-	\$-	\$469,645	\$-	\$ 168,155	\$637,800
Accumulated amortization at At December 31, 2016 Amortization Transfers to assets held for a Effect of movements in excluding At December 31, 2017 Amortization Effect of movements in excluding Dispositions At December 31, 2018	resale hange rates	\$- \$ - - \$- \$ -	Building and equ equ \$21,408 \$25,408 \$25,408 \$25,408 \$25,408 \$33,409,761) (20,6,285) (20,5) \$1,5 \$1,5 \$1,5 \$1,5 \$1,5 \$1,5 \$1,5 \$1,5	office and ipment equip 50,261 \$67,339,358 384	,486 157,537 3,746) (112,21	\$380,070 7 1,173,019 3) (1,149,352) ) (40,851) \$362,886 103,207 11,974 (156,280)
Carrying amounts Lan	nd Building	and office a	nd im	asehold ,	Γotal	
At December 31, 2017 \$ -	- \$ -	equipment e \$ 146,898 \$	quipment		\$221,622	
At December 31, 2017 \$ -		\$ 257,213 \$		•	\$316,013	

During the year ended December 31, 2018, amortization of property, plant and equipment totaling \$103,207 (2017 – \$97,794; 2016 – \$83,284) is included within selling, general and administrative expenses on the consolidated statements of net income and comprehensive income. For the years ended December 31, 2017 and 2016, amortization of property, plant and equipment totaling \$1,075,225 and \$105,724, respectively is recorded within discontinued operations.

# 9. Intangible assets

Cost	Licenses	Patents	Trademarks	Customer list	Approved ANDAs	Acquired in process research and development	Total
At December 31, 2016	\$-	\$25,012,530	\$4,296,192	\$7,472,143	\$1,505,664	\$83,720,025	\$122,006,554
Additions Impairment Transfers to assets held for resale Effect of movements in exchange rates At December 31, 2017 Effect of movements in exchange rates At December 31, 2018	2,383,550 (635,721)	-	-	-	-	-	2,383,550 (635,721 )
	-	(9,122,874	) -	(6,267,525)	(1,405,541)	(78,152,819)	(94,948,759)
	8,471	(1,650,944	(282,211	(496,269	(100,123)	(5,567,206)	(8,088,282 )
	\$1,756,300	\$14,238,712	\$4,013,981	\$708,349	\$-	\$-	\$20,717,342
	153,580	1,245,105	351,004	61,943	-	-	1,811,632
	\$1,909,880	\$15,483,817	\$4,364,985	\$770,292	\$-	\$-	\$22,528,974
Accumulated amortization ar impairment los		nses Patents	Traden	narks Custom list	er Approved ANDAs	Acquired in process research and development	Total
At December 3 Amortization Transfers to ass held for resale Effect of mover in exchange rate At December 3 Amortization Effect of mover in exchange rate	-	\$15,321 637,40		,192 \$814,10 437,90		\$697,666 5,460,444	\$21,141,737 6,633,957
	sets -	(684,2	16 ) -	(470,0	(105,416	5) (5,861,461	) (7,121,157)
	_	(1,035	,708) (282,2	211 ) (73,59	2 ) (5,335	) (296,649	) (1,693,495)
	1, 2017 \$- 195	\$14,238 5,977 -	3,712 \$4,013	,981 \$708,34 -	19 \$- -	\$ - -	\$18,961,042 195,977
	X 6	53 1,245,	105 351,0	04 61,943	3 -	-	1,666,705
At December 3	31, 2018 \$204	,630 \$15,483	3,817 \$4,364	,985 \$770,29	92 \$-	\$ -	\$20,823,724

Carrying amounts	Licenses	Patents		Trademarks		Customer list		Approved ANDAs		Acquired in process research and		Total
										deve	lopment	
At December 31, 2017	\$1,756,300	\$	-	\$	-	\$	-	\$	-	\$	-	\$1,756,300
At December 31, 2018	\$1,705,250	\$	-	\$	-	\$	-	\$	-	\$	-	\$1,705,250

As at December 31, 2018, the Company has recorded \$545,680 (2017 - \$501,800) within accounts payable and accrued liabilities relating to the current portion of license fees payable relating to the Zypitamag license acquired during the year ended December 31, 2017.

The Company has considered indicators of impairment as at December 31, 2018 and 2017. The Company did not record any write-down of intangible assets during the year ended December 31, 2018. During the year ended December 31, 2017 the Company recorded a write-down of intangible assets totaling \$635,721 pertaining to a license acquired during the year ended December 31, 2017. As at December 31, 2018, intangible assets pertaining to AGGRASTAT® intangible were fully amortized.

For the year ended December 31, 2018, amortization on the license totaling \$195,977 is recorded within cost of goods sold. For the years ended December 31 2017, there was no amortization of intangible recorded within net income from continuing operations. For the year ended December 31, 2016, amortization of intangible assets relating to AGGRASTAT® totaling \$1,347,022 is recognized in cost of goods sold and \$3,268 is recognized in research and development expenses.

For the years ended December 31, 2017 and 2016, amortization of the acquired intangible assets totaling \$6,633,957 and \$841,754, respectively, was recognized within loss from discontinued operations.

10.

#### Holdback receivable

The holdback receivable of US\$10 million originated on October 2, 2017 as a part of the Apicore Sale Transaction described in note 5. The holdback receivable was initially recorded at its fair value of \$11,940,736 and subsequently is measured at FVTPL. The other long-term liability, totalling \$1,200,608 (2017 - \$1,135,007) is payable to the former President and Chief Executive Officer of Apicore upon receipt of the holdback receivable.

On February 13, 2019, the Company received notice from the Buyer in the Apicore Sales Transaction of potential claims against the holdback receivable in respect of representations and warranties under the Apicore Sales Transaction with the maximum exposure of the claims being the total holdback receivable. The notice did not contain sufficiently detailed information to enable the Company to assess the merits of the claims. The Company will proceed diligently to investigate the potential claims and attempt to satisfactorily resolve them with a view to having the holdback receivable released.

In consideration of the uncertainty associated with the potential claims asserted by the Buyer, the Company reduced the carrying value of the holdback receivable by \$1,472,999 on the statement of financial position as at December 31, 2018. The Buyer did not make the required payments on the holdback receivable in February and April 2019.

11.

## Royalty obligation

On July 18, 2011, the Company settled its then existing long-term debt with Birmingham Associates Ltd. ("Birmingham"), an affiliate of Elliott Associates L.P., in exchange for i) \$4,750,000 in cash; ii) 2,176,003 common shares of the Company; and iii) a royalty on future AGGRASTAT® sales until May 1, 2023. The royalty is based on 4% of the first \$2,000,000 of quarterly AGGRASTAT® sales, 6% on the portion of quarterly sales between \$2,000,000 and \$4,000,000 and 8% on the portion of quarterly sales exceeding \$4,000,000 payable within 60 days of the end of the preceding three-month periods ended February 28, May 31, August 31 and November 30. Birmingham has a one-time option to switch the royalty payment from AGGRASTAT® to a royalty on the sale of MC-1. Management determined there is no value to the option to switch the royalty to MC-1 as the product is not commercially available for sale and the extended long-term development timelines associated with commercialization of the product.

In accordance with the terms of the agreement, if the Company were to dispose of its AGGRASTAT® rights, the acquirer would be required to assume the obligations under the royalty agreement.

The royalty obligation was recorded at its fair value at the date at which the liability was incurred, estimated to be \$901,915, and subsequently measured at amortized cost using the effective interest rate method at each reporting date. This resulted in a carrying value as at December 31, 2018 of \$3,530,558 (2017 – \$4,449,012) of which \$1,495,548 (2017 – \$1,537,202) represents the current portion of the royalty obligation. The net change in the royalty obligation for the year ended December 31, 2018 of \$355,287 (2017 – \$747,540; 2016 – \$2,271,436) is recorded within finance (income) expense on the consolidated statements of net income and comprehensive income. Royalties for the year ended December 31, 2018 totaled \$1,654,380 (2017 – \$1,242,587; 2016 – \$1,795,089) with payments made during the year ended December 31, 2018 of \$1,538,766 (2017 – \$1,829,295; 2016 – \$1,712,390).

**12.** 

**Capital Stock** 

#### (a) Authorized

The Company has authorized share capital of an unlimited number of common voting shares, an unlimited number of Class A common shares and an unlimited number of preferred shares. The preferred shares may be issued in one or more series, and the directors may fix prior to each series issued, the designation, rights, privileges, restrictions and conditions attached to each series of preferred shares.

12. Capital Stock (continued)

(b) Shares issued and outstanding

Shares issued and outstanding are as follows:

	Number of Common Shares	Amount
Balance, December 31, 2016	15,532,408	\$124,700,345
Shares issued upon exercise of stock options (12(c))	207,950	869,703
Shares issued upon exercise of warrants (12(d))	41,969	163,679
Balance, December 31, 2017	15,782,327	\$125,733,727
Shares issued upon exercise of stock options (12(c))	206,885	654,711
Shares repurchased and cancelled under a normal course issuer bid <sup>(*)</sup>	(441,400	) (3,501,333 )
Balance, December 31, 2018	15,547,812	\$122,887,105

<sup>(\*)</sup> On May 16, 2018, the Company announced that the TSX-V accepted the Company's notice of intention to make a normal course issuer bid ("NCIB"). Under the terms of the NCIB, the Company may acquire up to an aggregate of 794,088 common shares representing five percent of the common shares outstanding, over the twelve-month period that the NCIB is in place. The NCIB commenced on May 28, 2018 and will end on May 27, 2019, or on such earlier date as the Company may complete its maximum purchases under the NCIB. The prices that the Company will pay for common shares purchased will be the market price of the shares at the time of purchase.

During the year ended December 31, 2018 the Company repurchased and cancelled 441,400 common shares. The aggregate price paid for these common shares totaled \$3,021,340. As a result of the NCIB, during the year ended December 31, 2018 the Company recorded \$479,993 directly in its retained deficit representing the difference between the aggregate price paid for these common shares and a reduction of the Company's share capital totaling \$3,501,333.

Subsequent to December 31, 2018, the Company repurchased an additional 159,900 common shares to be cancelled for an aggregate cost of \$999,826.

## (c) Stock option plan

The Company has a stock option plan which is administered by the Board of Directors of the Company with stock options granted to directors, management, employees and consultants as a form of compensation. The number of common shares reserved for issuance of stock options is limited to a maximum of 2,934,403 common shares of the Company at any time. The stock options generally have a maximum term of between five and ten years and vest within a five-year period from the date of grant.

Changes in the number of options outstanding during the year ended December 31, 2018 is as follows:

		Weighte	d	
Year ended December 31, 2018	Options	average		
	Options	exercise		
		price		
Balance, beginning of period	1,602,127	\$ 3.58		
Granted	200,000	7.25		
Exercised	(206,885)	(1.76	)	
Forfeited, cancelled or expired	(200,600)	(6.85	)	
Balance, end of period	1,394,642	\$ 3.91		
Options exercisable, end of period	1,044,892	\$ 2.80		

## 12. Capital Stock (continued)

(c) Stock option plan (continued)

Changes in the number of options outstanding during the years ended December 31, 2017 and 2016 are as follows:

Year ended December 31	2017		2016	
		Weighted		Weighted
	Options	average	Options	average
	Options	exercise	Options	exercise
		price		price
Balance, beginning of period	1,387,000	\$ 2.37	2,277,126	\$ 1.90
Granted	476,000	7.20	265,025	6.16
Exercised	(207,950)	(2.50)	(1,069,434)	(1.72)
Forfeited, cancelled or expired	(52,923)	(8.58)	(85,717)	(9.59)
Balance, end of period	1,602,127	\$ 3.58	1,387,000	\$ 2.37
Options exercisable, end of period	1,231,127	\$ 2.50	1,387,000	\$ 2.37

Options outstanding at December 31, 2018 consist of the following:

Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Options outstanding weighted average exercise price		Number exercisable	
\$0.30	185,000	4.35 years	\$	0.30	185,000	
\$0.31 - \$1.00	5,334	0.29 years	\$	0.60	5,334	
\$1.01 - \$3.00	549,433	3.35 years	\$	1.59	549,433	
\$3.01 - \$5.00	32,500	1.90 years	\$	3.90	32,500	
\$5.01 - \$7.30	622,375	3.89 years	\$	7.06	272,625	
\$0.30 - \$7.30	1,394,642	3.68 years	\$	3.91	1,044,892	

Compensation expense related to stock options granted during the period or from previous periods under the stock option plan for the year ended December 31, 2018 is \$1,022,175 (2017 – \$490,769; 2016 – \$1,340,001). The compensation expense was determined based on the fair value of the options at the date of measurement using the

Black-Scholes option pricing model. The expected life of stock options is based on historical data and current expectations and is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may not necessarily be the actual outcome.

The compensation expense for the years ended December 31, 2018, 2017 and 2016 was determined based on the fair value of the options at the date of measurement using the Black-Scholes option pricing model:

Years ended December 31:	2018	2017	2016
Expected option life	4.4 years	4.5 years	4.8–5.0 years
Risk free interest rate	1.92%-2.04%	1.71 %	0.52%-0.67%
Dividend yield	Nil	nil	nil
Expected volatility	85.14%-93.72%	80.44 %	115.59%-117.56%

Notes to the C	Consolidated Financial	Statements
(expressed in	Canadian dollars)	

12. Capital Stock (continued)

(c) Stock option plan (continued)

Additionally, prior to its disposal Apicore had a stock option plan and at the December 1, 2016 acquisition date, there were 897,500 options to purchase Class E common stock of Apicore Inc. outstanding. 497,500 options became fully vested on the change in control with the right to put the outstanding Apicore Class E shares and options to the Company upon the change in control. The remaining Apicore stock options outstanding of 400,000 were unaffected by the change of control and fully vested during 2017. The value of the put option was initially recorded as a liability to repurchase Apicore Class E shares on the consolidated statements of financial position and the value of the remaining options was recorded as non-controlling interest within equity.

During the year ended December 31, 2017, employees and former directors of Apicore exercised 292,500 stock options to acquire 292,500 Class E common shares of Apicore for gross proceeds to the Company of U.S.\$280,125. These shares, as well as 112,500 Class E common shares previously issued for gross proceeds of U.S.\$48,375 were then purchased by the Company upon the employees and former directors exercising their put right to the Company. This resulted in the Company acquiring 405,000 Class E common shares of Apicore for a total cost of U.S.\$1,974,772 (Cdn - \$2,690,383) during 2017. As a result of the employees and former directors exercising their put right to the Company, the liability to repurchase Apicore Class E common shares on the consolidated statements of financial position was reduced.

On July 3, 2017, the remaining employee put options over 117,500 Class E shares, to be issued upon the exercise of stock options, of Apicore expired without being exercised by the employees and the value of these options, totaling \$615,381, was reclassified as a non-controlling interest. As a result, there remained 517,500 stock options in Apicore Inc. outstanding prior to the sale transaction which occurred on October 2, 2017.

During the year ended December 31, 2017, the Company recorded \$132,346 (2016 – \$60,240), respectively of stock-based compensation expense within the loss from discontinued operations on the consolidated statements of net income and comprehensive income relating to stock options in Apicore.

(d) Warrants

On November 17, 2016 in connection with a term loan entered into to fund an acquisition, the Company issued 900,000 warrants to the lenders, exercisable for a 48-month period following the issuance of the loan at a price of \$6.50 per share. The fair value of the warrants issued in connection with the loan was \$2,065,500 net of its pro-rata share of financing costs of \$116,695 and were recorded in equity with a corresponding balance recorded as deferred financing costs which is netted against the associated long-term debt on the consolidated statements of financial position as at December 31, 2017.

Changes in the number of Canadian dollar denominated warrants outstanding during the years ended December 31, 2018, 2017 and 2016 are as follows:

Years ended December 31	2018		2017		2016	
		Weighted		Weighted		Weighted
	Warrants	average	Warrants	average	Warrants	average
	vv arrants	exercise	vv arrants	exercise	vv arrants	exercise
		price		price		price
Balance, beginning of period	900,000	\$ 6.50	941,969	\$ 6.31	59,775	\$ 2.20
Granted	-	-	-	-	900,000	6.50
Exercised	-	-	(41,969)	(2.20)	(17,806)	(2.20)
Balance, end of period	900,000	\$ 6.50	900,000	\$ 6.50	941,969	\$ 6.31
Warrants exercisable, end of period	900,000	\$ 6.50	900,000	\$ 6.50	941,969	\$ 6.31

12.

**Capital Stock (continued)** 

*(d)* 

Warrants (continued)

The fair value of the warrants issued during the year ended December 31, 2016 was determined at the date of measurement using a Black-Scholes pricing model with the following assumptions:

Years ended December 31 2016
Expected option life 4.0 years
Risk-free interest rate 0.85 %
Dividend yield nil
Expected volatility 120.40 %

(e)

Per share amounts

The following table reflects the calculation of basic earnings per share for the years ended December 31, 2018, 2017 and 2016:

Year ended December 31	2018	2017	2016
Net earnings before discontinued operations	\$0.25	\$0.74	\$0.24
Earnings from discontinued operations, net of tax	-	2.04	1.56
	\$0.25	\$2.78	\$1.80

The following table reflects the calculation of diluted earnings per share for the years ended December 31, 2018, 2017 and 2016:

Year ended December 31	2018	2017	2016
Net earnings before discontinued operations	\$0.24	\$0.63	\$0.21
Earnings from discontinued operations, net of tax	-	1.76	1.35
	\$0.24	\$2.39	\$1.56

The following table reflects the income used in the basic earnings per share computations for the years ended December 31, 2018, 2017 and 2016:

Year ended December 31	2018	2017	2016
Net earnings before discontinued operations	\$3,925,639	\$11,496,693	\$3,624,323
Earnings from discontinued operations, net of tax	-	31,924,191	23,358,318
	\$3,925,639	\$43,420,884	\$26,982,641

The following table reflects the income (and share data used in the denominator of the basic and diluted earnings per share computations for the years ended December 31, 2018, 2017 and 2016:

Year ended December 31	2018	2017	2016
Weighted average shares outstanding for basic earnings per share	15,791,396	15,636,853	15,002,005
Effects of dilution from:			
Stock options	772,267	1,601,227	1,372,427
Warrants	-	900,000	941,969
Weighted average shares outstanding for diluted earnings per share	16,563,663	18,138,080	17,316,401

12.

**Capital Stock (continued)** 

(e)

Per share amounts (continued)

Effects of dilution from 622,375 stock options (2017 – 900, 2016 – 14,573) and 900,000 warrants (2017 – nil and 2016 – nil) were excluded in the calculation of weighted average shares outstanding for diluted earnings per share before discontinued operations for the year ended December 31, 2018 as their exercise prices exceed the Company's share price on the TSX-V at December 31, 2018.

13. Income taxes

The Company recognized current income tax expense of \$677,900 for the year ended December 31, 2018 (2017 – recovery of \$9,392,836; 2016 – expense of \$501,315).and a deferred income tax expense of \$218,976 for the year ended December 31, 2018 (2017 – expense of \$333,187; 2016 – recovery of \$331,095).

As at December 31, 2018 and 2017, deferred tax assets and liabilities have been recognized with respect to the following items:

As at December 31 2018 2017

Deferred tax assets

Non-capital loss carryforwards \$127,176 \$326,108 Total deferred tax assets \$127,176 \$326,108

As at December 31, 2018 and 2017, Canadian deferred tax assets have not been recognized with respect to the following table. The scientific research and experimental development deferred tax assets expire between 2025 and 2028.

As at December 31 2018 2017

Deferred tax assets

Scientific research and experimental development \$3,237,000 \$3,574,000

Holdback receivable 199,000 -

Other 159,000 315,000 Total deferred tax assets \$3,595,000 \$3,889,000

The reconciliation of the Canadian statutory rate to the income tax rate applied to the net income before discontinued operations for the years ended December 31, 2018, 2017 and 2016 to the income tax expense is as follows:

Year ended December 31 2018 2017 2016

Income (loss) for the year

Canadian \$3,439,883 \$(2,178,334) \$(4,012,706) Foreign 1,382,632 4,615,378 7,807,249 \$4,822,515 \$2,437,044 \$3,794,543

Year ended December 31	2018	2017	2016
Canadian federal and provincial income taxes at 27% (2017 – 27%; 2016 – 27%)	\$(1,302,000)	\$(658,000)	\$(1,025,000)
Permanent differences and other items	26,000	(335,000)	(758,000)
Foreign tax rate in foreign jurisdictions	85,000	656,000	2,159,000
Change in unrecognized deferred tax assets	294,000	9,397,000	(546,000)
	\$(897,000)	\$9,060,000	\$(170,000)

#### 13.

#### **Income taxes (continued)**

The foreign tax rate differential is the difference between the Canadian federal and provincial statutory income tax rate and the tax rates in Barbados (2.50%), Mauritius (15.00%), Ireland (12.50%) and the United States (21.00%) that is applicable to income or losses incurred by the Company's subsidiaries.

At December 31, 2018, the Company has the following Barbados losses available for application in future years:

2019 \$2,478,000 2020 1,271,000 2022 1,339,000 \$5,088,000

#### 14.

### **Finance income (expense)**

During the years ended December 31, 2018, 2017 and 2016 the Company earned finance income (incurred finance expense) as follows:

Year ended December 31	2018	2017	2016
Interest income	\$1,114,676	\$47,447	\$30,452
Accretion of royalty obligation	(355,287)	(747,540)	(2,271,436)
Accretion on holdback receivable	325,522	-	-
Interest on MIOP loan	-	(105,670)	(218,867)
Bank charges and other interest	(23,979)	(31,698)	(20,224)
Change in fair value of warrant liability	-	-	1,161
	\$1,060,932	\$(837,461)	\$(2,478,914)

During the years ended December 31, 2018, 2017 and 2016, the Company received (paid) finance income (expense) as follows:

Year ended December 31	2018	2017	2016
Interest received	\$279,098	\$47,447	\$30,452
Interest paid on MIOP loan	-	(88,828)	(186,467)
Other interest, net and banking fees	(23,979)	(31,698)	(20,224)
	\$255,119	\$73,079	\$176,239

15. Commitments and contingencies

(a) Commitments

As at December 31, 2018, and in the normal course of business, the Company has obligations to make future payments representing contracts and other commitments that are known and committed as follows:

2019	\$4,005,841
2020	2,240,096
2021	1,274,935
2022	1,294,288
2023	204,630
Thereafter	204,630
	\$9,224,420

15. Commitments and contingencies (continued)

(a) Commitments (continued)

The Company has entered into a manufacturing and supply agreement to purchase a minimum quantity of AGGRASTAT® unfinished product inventory totaling U.S.\$150,000 annually (based on current pricing) until 2024 and a minimum quantity of AGGRASTAT® finished product inventory totaling U.S.\$197,900 annually (based on current pricing) until 2022 and between 400,000 and 525,000 euros annually (based on current pricing) until 2022.

Effective November 1, 2014, the Company entered into a sub-lease with Genesys Venture Inc. ("GVI") to lease office space at a rate of \$170,000 per annum for three years ending October 31, 2017. The lease was amended on May 1, 2016 and increased the leased area covered under the lease agreement at a rate of \$212,000 per annum until October 31, 2019. The leased area covered under the lease was again increased, effective November 1, 2018 at a rate of \$306,400 per annum until the end of the term of the lease.

Subsequent to December 31, 2018, effective January 1, 2019, the Company renewed its business and administration services agreement with GVI, as described in note 16(b), under which the Company is committed to pay \$7,083 per month or \$85,000 per year for a one-year term.

Contracts with contract research organizations are payable over the terms of the associated agreements and clinical trials and timing of payments is largely dependent on various milestones being met, such as the number of patients recruited, number of monitoring visits conducted, the completion of certain data management activities, trial completion, and other trial related activities.

On October 31, 2017, the Company acquired an exclusive license to sell and market PREXXARTAN® (valsartan) oral solution in the United States and its territories with a seven-year term, with extensions to the term available, which has been granted tentative approval by the U.S. Food and Drug Administration ("FDA"), and which was converted to final approval during 2017. The Company acquired the exclusive license rights for an upfront payment of U.S.\$100,000, with an additional U.S.\$400,000 payable on final FDA approval and will be obligated to pay royalties and milestone payments from the net revenues of PREXXARTAN®. The U.S.\$400,000 payment is on hold pending resolution of the dispute between the licensor and the third-party manufacturer of PREXXARTAN® described in note 15(d) and is recorded within accounts payable and accrued liabilities on the consolidated statements of financial position.

On December 14, 2017 and subsequently updated on March 7, 2018, the Company announced it had acquired an exclusive license to sell and market a branded cardiovascular drug, ZYPITAMAG<sup>TM</sup> (pitavastatin magnesium) in the United States and its territories for a term of seven years with extensions to the term available. The Company has entered into a profit-sharing arrangement resulting in a portion of the net profits from ZYPITAMAG<sup>TM</sup> being paid to the licensor. To date, no amounts are due and/or payable pertaining to profit sharing on this product.

(b) Guarantees

The Company periodically enters into research agreements with third parties that include indemnification provisions customary in the industry. These guarantees generally require the Company to compensate the other party for certain damages and costs incurred as a result of claims arising from research and development activities undertaken on behalf of the Company. In some cases, the maximum potential amount of future payments that could be required under these indemnification provisions could be unlimited. These indemnification provisions generally survive termination of the underlying agreement. The nature of the indemnification obligations prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay. Historically, the Company has not made any indemnification payments under such agreements and no amount has been accrued in the consolidated financial statements with respect to these indemnification obligations.

#### 15. Commitments and contingencies (continued)

#### (c) Royalties

As a part of the Birmingham debt settlement described in note 11, beginning on July 18, 2011, the Company is obligated to pay a royalty to Birmingham based on future commercial AGGRASTAT® sales until 2023. The royalty is based on 4% of the first \$2,000,000 of quarterly AGGRASTAT® sales, 6% on the portion of quarterly sales between \$2,000,000 and \$4,000,000 and 8% on the portion of quarterly sales exceeding \$4,000,000 payable within 60 days of the end of the preceding three-month periods ended February 28, May 31, August 31 and November 30. Birmingham has a one-time option to switch the royalty payment from AGGRASTAT® to a royalty on the sale of MC-1. Management has determined there is no value to the option to switch the royalty to MC-1 as the product is not commercially available for sale and the extended long-term development timeline associated with commercialization of the product. Royalties for the year ended December 31, 2018 totaled \$1,654,380 (2017 – \$1,242,587; 2016 – \$1,795,089) with payments made during the year ended December 31, 2018 of \$1,538,766 (2017 – \$1,829,295; 2016 – \$1,712,390).

The Company is obligated to pay royalties on any future commercial net sales of PREXXARTAN® to the licensor of PREXXARTAN®. To date, no royalties are due and/or payable.

(d) Contingencies

In the normal course of business, the Company may from time to time be subject to various claims or possible claims. Although management currently believes there are no claims or possible claims that if resolved would either individually or collectively result in a material adverse impact on the Company's financial position, results of operations, or cash flows, these matters are inherently uncertain and management's view of these matters may change in the future.

During 2018, the Company was named in a civil claim in Florida from the third-party manufacturer of PREXXARTAN® against the licensor. The claim disputed the rights granted by the licensor to the Company with respect to PREXXARTAN®. The claim against the Company has since been withdrawn, however the dispute between the licensor and the third-party manufacturer continues.

On September 10, 2015, the Company submitted a supplemental New Drug Application ("sNDA") to the FDA to expand the label for AGGRASTAT®. The label change is being reviewed and evaluated based substantially on data from published studies. If the label change submission were to be successful, the Company will be obligated to pay 300,000 Euros over the course of a three-year period in equal quarterly instalments following approval. On July 7, 2016, the Company announced it received a Complete Response Letter stating the sNDA cannot be approved in its present form and requested additional information. The payments are contingent upon the success of the filing and as such the Company has not recorded any amount in the consolidated statements of net income (loss) and comprehensive income (loss) pertaining to this contingent liability.

During 2015, the Company began a development project of a cardiovascular generic drug in collaboration with Apicore. The Company has entered into a supply and development agreement under which the Company holds all commercial rights to the drug. In connection with this project, the Company is obligated to pay Apicore 50% of net profit from the sale of this drug. On August 13, 2018, the Company announced that the FDA has approved its aNDA for SNP, a generic intravenous cardiovascular product and the Company intends to launch the product commercially in 2019. To date, no amounts are due and/or payable pertaining to profit sharing on this product.

16.

**Related party transactions** 

(a)

Key management personnel compensation

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company. The Board of Directors, President and Chief Executive Officer and Chief Financial Officer are key management personnel for all periods. The Vice-President, Commercial Operations was considered key management personnel until the conclusion of his employment in September 2017 and for the 2018 periods, a new Vice-President, Commercial Operations was hired effective January 8, 2018 and is included in key management personnel from the effective date of his hire. Beginning in December 2016 and ending of October 2, 2017, the President and Chief Executive Officer of Apicore, was considered key management personnel. On May 9, 2016, the Company announced that the employment agreement with the Company's then President and Chief Operating Officer had been terminated, effective immediately. For the year ended December 31, 2016, the now former President and Chief Operating Officer was included in key management personnel. The compensation pertaining to the President and Chief Executive Officer of Apicore has been included in the income from discontinued operations in the consolidated statements of net income and comprehensive income for the years ended December 31, 2017 and 2016 and his compensation has been excluded from the table below. Included in the table below is \$750,000 relating to transaction bonuses which is included within the income from discontinued operations for the year ended December 31, 2017 on the consolidated statement net income and comprehensive income.

In addition to their salaries, the Company also provides non-cash benefits and participation in the Stock Option Plan. The following table details the compensation paid to key management personnel:

Year ended December 31 159.7 \$31.6 Less amount representing interest 2.1 Present value of minimum payments \$29.5

On March 22, 2013, we entered into an agreement with a financial institution to renew the lease of our corporate headquarters in Richardson, Texas for a term of approximately six years through March 1, 2019 (the "Lake Park Renewal"). The leased property consists of an office building of approximately 192,000 square feet, land and related improvements. During the lease term, the Lake Park Renewal requires us to pay base rent in quarterly installments, payable in arrears. At the end of the lease term, we must do one of the following: (i) purchase the property for \$41.2 million; (ii) vacate the property and return it in good condition; (iii) arrange for the sale of the leased property to a third party; or (iv) renew the lease under mutually agreeable terms. If we elect to sell the property to a third party and the sales proceeds are less than the lease balance, we must pay any such deficit to the financial institution. Any such deficit payment cannot exceed 86% of the lease balance. The Lake Park Renewal is classified as an operating lease

and its future annual minimum lease payments are included in the table above. We are in the process of finalizing the renewal of our lease that expires on March 1, 2019 and expect the terms and conditions to be similar to the existing lease.

Our obligations under the Lake Park Renewal are secured by a pledge of our interest in the leased property. The Lake Park Renewal contains customary lease covenants and events of default as well as events of default if (i) indebtedness of \$75 million or more is not paid when due, (ii) there is a change of control or (iii) we fail to comply with certain covenants incorporated from our existing credit facility agreement. We believe we were in compliance with these financial covenants as of December 31, 2018.

#### Environmental

Environmental laws and regulations in the locations we operate can potentially impose obligations to remediate hazardous substances at our properties, properties formerly owned or operated by us, and facilities to which we have sent or send waste for treatment or disposal. We are aware of contamination at some facilities; however, we do not believe that any future remediation related to those facilities will be material to our results of operations. Total environmental accruals are included Accrued expenses and Other liabilities on the accompanying Consolidated Balance Sheets.

Future environmental costs are estimates and may be subject to change due to changes in environmental remediation regulations, technology or site-specific requirements.

#### Product Warranties and Product Related Contingencies

We incur the risk of liability for claims related to the installation and service of heating and air conditioning products, and we maintain liabilities for those claims that we self-insure. We are involved in various claims and lawsuits related to our products. Our product liability insurance policies have limits that, if exceeded, may result in substantial costs that could have an adverse effect on our results of operations. In addition, warranty claims and certain product liability claims are not covered by our product liability insurance.

Total product warranty liabilities related to continuing operations are included in the following captions on the accompanying Consolidated Balance Sheets (in millions):

	As of	
	December 31,	
	2018	2017
Accrued expenses	\$37.9	\$34.8
Other liabilities	73.7	75.1
Total product warranty liabilities	\$111.6	\$109.9

The changes in product warranty liabilities related to continuing operations for the years ended December 31, 2018 and 2017 were as follows (in millions):

Total warranty liability as of December 31, 2016	\$101.1	1
Payments made in 2017	(28.8	)
Changes resulting from issuance of new warranties	41.1	
Changes in estimates associated with pre-existing liabilities	(4.8	)
Changes in foreign currency translation rates and other	1.3	
Total warranty liability as of December 31, 2017	\$109.9	9
Payments made in 2018	(31.6	)
Changes resulting from issuance of new warranties	36.8	
Changes in estimates associated with pre-existing liabilities	(1.5	)
Changes in foreign currency translation rates and other	(0.8)	)
Warranty liability from divestitures	(1.2	)
Total warranty liability as of December 31, 2018	\$111.6	5

We have incurred, and will likely continue to incur, product costs not covered by insurance or our suppliers' warranties, which are not included in the table above. Also, to satisfy our customers and protect our brands, we have repaired or replaced installed products experiencing quality-related issues, and will likely continue such repairs and replacements.

#### Self-Insurance

We use a combination of third-party insurance and self-insurance plans to provide protection against claims relating to workers' compensation/employers' liability, general liability, product liability, auto liability, auto physical damage and other exposures. We use large deductible insurance plans, written through third-party insurance providers, for workers' compensation/employers' liability, general liability, product liability and auto liability. We also carry umbrella or excess liability insurance for all third-party and self-insurance plans, except for directors' and officers' liability, property damage and certain other insurance programs. For directors' and officers' liability, property damage and certain other exposures, we use third-party insurance plans that may include per occurrence and annual aggregate limits. We believe the deductibles and liability limits for all of our insurance policies are appropriate for our business and are adequate for companies of our size in our industry.

We maintain safety and manufacturing programs that are designed to remove risk, improve the effectiveness of our business processes and reduce the likelihood and significance of our various retained and insured risks. In recent years, our actual claims experience has collectively trended favorably and, as a result, both self-insurance expense and the related liability have decreased.

Total self-insurance liabilities were included in the following captions on the accompanying Consolidated Balance Sheets (in millions):

 $\begin{array}{c} As \text{ of} \\ December \\ 31, \\ 2018 \quad 2017 \\ Accrued expenses \\ S6.0 \quad \$7.3 \\ Other liabilities \\ 19.5 \quad 21.6 \\ Total self-insurance liabilities \\ \$25.5 \quad \$28.9 \\ \end{array}$ 

#### Litigation

We are involved in a number of claims and lawsuits incident to the operation of our businesses. Insurance coverages are maintained and estimated costs are recorded for such claims and lawsuits, including costs to settle claims and lawsuits, based on experience involving similar matters and specific facts known.

Some of these claims and lawsuits allege personal injury or health problems resulting from exposure to asbestos that was integrated into certain of our products. We have never manufactured asbestos and have not incorporated asbestos-containing components into our products for several decades. A substantial majority of asbestos-related claims have been covered by insurance or other forms of indemnity or have been dismissed without payment. The remainder of our closed cases have been resolved for amounts that are not material, individually or in the aggregate. Our defense costs for asbestos-related claims are generally covered by insurance; however, our insurance coverage for settlements and judgments for asbestos-related claims vary depending on several factors, and are subject to policy limits, so we may have greater financial exposure for future settlements and judgments. We currently estimate our probable liability for known cases is \$9.7 million and it is recorded in Accrued expenses in the Consolidated Balance Sheet. We currently estimate future asbestos-related litigation cases to be between \$19.3 million and \$34.6 million before consideration of probable insurance recoveries with all amounts in that range equally likely. We have accrued \$19.3 million in Other liabilities in the Consolidated Balance Sheet at December 31, 2018. For the years ended December 31, 2018, 2017 and 2016, we recorded expense of \$4.0 million, \$3.5 million and \$6.3 million, respectively, net of probable insurance recoveries, for known and future asbestos-related litigation and is recorded in Losses (gains) and other expenses, net in the Consolidated Statements of Operations.

In October 2016, we self-reported to the Securities and Exchange Commission ("SEC") and the Department of Justice ("DOJ") an alleged payment in the amount of 30,000 rubles (approximately US \$475) to a Russian customs broker or official. Under the oversight of our Audit Committee, we initiated an investigation into this matter with the assistance of external legal counsel and external forensic accountants. The scope of the investigation was later expanded to include our operations in Poland and Ukraine. The investigation raised questions regarding possible irregularities with respect to non-compliance with customs documents and procedures related to these operations. We concluded our investigation and communicated our findings to the SEC and the DOJ. The DOJ has declined to prosecute this matter and we continue to fully cooperate with the SEC regarding this matter.

It is management's opinion that none of these claims or lawsuits or any threatened litigation will have a material adverse effect, individually or in the aggregate, on our financial condition, results of operations or cash flows. Claims and lawsuits, however, involve uncertainties and it is possible that their eventual outcome could adversely affect our results of operations in a future period.

#### Marshalltown Tornado and Recovery

On July 19, 2018 our manufacturing facility in Marshalltown, Iowa was severely damaged by a tornado. Insurance covers the repair or replacement of our assets that suffered damage or loss, and we are working closely with our insurance carriers and claims adjusters to ascertain the full amount of insurance recoveries due to us as a result of the damage and loss we incurred. Our insurance policies also provide business interruption coverage, including lost profits, and reimbursement for other expenses and costs that have been incurred relating to the damages and losses suffered. These costs and insurance recoveries are shown in Gain from insurance recoveries, net of losses incurred and Insurance proceeds for lost profits in the Consolidated Statements of Operations.

The following table summarizes the gain from insurance recoveries, net of losses incurred:

	For the
	Year
(Amounts in millions)	Ended
	December
	31, 2018
Insurance recoveries received	\$ 124.3
Less losses and expenses incurred:	
Site clean-up and remediation	50.9
Factory inefficiencies due to lower productivity	7.4
Write-off of property, plant and equipment	4.2
Write-off of inventory	5.8
Other	17.7
Total losses and expenses	\$ 86.0
Gain from insurance recoveries	\$ 38.3
Presentation in the Consolidated Statements of Operations:	
Gain from insurance recoveries, net of losses incurred	\$ 10.9
Insurance proceeds for lost profits	\$ 27.4

### 12. Lines of Credit and Financing Arrangements:

The following tables summarize our outstanding debt obligations and the classification in the accompanying Consolidated Balance Sheets (in millions):

	As of December 31,		
	2018	2017	
Short-Term Debt:			
Foreign obligations	<b>\$</b> —	\$0.9	
Total short-term debt	<b>\$</b> —	\$0.9	
Current maturities of long-term debt:			
Asset Securitization Program	\$268.0	<b>\$</b> —	
Capital lease obligations	3.5	3.2	
Domestic credit facility	30.0	30.0	
Debt issuance costs	(0.7)	(0.6)	
Total current maturities of long-term debt	\$300.8	\$32.6	
Long-Term Debt:			
Asset Securitization Program	<b>\$</b> —	\$276.0	
Capital lease obligations	15.7	11.9	
Domestic credit facility	378.0	337.0	
Senior unsecured notes	350.0	350.0	
Debt issuance costs	(3.2)	(4.4)	
Total long-term debt	\$740.5	\$970.5	
Total debt	\$1,041.3	\$1,004.0	

As of December 31, 2018, the aggregate amounts of required principal payments on total debt were as follows (in millions):

2019 \$301.5 2020 32.6 2021 349.3 2022 0.1 2023 350.0 Thereafter 11.7

Short-Term Debt

#### Foreign Obligations

Through several of our foreign subsidiaries, we have facilities available to assist in financing seasonal borrowing needs for our foreign locations. We had \$0.0 million and \$0.9 million of foreign obligations as of December 31, 2018 and 2017, respectively, that were primarily borrowings under non-committed facilities. Proceeds from these facilities were \$40.3 million, \$30.4 million and \$28.4 million during the years ended December 31, 2018, 2017 and 2016, respectively. Repayments on the facilities were \$41.2 million, \$31.9 million and \$30.8 million during the years ended December 31, 2018, 2017 and 2016, respectively.

#### **Asset Securitization Program**

Under the Asset Securitization Program ("ASP"), we are eligible to sell beneficial interests in a portion of our trade accounts receivable to a financial institution for cash. The ASP contains a provision whereby we retain the right to repurchase all of the outstanding beneficial interests transferred. As a result of the repurchase right, the transfer of the receivables under the ASP is not accounted for as a sale. Accordingly, the cash received from the transfer of the beneficial interests in our trade accounts receivable is reflected as secured borrowings in the accompanying Consolidated Balance Sheets and proceeds received are included in Cash flows from financing activities in the accompanying Consolidated Statements of Cash Flows. Our continued involvement with the transferred assets includes servicing, collection and administration of the transferred beneficial interests. The accounts receivable securitized under the ASP are high-quality domestic customer accounts that have not aged significantly. The receivables represented by the retained interest that we service are exposed to the risk of loss for any uncollectible amounts in the pool of receivables transferred under the ASP. The ASP will expire in November 2019 and we intend to renew the ASP prior to the expiration.

The ASP provides for a maximum securitization amount ranging from \$225.0 million to \$380.0 million, depending on the period. The maximum capacity under the ASP is the lesser of the maximum securitization amount or 100% of the net pool balance less allowances, as defined by the ASP. Eligibility for securitization is limited based on the amount and quality of the qualifying accounts receivable and is calculated monthly. The eligible amounts available and beneficial interests sold were as follows (in millions):

As of December 31, 2018 2017 Eligible amount available under the ASP on qualified accounts receivable \$290.0 \$290.0 Less: Beneficial interest transferred (268.0) (276.0) Remaining amount available \$22.0 \$14.0

We pay certain discount fees to use the ASP and to have the facility available to us. These fees relate to both the used and unused portions of the securitization. The used fee is based on the beneficial interest sold and calculated on either the average LIBOR rate or floating commercial paper rate determined by the purchaser of the beneficial interest, plus a program fee of 0.70%. The average rates as of December 31, 2018 and 2017 were 3.27% and 2.60%, respectively. The unused fee is based on 101% of the maximum available amount less the beneficial interest transferred and is calculated at a 0.35% fixed rate throughout the term of the agreement. We recorded these fees in Interest expense, net in the accompanying Consolidated Statements of Operations.

The ASP contains certain restrictive covenants relating to the quality of our accounts receivable and cross-default provisions with our Sixth Amended and Restated Credit Facility Agreement ("Domestic Credit Facility"), senior unsecured notes and any other indebtedness we may have over \$75.0 million. The administrative agent under the ASP is also a participant in our Domestic Credit Facility. The participating financial institutions have investment grade credit ratings. As of December 31, 2018, we believe we were in compliance with all covenant requirements.

Long-Term Debt

#### **Domestic Credit Facility**

On August 30, 2016, we replaced an earlier credit facility with the Domestic Credit Facility, which consists of a \$650.0 million unsecured revolving credit facility and a \$250.0 million unsecured term loan and matures in August 2021 (the "Maturity Date"). Under our Domestic Credit Facility, we had outstanding borrowings of \$408.0 million, of which \$190.0 million was the term loan balance, as well as \$2.5 million committed to standby letters of credit as of December 31, 2018. Subject to covenant limitations, \$429.5 million was available for future borrowings at that date.

The unsecured term loan also matures on the Maturity Date and requires quarterly principal repayments of \$7.5 million beginning in March 2017. The revolving credit facility includes uncommitted subfacilities for swingline loans of up to \$65.0 million and letters of credit up to \$100.0 million. Additionally, at our request and subject to certain conditions, the commitments under the Domestic Credit Facility may be increased by a maximum of \$350.0 million provided existing or new lenders agree to provide such additional commitments. In January 2019, we increased the maximum revolving credit commitments by \$350.0 million as permitted under the Domestic Credit Facility bringing the total maximum revolving credit commitments to \$1.0 billion.

Our weighted average borrowing rate on the facility was as follows:

As of December 31, 2018 2017

Weighted average borrowing rate 3.74% 2.76%

Our Domestic Credit Facility is guaranteed by certain of our subsidiaries and contains financial covenants relating to leverage and interest coverage. Other covenants contained in the Domestic Credit Facility restrict, among other things, certain mergers, asset dispositions, guarantees, debt, liens, and affiliate transactions. The financial covenants require us to maintain a defined Consolidated Indebtedness to Adjusted EBITDA Ratio and a Cash Flow (defined as EBITDA minus capital expenditures) to Interest Expense Ratio. The required ratios under our Domestic Credit Facility are detailed below:

Consolidated Indebtedness to Adjusted EBITDA Ratio no greater than 3.5 : 1.0 Cash Flow to Interest Expense Ratio no less than 3.0 : 1.0

Our Domestic Credit Facility contains customary events of default. These events of default include nonpayment of principal or interest, breach of covenants or other restrictions or requirements, default on certain other indebtedness or receivables securitizations (cross default), and bankruptcy. A cross default under our Domestic Credit Facility could occur if:

We fail to pay any principal or interest when due on any other indebtedness or receivables securitization exceeding \$75.0 million; or

We are in default in the performance of, or compliance with any term of any other indebtedness or receivables securitization in an aggregate principal amount exceeding \$75.0 million or any other condition exists which would give the holders the right to declare such indebtedness due and payable prior to its stated maturity.

Each of our major debt agreements contains provisions by which a default under one agreement causes a default in the others (a "cross default"). If a cross default under the Domestic Credit Facility, our senior unsecured notes, our lease of our corporate headquarters in Richardson, Texas (recorded as an operating lease), or our ASP were to occur, it could have a wider impact on our liquidity than might otherwise occur from a default of a single debt instrument or lease commitment.

If any event of default occurs and is continuing, the administrative agent, or lenders with a majority of the aggregate commitments may require the administrative agent to, terminate our right to borrow under our Domestic Credit Facility and accelerate amounts due under our Domestic Credit Facility (except for a bankruptcy event of default, in which case such amounts will automatically become due and payable and the lenders' commitments will automatically terminate). As of December 31, 2018, we believe we were in compliance with all covenant requirements.

#### Senior Unsecured Notes

We issued \$350.0 million of senior unsecured notes in November 2016 (the "Notes") which will mature on November 15, 2023 with interest being paid on May 15 and November 15 at 3.00% per annum semiannually. The Notes are guaranteed, on a senior unsecured basis, by each of our subsidiaries that guarantee indebtedness under our Domestic Credit Facility. The indenture governing the Notes contains covenants that, among other things, limit our ability and the ability of the subsidiary guarantors to: create or incur certain liens; enter into certain sale and leaseback transactions; and enter into certain mergers, consolidations and transfers of substantially all of our assets. The indenture also contains a cross default provision which is triggered if we default on other debt of at least \$75 million in principal which is then accelerated, and such acceleration is not rescinded within 30 days of the notice date. As of December 31, 2018, we believe we were in compliance with all covenant requirements.

#### 13. Employee Benefit Plans:

Over the past several years, we have frozen many of our defined benefit pension and profit sharing plans and replaced them with defined contribution plans. We have a liability for the benefits earned under these inactive plans prior to the date the benefits were frozen. We also have several active defined benefit plans that provide benefits based on years of service. Our defined contribution plans generally include both company and employee contributions which are based on predetermined percentages of compensation earned by the employee.

In addition to freezing the benefits of our defined benefit pension plans, we have also eliminated nearly all of our post-retirement medical benefits. In 2012, we amended the post-retirement benefit plan to shift pre-65 medical coverage for the employees of

our largest manufacturing plant so that by 2016, retirees would pay 100% of the cost of post-retirement medical coverage. This change resulted in a significant reduction in the projected benefit obligation for post-retirement medical benefits in 2012.

Effective for fiscal year 2016, we adopted the full yield curve approach for estimating the service cost and interest cost components of expense for plans that use a yield curve to determine the discount rate. The new method applies the specific spot rates along the yield curve used in the most recent measurement of the benefit obligation, resulting in a more precise estimate of expense. The impact for fiscal year 2016 was a decrease in expense of approximately \$3.2 million.

In 2016, we offered certain former employees with vested pension benefits a lump sum payout in an effort to reduce our long-term pension obligations. As a result, for 2016, the net periodic benefit cost for our pension plans included a non-cash settlement charge of \$31.4 million and the projected benefit obligation decreased by \$50.6 million. We did not have similar funding of pension buyout activity in 2018 and 2017.

On March 10, 2017, the FASB issued ASU 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. ASU 2017-07 changes the income statement presentation of defined benefit plan expense by requiring separation between operating expense (service cost component) and non-operating expense (all other components, including interest cost, amortization of prior service cost, curtailments and settlements, etc.). The operating expense component is reported with similar compensation costs while the non-operating components are reported in Other expense (income), net in the Statement of Operations. In addition, only the service cost component is eligible for capitalization as part of an asset such as inventory or property, plant and equipment. We elected the practical expedient to use the prior year's disclosure as a basis for the retroactive adoption of the ASU. The ASU did not have a material impact on our financial results.

#### **Defined Contribution Plans**

We recorded the following contributions to the defined contribution plans (in millions):

For the Years Ended December 31, 2018 2017 2016

Contributions to defined contribution plans \$18.8 \$18.1 \$16.3

#### Pension and Post-retirement Benefit Plans

The following tables set forth amounts recognized in our financial statements and the plans' funded status for our pension and post-retirement benefit plans (dollars in millions):

Pension Benefits

	Pension Benefits	
	2018 2017	
Accumulated benefit obligation	\$368.0 \$401.5	
Changes in projected benefit obligation:		
Benefit obligation at beginning of year	\$405.5 \$381.6	
Service cost	5.3 5.0	
Interest cost	12.3 12.6	
Other	0.3 —	
Actuarial (gain) loss	(26.4 ) 22.1	
Effect of exchange rates	(2.7 ) 4.3	
Settlements and curtailments	(1.3 ) (1.3 )	
Benefits paid	(21.1 ) (18.8 )	
Benefit obligation at end of year	\$371.9 \$405.5	
Denotify congustion at one of your	φ271.9 φ102.2	
Changes in plan assets:		
Fair value of plan assets at beginning of year	\$318.6 \$292.5	
Actual (loss) gain return on plan assets	(23.3 ) 39.8	
Employer contribution	20.6 3.5	
Effect of exchange rates	(2.5) 2.9	
Plan settlements	(1.3 ) (1.3 )	
Benefits paid	(21.1 ) (18.8 )	
Fair value of plan assets at end of year	291.0 318.6	
Funded status / net amount recognized	\$(80.9) \$(86.9)	
-	+(0012)+(0012)	
Net amount recognized consists of:		
Non-current assets	\$3.3 \$1.6	
Current liability	(1.4)(4.0)	
Non-current liability	(82.8 ) (84.5 )	
Net amount recognized	\$(80.9) \$(86.9)	
		For the Years
		Ended
		December 31,
		2018 2017
Pension plans with a benefit obligation in exce	ess of plan assets:	
Projected benefit obligation	-	\$357.2 \$394.4
Accumulated benefit obligation		353.4 390.4
Fair value of plan assets		275.0 305.9
r		

Our U.S.-based pension plans comprised approximately 89% of the projected benefit obligation and 88% of plan assets as of December 31, 2018.

	Pension Benefits		
	2018	2017	2016
Components of net periodic benefit cost as of December 31:			
Service cost	\$5.3	\$5.0	\$4.4
Interest cost	12.3	12.6	15.3
Expected return on plan assets	(18.8)	(21.3)	(21.5)
Amortization of prior service cost	0.1	0.2	0.3
Recognized actuarial loss	9.2	8.1	7.6
Settlements and curtailments <sup>(1)</sup>	0.7	0.7	31.6
Net periodic benefit cost	\$8.8	\$5.3	\$37.7

<sup>(1)</sup> The Consolidated Statements of Operations includes \$31.4 million related to pension settlement charges that represent the lump-sum payments made in the fourth quarter of 2016.

The following table sets forth amounts recognized in AOCL and Other comprehensive income (loss) in our financial statements for 2018 and 2017 (in millions):

	Pension Benefits
	2018 2017
Amounts recognized in AOCL:	
Prior service costs	\$(0.9 ) \$(0.8 )
Actuarial loss	(199.4 ) (194.6 )
Subtotal	(200.3) (195.4)
Deferred taxes	49.5 71.2
Net amount recognized	\$(150.8) \$(124.2)
Changes recognized in other comprehensive income (loss):	
Current year prior service costs	0.3 0.1
Current year actuarial (gain) loss	15.7 3.7
Effect of exchange rates	(1.1 ) 1.7
Amortization of prior service (costs) credits	(0.1) $(0.2)$
Amortization of actuarial loss	(9.9 ) (8.8 )
Total recognized in other comprehensive income (loss)	\$4.9 \$(3.5)
Total recognized in net periodic benefit cost and other comprehensive income (loss)	\$13.7 \$1.8

The estimated prior service (costs) credits and actuarial losses that will be amortized from AOCL in 2019 are (0.1) million and (7.9) million, respectively, for pension benefits.

The following tables set forth the weighted-average assumptions used to determine Benefit obligations and Net periodic benefit cost for the U.S.-based plans in 2018 and 2017:

	Pension Benefits	
	2018	2017
Weighted-average assumptions used to determine benefit obligations as of December 31:		
Discount rate	4.32%	3.66%
Rate of compensation increase	4.23%	4.23%

	Pension Benefits		
	2018	2017	2016
Weighted-average assumptions used to determine net periodic benefit cost for the years ended			
December 31:			
Discount rate - service cost	3.48%	3.96%	4.30%
Discount rate - interest cost	3.22%	3.51%	3.76%
Expected long-term return on plan assets	6.50%	7.50%	7.50%
Rate of compensation increase	4.23%	4.23%	4.23%

The following tables set forth the weighted-average assumptions used to determine Benefit obligations and Net periodic benefit cost for the non-U.S.-based plans in 2018 and 2017:

	Pension Benefits	
	2018	2017
Weighted-average assumptions used to determine benefit obligations as of December 31:		
Discount rate	2.93%	2.58%
Rate of compensation increase	3.77%	3.63%

	2018	2017	2016
Weighted-average assumptions used to determine net periodic benefit cost for the years ended			
December 31:			
Discount rate - service cost	1.32%	1.34%	2.04%
Discount rate - interest cost	2.67%	2.75%	3.45%
Expected long-term return on plan assets	4.19%	4.40%	4.87%
Rate of compensation increase	3.62%	3.78%	3.70%

To develop the expected long-term rate of return on assets assumption for the U.S. plans, we considered the historical returns for each asset category, as well as the target asset allocation of the pension portfolio and the effect of periodic balancing. These results were adjusted for the payment of reasonable expenses of the plan from plan assets. This resulted in the selection of the 6.50% long-term rate of return on assets assumption. A similar process was followed for the non-U.S.-based plans.

To select a discount rate for the purpose of valuing the plan obligations for the U.S. plans, we performed an analysis in which the projected cash flows from defined benefit and retiree healthcare plans was matched with a yield curve based on the appropriate universe of high-quality corporate bonds that were available. We used the results of the yield curve analysis to select the discount rate for each plan. The analysis was completed separately for each U.S. pension and OPEB plan. A similar process was followed for the non-U.S.-based plans with sufficient corporate bond information. In other countries, the discount rate was selected based on the approximate duration of plan obligations.

Assumed health care cost trend rates have an effect on the amounts reported for our healthcare plan. The following table sets forth the healthcare trend rate assumptions used:

2018	•	2017	
Assumed health care			
cost trend rates as of			
December 31:			
Health care cost trend			
rate assumed for next 6.50	%	6.50	%
year			

**Pension Benefits** 

Rate to which the

cost rate is assumed to decline (the 5.00 % 5.00

ultimate trend rate)
Year that the rate

reaches the ultimate 2022 2021

trend rate

Expected future benefit payments are shown in the table below (in millions):

For the Years Ended December 31,

2019 2020 2021 2022 2023 2024-2028

Pension benefits \$19.3 \$19.9 \$25.8 \$20.7 \$23.5 \$ 147.1

#### Pension Plan Assets

We believe asset returns can be optimized at an acceptable level of risk by adequately diversifying the plan assets between equity and fixed income. In the second quarter of 2018, we changed the targeted allocations for our plan assets. The targeted allocation for fixed income and cash investments was changed to 60%, and the targeted allocation for equity investments was changed to 40%. Our targeted exposure to International equity including emerging markets was changed to 15.0% of total assets and our exposure to domestic equity was changed to 25.0%. Our U.S. pension plan represents 87%, our Canadian pension plan 6%, and our United Kingdom ("U.K.") pension plan 7% of the total fair value of our plan assets as of December 31, 2018.

Our U.S. pension plans' weighted-average asset allocations as of December 31, 2018 and 2017, by asset category, are as follows:

Plan Assets as of

December 31,

Asset Category: 2018 2017

U.S. equity 24.6 % 12.5 %
International equity 15.5 % 15.1 %
Fixed income 57.2 % 71.1 %
Money market/cash 2.7 % 1.3 %
Total 100.0 % 100.0 %

U.S. pension plan assets are invested according to the following targets:

Asset Category: Target U.S. equity 25.0% International equity 15.0% Fixed income 60.0%

Our Canadian pension plans were invested approximately 75% in Canadian bonds and 25% in international equities. Our U.K. pension plan was invested in a broad mix of assets consisting of U.K. and international equities, and U.K. fixed income securities, including corporate and government bonds.

The fair values of our pension plan asse	Fair Value Measu December 31, 20 Quoted Prices in Significant Active Markets for Inputs Identical Assets		rements as of		
	(Level				
	1)				
Asset Category:				4	
Cash and cash equivalents		\$ —	\$ -	-\$7.2	
Commingled pools / Collective Trusts: U.S. equity (1)		62.7		62.7	
International equity (2)		39.5	_	39.5	
Fixed income (3)	_	146.2		146.2	
Balanced pension trust: (4)		1.0.2		110.2	
International equity		4.0		4.0	
Fixed income		12.0		12.0	
Pension fund:					
International equity (5)		2.7	_	2.7	
Fixed income (6)		8.9	_	8.9	
Blend (7)	— ¢7.0	7.8	<u> </u>	7.8	
Total	\$1.2	\$ 283.8	\$ -	-\$291.0	
	Dece Quot Price in Activ Marl	ember 31, 201 ted es Significant Other cets Observable Inputs ical (Level 2)	Significant Unobservable Inputs (Level 3)	Total	
Asset Category:	-)				
Cash and cash equivalents	\$3.9	\$ —	\$ _	-\$3.9	
Commingled pools / Collective Trusts:					
U.S. equity (1)		34.7		34.7	
International equity (2)	_	42.2		42.2	
Fixed income (3)	_	197.9	_	197.9	
Balanced pension trust: (4)		16		16	
International equity Fixed income	_	4.6 13.6	_	4.6 13.6	
I IACU IIICUIIIC		13.0		13.0	

Pension fund:

i chistori runu.			
International equity (5)	<b>—</b> 3.3		3.3
Fixed income (6)	<b>—</b> 5.9		5.9
Blend (7)	— 12.5	—	12.5
Total	\$3.9 \$ 314.7	\$	<b>—</b> \$318.6

Additional information about assets measured at Net Asset Value ("NAV") per share (in millions):

	As of December 31, 2018			
	Fair	Redemption Frequency	Redemption Notice Period	
	Value	(if currently eligible)	Redemption Notice Terrod	
Asset Category:				
Commingled pools / Collective Trusts:				
U.S. equity <sup>(1)</sup>	\$62.7	Daily	5 days	
International equity (2)	39.5	Daily	5 days	
Fixed income (3)	146.2	Daily	5-15 days	
Balanced pension trust: (4)				
International equity	4.0	Daily	3-5 days	
Fixed income	12.0	Daily	3-5 days	
Pension fund:				
International equity (5)	2.7	Daily	1-3 days	
Fixed income (6)	8.9	Daily	1-3 days	
Blend (7)	7.8	Daily	1-3 days	
Total	\$283.8			
		December 31, 2017		
	Fair	Redemption Frequency	Redemption Notice Period	
			Redemption Notice Period	
Asset Category:	Fair	Redemption Frequency	Redemption Notice Period	
Commingled pools / Collective Trusts:	Fair Value	Redemption Frequency (if currently eligible)	•	
Commingled pools / Collective Trusts: U.S. equity (1)	Fair Value \$34.7	Redemption Frequency (if currently eligible) Daily	5 days	
Commingled pools / Collective Trusts: U.S. equity (1) International equity (2)	Fair Value \$34.7 42.2	Redemption Frequency (if currently eligible)  Daily Daily	5 days 5 days	
Commingled pools / Collective Trusts: U.S. equity <sup>(1)</sup> International equity <sup>(2)</sup> Fixed income <sup>(3)</sup>	Fair Value \$34.7	Redemption Frequency (if currently eligible) Daily	5 days	
Commingled pools / Collective Trusts: U.S. equity <sup>(1)</sup> International equity <sup>(2)</sup> Fixed income <sup>(3)</sup> Balanced pension trust: <sup>(4)</sup>	Fair Value \$34.7 42.2 197.9	Redemption Frequency (if currently eligible)  Daily Daily Daily	5 days 5 days 5-15 days	
Commingled pools / Collective Trusts: U.S. equity <sup>(1)</sup> International equity <sup>(2)</sup> Fixed income <sup>(3)</sup> Balanced pension trust: <sup>(4)</sup> International equity	Fair Value \$34.7 42.2 197.9	Redemption Frequency (if currently eligible)  Daily Daily Daily Daily	5 days 5 days 5-15 days 3-5 days	
Commingled pools / Collective Trusts: U.S. equity (1) International equity (2) Fixed income (3) Balanced pension trust: (4) International equity Fixed income	Fair Value \$34.7 42.2 197.9	Redemption Frequency (if currently eligible)  Daily Daily Daily	5 days 5 days 5-15 days	
Commingled pools / Collective Trusts: U.S. equity (1) International equity (2) Fixed income (3) Balanced pension trust: (4) International equity Fixed income Pension fund:	Fair Value \$34.7 42.2 197.9 4.6 13.6	Redemption Frequency (if currently eligible)  Daily Daily Daily Daily Daily	5 days 5 days 5-15 days 3-5 days 3-5 days	
Commingled pools / Collective Trusts: U.S. equity (1) International equity (2) Fixed income (3) Balanced pension trust: (4) International equity Fixed income Pension fund: International equity (5)	Fair Value \$34.7 42.2 197.9 4.6 13.6	Redemption Frequency (if currently eligible)  Daily Daily Daily Daily Daily Daily Daily	5 days 5 days 5-15 days 3-5 days 3-5 days 1-3 days	
Commingled pools / Collective Trusts: U.S. equity (1) International equity (2) Fixed income (3) Balanced pension trust: (4) International equity Fixed income Pension fund: International equity (5) Fixed income (6)	Fair Value \$34.7 42.2 197.9 4.6 13.6 3.3 5.9	Redemption Frequency (if currently eligible)  Daily Daily Daily Daily Daily Daily Daily	5 days 5 days 5-15 days 3-5 days 3-5 days 1-3 days 1-7 days	
Commingled pools / Collective Trusts: U.S. equity (1) International equity (2) Fixed income (3) Balanced pension trust: (4) International equity Fixed income Pension fund: International equity (5)	Fair Value \$34.7 42.2 197.9 4.6 13.6	Redemption Frequency (if currently eligible)  Daily Daily Daily Daily Daily Daily Daily	5 days 5 days 5-15 days 3-5 days 3-5 days 1-3 days	

- (1) This category includes investments primarily in U.S. equity securities that include large, mid and small capitalization companies.
- (2) This category includes investments primarily in international equity securities that include large, mid and small capitalization companies in large developed markets as well as emerging markets equities.
- (3) This category includes investments in U.S. investment grade and high yield fixed income securities, international fixed income securities and emerging markets fixed income securities.
- The investment objectives of the plan are to provide long-term capital growth and income by investing primarily in a well-diversified, balanced portfolio of Canadian common stocks, bonds and money market securities. The plan also holds a portion of its assets in international equities, a portion of which may be invested in U.S. securities. This category includes investments in international equity securities, a portion of which may be invested in U.S.
- (5) securities
- and aims to provide returns consistent with the markets in which it invests and provide broad exposure to countries around the world.
  - This category includes investments in U.K. government index-linked securities (index-linked gilts) that have
- (6) maturity periods of 5 years or longer with a derivatives overlay and investment grade corporate bonds denominated in sterling.
- This category includes investments in pooled funds where the fund manager has discretion for the asset allocation
- (7) and can invest in a wide range of international and US asset classes including equity, credit markets, sovereign debt and alternative assets (including derivative-based strategies).

The majority of our commingled pool/collective trusts, mutual funds, balanced pension trusts and pension funds are managed by professional investment advisors. The NAVs per share are furnished in monthly and/or quarterly statements received from the investment advisors and reflect valuations based upon their pricing policies. We assessed the fair value classification of these investments as Level 2 for commingled pool/collective trusts, balanced pension trusts and pension funds based on an examination of their pricing policies and the related controls and procedures. The fair values we report are based on the pool, trust or fund's NAV per share. The NAVs per share are calculated periodically (daily or no less than one time per month) as the aggregate value of each pool or trust's underlying assets divided by the number of units owned. See Note 21 for information about our fair value hierarchies and valuation techniques.

## 14. Comprehensive Income:

The following table provides information on items not reclassified in their entirety from AOCL to Net Income in the accompanying Consolidated Statements of Operations (in millions):

For the Years

	Ended	
	December 31,	
AOCL Component	2018 2017	Affected Line Item(s) in the Consolidated Statements of Operations
Gains/(Losses) on cash flow hedges:		
Commodity derivative contracts	\$6.1 \$13.7	Cost of goods sold
Income tax benefit	(1.4 ) (5.0 )	Provision for income taxes
Net of tax	\$4.7 \$8.7	
Defined Benefit Plan Items:		

Pension and Post-Retirement Benefits costs	\$(9.3)	\$(7.3)	Cost of goods sold; Selling, general and administrative
	Ψ(>.c )	Ψ(/10/	expenses
Income tax benefit	2.3	2.8	Provision for income taxes

Net of tax \$(7.0) \$(4.5)

Foreign currency translation adjustments:

Foreign currency adjustments upon sale of business (27.9) — Loss (gain), net on sale of businesses and related property

business property
Net of tax (27.9 ) —

Total reclassifications from AOCL \$(30.2) \$4.2

The following tables provide information on changes in AOCL, by component (net of tax), for the years ended December 31, 2018 and 2017 (in millions):

	Gains (Losses) on Cash Flow Hedges	(Lo	realized Gains sses) on ailable-for-Sale urities	Be Pl	efined enefit an ems	Cu Tra	oreign nrency anslation ljustments	A	otal OCL
Balance as of December 31, 2017	\$ 7.4	\$	1.8	\$(	127.5)	\$	(39.1)	\$(	(157.4)
Other comprehensive loss before reclassifications	(8.9	(1.8	)	(3	4.0 )	(16	6.9	(6	1.6 )
Amounts reclassified from AOCL	(4.7	) —		7.	$\mathbf{C}$	27	.9	30	).2
Net other comprehensive (loss) income	(13.6	(1.8	)	(2	7.0 )	11	.0	(3	1.4 )
Balance as of December 31, 2018	\$ (6.2	) \$		\$(	154.5)	\$	(28.1)	\$(	(188.8)
	(Lo on Flo	ins osses) Cash ow edges	Available-for Securities		Benet e Plan Items	fit	Currency Translation Adjustment	on	Total AOCL
Balance as of December 31, 2016	\$ 5	5.6	\$ 2.3		\$(130	(0.0)	\$ (73.0	)	\$(195.1)
Other comprehensive (loss) income before reclassifications	10.	.5	(0.5	)	(2.0	)	33.9		41.9
Amounts reclassified from AOCI	(8.	7 )			4.5				(4.2)
Net other comprehensive (loss) income	1.8	3	(0.5	)	2.5		33.9		37.7
Balance as of December 31, 2017	\$ 7	7.4	\$ 1.8		\$(127	7.5)	\$ (39.1	)	\$(157.4)

## 15. Stock-Based Compensation:

Stock-based compensation expense related to continuing operations was included in Selling, general and administrative expenses in the accompanying Consolidated Statements of Operations as follows (in millions):

For the Years Ended December 31, 2018 2017 2016

Compensation expense<sup>(1)</sup> \$26.3 \$24.9 \$31.7

## Incentive Plan

Under the Lennox International Inc. 2010 Incentive Plan, as amended and restated (the "2010 Incentive Plan"), we are authorized to issue awards for 24.3 million shares of common stock. The 2010 Incentive Plan provides for various long-term incentive awards, including performance share units, restricted stock units and stock appreciation rights. A description of these long-term incentive awards and related activity within each award category is provided below.

As of December 31, 2018, awards for 9.9 million shares of common stock had been granted, net of cancellations and repurchases, and there were 3.5 million shares available for future issuance.

Performance Share Units

<sup>(1)</sup> Stock-based compensation expense was recorded in our Corporate and other business segment.

Performance share units are granted to certain employees at the discretion of the Board of Directors with a three-year performance period beginning January 1st of each year. Upon meeting the performance and vesting criteria, performance share units are converted to an equal number of shares of our common stock. Performance share units vest if, at the end of the three-year performance period, at least the threshold performance level has been attained. To the extent that the payout level attained is less than 100%, the difference between 100% and the units earned and distributed will be forfeited. Eligible participants may also earn additional units of our common stock, which would increase the potential payout up to 200% of the units granted, depending on LII's performance over the three-year performance period.

Performance share units are classified as equity awards. Compensation expense is recognized on an earnings curve over the period and is based on the expected number of units to be earned and the fair value of the stock at the date of grant. The fair value of units is calculated as the average of the high and low market price of the stock on the date of grant discounted by the expected dividend rate over the service period. The number of units expected to be earned will be adjusted in future periods as necessary to reflect changes in the estimated number of award to be issued and, upon vesting, the actual number of units awarded. Our practice is to issue new shares of common stock or utilize treasury stock to satisfy performance share unit distributions.

The following table provides information on our performance share units:

	For the Years Ended December		
	31,		
	2018	2017	2016
Compensation expense for performance share units (in millions)	\$12.3	\$12.2	\$18.1
Weighted-average fair value of grants, per share	\$204.64	\$197.54	\$150.21
Payout ratio for shares paid	173.2 %	185.9 %	200.0 %

A summary of the status of our undistributed performance share units as of December 31, 2018, and changes during the year then ended, is presented below (in millions, except per share data):

,	
	Weighted-
	Average
Charac	Grant
Silares	Date Fair
	Value per
	Share
0.3	\$ 123.80
0.1	204.64
(0.2)	88.26
1) 0.2	\$ 160.69
	0.1 (0.2 )

<sup>(1)</sup> Undistributed performance share units include approximately 0.2 million units with a weighted-average grant date fair value of \$182.06 per share that had not yet vested and 0.1 million units that have vested but were not yet distributed.

As of December 31, 2018, we had \$21.3 million of total unrecognized compensation cost related to non-vested performance share units that is expected to be recognized over a weighted-average period of 2.2 years. Our estimated forfeiture rate for these performance share units was 12.4% as of December 31, 2018.

The total fair value of performance share units distributed and the resulting tax deductions to realized tax benefits were as follows (in millions):

For the Years Ended December 2018 2017 2016 Fair value of performance share units distributed \$21.1 \$64.3 \$39.4 \$5.3 \$24.5 \$15.0

**Restricted Stock Units** 

Realized tax benefits from tax deductions

Restricted stock units are issued to attract and retain key employees. Generally, at the end of a three-year retention period, the units will vest and be distributed in shares of our common stock to the participant. Our practice is to issue new shares of common stock or utilize treasury stock to satisfy restricted stock unit vestings. Restricted stock units are classified as equity awards. The fair value of units granted is the average of the high and low market price of the stock on the date of grant discounted by the expected dividend rate over the service period. Units are amortized to compensation expense ratably over the service period.

The following table provides information on our restricted stock units (in millions, except per share data):

For the Years Ended December 31, 2018 2017 2016

Compensation expense for restricted stock units \$9.2 \$8.3 \$9.0

Weighted-average fair value of grants, per share \$204.64 \$197.54 \$150.14

A summary of our non-vested restricted stock units as of December 31, 2018 and changes during the year then ended is presented below (in millions, except per share data):

		Weighted-
		Average
	Chanas	Grant
	Shares	Date Fair
		Value per
		Share
Non-vested restricted stock units as of December 31, 2017	0.2	\$ 156.16
Granted	0.1	204.64
Vested	(0.1)	125.46
Forfeited	_	_
Non-vested restricted stock units as of December 31, 2018 (1)	0.2	\$ 182.84

(1) As of December 31, 2018, we had \$19.5 million of total unrecognized compensation cost related to non-vested restricted stock units that is expected to be recognized over a weighted-average period of 2.3 years. Our estimated forfeiture rate for restricted stock units was 16.0% as of December 31, 2018.

The total fair value of restricted stock units vested and the resulting tax deductions to realized tax benefits were as follows (in millions):

For the Years
Ended December
31,
2018 2017 2016

Fair value of restricted stock units vested \$9.7 \$19.0 \$17.0 Realized tax benefits from tax deductions 2.4 7.2 6.5

## **Stock Appreciation Rights**

Stock appreciation rights are issued to certain key employees. Each recipient is given the "right" to receive compensation, paid in shares of our common stock, equal to the future appreciation of our common stock price. Stock appreciation rights generally vest in one-third increments beginning on the first anniversary date after the grant date and expire after seven years. Our practice is to issue new shares of common stock or utilize treasury stock to satisfy the exercise of stock appreciation rights.

The following table provides information on our stock appreciation rights (in millions, except per share data):

For the Years Ended December 31, 2018 2017 2016 \$4.8.\$4.4.\$4.6

Compensation expense for stock appreciation rights \$4.8 \$4.4 \$4.6 Weighted-average fair value of grants, per share 35.5732.32 22.93

Compensation expense for stock appreciation rights is based on the fair value on the date of grant, estimated using the Black-Scholes-Merton valuation model, and is recognized over the service period. We used historical stock price data to estimate the expected volatility. We determined that the recipients of stock appreciation rights can be combined into one employee group that has similar historical exercise behavior and we used our historical pattern of award exercises to estimate the expected life of the awards for the employee group. The risk-free interest rate was

based on the zero-coupon U.S. Treasury yield curve with a maturity equal to the expected life of the awards at the time of grant.

The fair value of the stock appreciation rights granted in 2018, 2017 and 2016 were estimated on the date of grant using the following assumptions:

	2018		2017		2016	
Expected dividend yield	1.76	%	1.47	%	1.62	%
Risk-free interest rate	2.71	%	2.02	%	1.66	%
Expected volatility	20.60	%	19.97	%	19.60	%
Expected life (in years)	3.93		3.95		3.99	

A summary of our stock appreciation rights as of December 31, 2018, and changes during the year then ended, is presented below (in millions, except per share data):

	Shares	Weighted-Average Exercise Price per Share
Outstanding stock appreciation rights as of December 31, 2017	1.1	\$ 121.63
Granted	0.2	214.63
Exercised	(0.3)	74.51
Forfeited	_	
Outstanding stock appreciation rights as of December 31, 2018	0.9	\$ 148.98
Exercisable stock appreciation rights as of December 31, 2018	0.6	\$ 120.52

<sup>(1)</sup> Share amounts are rounded but the balance of undistributed performance share units as of December 31, 2018 accurately reflects actual units undistributed.

The following table summarizes information about stock appreciation rights outstanding as of December 31, 2018 (in millions, except per share data and years):

	Stock Appreciation Rights Outstanding		Stock Appreciation Rights Exercisable	
Range of Exercise Prices	Weighted-Average Remaining Shares Contractual Term (in years)	Aggregate Intrinsic Value	Weighted-Average Remaining Shares Contractual Life (in years)	Aggregate Intrinsic Value
\$51.11 to \$92.64	0.3 2.22	\$ 37.8	0.3 2.22	\$ 37.8
\$124.97 to \$156.94	0.3 4.58	\$ 24.1	0.3 4.48	\$ 20.2
\$205.53 to \$214.63	0.3 6.46	\$ 3.0	0.1 6.00	\$ 0.8

As of December 31, 2018, we had \$9.7 million of unrecognized compensation cost related to non-vested stock appreciation rights that is expected to be recognized over a weighted-average period of 2.3 years. Our estimated forfeiture rate for stock appreciation rights was 12.9% as of December 31, 2018.

The total intrinsic value of stock appreciation rights exercised and the resulting tax deductions to realize tax benefits were as follows (in millions):

	For the	e Years	S
	Ended	Decen	nber
	31,		
	2018	2017	2016
Intrinsic value of stock appreciation rights exercised	\$35.9	\$25.1	\$36.9
Realized tax benefits from tax deductions	\$8.9	\$9.6	\$14.1
	31, 2018 \$35.9	2017 \$25.1	2016

## Employee Stock Purchase Plan

Under the 2012 Employee Stock Purchase Plan ("ESPP"), all employees who meet certain service requirements are eligible to purchase our common stock through payroll deductions at the end of three month offering periods. The purchase price for such shares is 95% of the fair market value of the stock on the last day of the offering period. A maximum of 2.5 million shares is authorized for purchase until the ESPP plan termination date of May 10, 2022, unless terminated earlier at the discretion of the Board of Directors. Employees purchased approximately 15,000 shares under the ESPP during the year ended December 31, 2018. Approximately 2.4 million shares remain available

for purchase under the ESPP as of December 31, 2018.

### 16. Stock Repurchases:

Our Board of Directors has authorized a total of \$2.5 billion to repurchase of shares of our common stock (collectively referred to as the "Share Repurchase Plans"), including a \$500 million share repurchase authorization in March 2018. The Share Repurchase Plans authorize open market repurchase transactions and do not have a stated expiration date. As of December 31, 2018, \$446.0 million may be used to repurchase shares under the Share Repurchase Plans.

On February 8, 2018, the Company entered into a Fixed Dollar Accelerated Share Repurchase Transaction (the "ASR Agreement") with MUFG Securities EMEA plc ("MUFG"), to effect an accelerated stock buyback of our common stock. Under the ASR Agreement, on February 8, 2018, we paid MUFG an initial purchase price of \$150.0 million, and MUFG delivered to us common stock, representing approximately 85% of the shares expected to be purchased under the ASR Agreement. The ASR was completed in April of 2018 and MUFG delivered additional shares for a total of 0.7 million shares of common stock repurchased as part of this ASR Agreement.

We repurchased 1.0 million shares for \$200.2 million in open market transactions during the second quarter of 2018 and 0.5 million shares for \$100.0 million in open market transactions during the fourth quarter of 2018.

We also repurchased 0.1 million shares for \$26.9 million and 0.1 million shares for \$26.1 million for the years ended December 31, 2018 and 2017, respectively, from employees who surrendered their shares to satisfy minimum tax withholding obligation upon the vesting of stock-based compensation awards.

#### 17. Divestitures:

#### Australia and Asia Divestiture

During the first quarter of 2018, we obtained Board of Directors' approval and signed an agreement with Beijer Ref AB, a Stockholm Stock Exchange-listed company, for the sale of our Australia and Asia business except for the Milperra property. The Milperra property was sold to another purchaser during the second quarter of 2018. We completed the sale to Beijer Ref AB in the second quarter of 2018 with the final post-completion adjustment being recorded in the third quarter of 2018. The following table summarizes the net loss recognized in connection with this divestiture:

	For the	
	Year	
(Amounts in millions)	Ended	
	Decembe	er
	31, 2018	
Cash received from the buyer	\$ 82.9	
Net assets sold <sup>(1)</sup>	(87.2	)
AOCL reclassification adjustments, primarily foreign currency translation	(3.2	)
Direct costs to sell	(5.8	)
Loss on sale of business	\$ (13.3	)

(1) Includes \$10.3 million of net assets that were written down during the quarter ended March 31, 2018 based on the expected proceeds from the sale, net of selling costs for the sale for our Australia and Asia business.

The Milperra property was sold during the quarter ended June 30, 2018. We received net cash proceeds of \$37.2 million net of direct costs to sell of \$1.5 million. The net gain recognized in connection with this sale was \$23.8 million.

#### South America Divestiture

During the second quarter of 2018, we obtained Board of Directors' approval and signed an agreement with Elgin SA, a private Brazilian company, for the sale of our South America business. The sale was subject to Brazilian antitrust approval. We obtained antitrust approval and completed the sale to Elgin SA in the third quarter of 2018. The following table summarizes the net loss recognized in connection with this divestiture: (Amounts in millions)

	For the	
	Year	
	Ended	
	Decemb	er
	31, 2018	3
Cash received from the buyer	\$ 4.2	
Net assets sold <sup>(2)</sup>	(14.1	)
AOCL reclassification adjustments, primarily foreign currency translation	(24.7	)
Direct costs to sell	(2.9	)
Loss on sale of business	\$ (37.5	)

<sup>(2)</sup> Includes \$1.2 million of net assets that were written down during the quarter ended June 30, 2018 based on the expected proceeds from the sale, net of selling costs for the sale for our South America business.

The total Loss (gain), net on sale of businesses and related property in our Consolidated Statements of Operations of \$27.0 million is comprised of the \$13.3 million loss on the sale of our Australia and Asia business, the \$23.8 million gain on the sale of our Milperra property, and the \$37.5 million loss on the sale of our South America business.

#### 18. Restructuring Charges:

We record restructuring charges associated with management-approved restructuring plans to reorganize or to remove duplicative headcount and infrastructure within our businesses. Restructuring charges include severance costs to eliminate a specified number of employees, infrastructure charges to vacate facilities and consolidate operations, contract cancellation costs and other related activities. The timing of associated cash payments is dependent upon the type of restructuring charge and can extend over a multi-year period. Restructuring charges are not included in our calculation of segment profit (loss), as more fully explained in Note 20.

### Restructuring Activities in 2018

Information regarding the restructuring charges for all ongoing activities are presented in the table below (in millions):

	Incurred in 2018	Incurred to Date	Total Expected to be Incurred
Severance and related expense	\$ 1.7	\$ 13.0	\$ 13.8
Asset write-offs and accelerated depreciation		3.2	3.2
Lease termination	0.7	0.9	0.9
Other	0.6	4.7	4.7
Total	\$ 3.0	\$ 21.8	\$ 22.6

While restructuring charges are excluded from our calculation of segment profit (loss), the table below presents the restructuring charges associated with each segment (in millions):

	Incurred in 2018	Incurred to Date	Total Expected to be Incurred
Residential Heating & Cooling	\$ 0.6	\$ 2.0	\$ 2.0
Commercial Heating & Cooling	1.1	3.1	3.1
Refrigeration	1.3	14.4	15.2
Corporate & Other	_	2.3	2.3
Total	\$ 3.0	\$ 21.8	\$ 22.6

Restructuring accruals are included in Accrued expenses in the accompanying Consolidated Balance Sheets.

### 19. Earnings Per Share:

Basic earnings per share are computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted earnings per share are computed by dividing net income by the sum of the weighted-average number of shares and the number of equivalent shares assumed outstanding, if dilutive, under our stock-based compensation plans.

The computations of basic and diluted earnings per share for Income from continuing operations were as follows (in millions, except per share data):

	For the Years Ended		
	December 31,		
	2018	2017	2016
Net income	\$359.0	\$305.7	\$277.8
Add: Loss from discontinued operations	1.3	1.4	0.8
Income from continuing operations	\$360.3	\$307.1	\$278.6
Weighted-average shares outstanding – basic	40.6	42.2	43.4
Add: Potential effect of diluted securities attributable to stock-based payments	0.5	0.6	0.6
Weighted-average shares outstanding – diluted	41.1	42.8	44.0
Earnings per share - Basic:			
Income from continuing operations	\$8.87	\$7.28	\$6.41
Loss from discontinued operations	(0.03)	(0.03)	(0.02)
Net income	\$8.84	\$7.25	\$6.39
Earnings per share - Diluted:			
Income from continuing operations	\$8.77	\$7.17	\$6.34
Loss from discontinued operations	(0.03)	(0.03)	(0.02)
Net income	\$8.74	\$7.14	\$6.32

An insignificant number of stock appreciation rights were outstanding but not included in the diluted earnings per share calculation because the assumed exercise of such rights would have been anti-dilutive.

## 20. Reportable Business Segments:

#### **Description of Segments**

We operate in three reportable business segments of the heating, ventilation, air conditioning and refrigeration ("HVACR") industry. Our segments are organized primarily by the nature of the products and services we provide. The following table describes each segment:

Segment	Products or Services	Markets Served	Geographic Areas
Residential Heating & Cooling	Furnaces, air conditioners, heat pumps, packaged heating and cooling systems, indoor air quality equipment, comfort control products, replacement parts and supplies	Residential Replacement; Residential New Construction	United States Canada
Commercial Heating & Cooling	Unitary heating and air conditioning equipment, applied systems, controls, installation and service of commercial heating and cooling equipment, variable	Light Commercial	United States Canada

Refrigeration	Condensing units, unit coolers, fluid coolers, air-cooled condensers, air handlers, process chillers, controls, compressorized racks, supermarket display cases and systems	Light Commercial; Food Preservation; Non-Food/Industrial	Europe United States Canada Europe Asia Pacific* South America* Central America
---------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------	---------------------------------------------------------------------------------

\*Our businesses in Australia, Asia and South America were sold in the second and third quarters of 2018, respectively. Refer to Note 17 for details regarding the divestiture of the businesses.

### Segment Data

We use segment profit or loss as the primary measure of profitability to evaluate operating performance and to allocate capital resources. We define segment profit or loss as a segment's income or loss from continuing operations before income taxes included in the accompanying Consolidated Statements of Operations, excluding certain items. The reconciliation below details the items excluded.

Our corporate costs include those costs related to corporate functions such as legal, internal audit, treasury, human resources, tax compliance and senior executive staff. Corporate costs also include the long-term, share-based incentive awards provided to employees throughout our business. We recorded these share-based awards as Corporate costs because they are determined at the discretion of the Board of Directors and based on the historical practice of doing so for internal reporting purposes.

Any intercompany sales and associated profit (and any other intercompany items) are eliminated from segment results. There were no significant intercompany eliminations included in the results presented in the table below.

Net sales and segment profit (loss) by segment, along with a reconciliation of segment profit (loss) to Operating income, are shown below (in millions):

	For the Years Ended December		
	31,		
	2018	2017	2016
Net Sales (1)			
Residential Heating & Cooling	\$2,225.0	\$2,140.4	\$2,000.8
Commercial Heating & Cooling	1,043.5	973.8	917.9
Refrigeration	615.4	725.4	722.9
	\$3,883.9	\$3,839.6	\$3,641.6
Segment profit (loss) (2)			
Residential Heating & Cooling	\$399.4	\$373.9	\$348.8
Commercial Heating & Cooling	159.5	157.3	149.3
Refrigeration	66.1	72.6	68.9
Corporate and other	(84.4	(89.2	(97.4)
Total segment profit	540.6	514.6	469.6
Reconciliation to Operating income:			
Special inventory write down	0.2		
Special product quality adjustments		5.4	(0.4)
Loss (gain), net on sale of businesses and related property	27.0	1.1	
Gain from insurance recoveries, net of losses incurred	(10.9)	<b>—</b>	
Pension settlement	0.4		31.4
Items in (Gains) Losses and other expenses, net that are excluded from segment	11.4	10.4	7.4
profit (loss) (2)			
Restructuring charges	3.0	3.2	1.8
Operating income	\$509.5	\$494.5	\$429.4

<sup>(1)</sup> On a consolidated basis, no revenue from transactions with a single customer were 10% or greater of our consolidated net sales for any of the periods presented.

<sup>(2)</sup> We define segment profit (loss) as a segment's operating income included in the accompanying Consolidated Statements of Operations, excluding:

The following items in Losses (gains) and other expenses, net:

Net change in unrealized losses (gains) on unsettled futures contracts,

Special legal contingency charges,

Asbestos-related litigation,

Environmental liabilities,

Contractor tax payments,

Other items, net,

Special inventory write down,

Loss (gain), net on sale of businesses and related property,

Gain from insurance recoveries, net of losses incurred

Special product quality adjustment,

Pension settlement, and,

Restructuring charges.

Total assets by segment are shown below (in millions):

	As of December 31,			
	2018	2017	2016	
Total Assets:				
Residential Heating & Cooling	\$837.4	\$771.3	\$673.4	
Commercial Heating & Cooling	457.2	443.9	385.8	
Refrigeration	355.2	506.9	442.8	
Corporate and other	167.4	169.4	258.3	
Total assets	\$1,817.2	\$1,891.5	\$1,760.3	

The assets in the Corporate and other segment primarily consist of cash, short-term investments and deferred tax assets. Assets recorded in the operating segments represent those assets directly associated with those segments.

Total capital expenditures by segment are shown below (in millions):

For the Years

**Ended December** 

31,

2018 2017 2016

Capital Expenditures:

 Residential Heating & Cooling
 \$45.2
 \$38.9
 \$36.7

 Commercial Heating & Cooling
 14.0
 18.5
 11.5

 Refrigeration
 7.8
 8.0
 12.1

 Corporate and other
 28.2
 32.9
 24.0

 Total capital expenditures (1)
 \$95.2
 \$98.3
 \$84.3

Depreciation and amortization expenses by segment are shown below (in millions):

For the Years Ended December

31.

2018 2017 2016

Depreciation and Amortization:

Residential Heating & Cooling
Commercial Heating & Cooling
Refrigeration
Corporate and other
Total depreciation and amortization

\$26.6 \$24.9 \$21.0

10.4 10.1 9.8

7.1 9.9 9.7

21.9 19.7 17.6

\$58.1

<sup>(1)</sup> Includes amounts recorded under capital leases. There were no significant new capital leases in 2018, 2017 or 2016.

The equity method investments are shown below (in millions):

For the Years **Ended December** 31. 2018 2017 2016 Income from Equity Method Investments: Refrigeration \$2.1 \$3.9 \$4.0 Residential 8.5 11.7 11.5 Commercial 2.8 1.4 2.9 Total income from equity method investments \$12.0 \$18.4 \$18.4

### Geographic Information

Net sales for each major geographic area in which we operate are shown below (in millions):

For the Years Ended December 31. 2018 2017 2016 Net Sales to External Customers by Point of Shipment: **United States** \$3,275.9 \$3,128.7 \$2,966.8 Canada 254.8 237.8 218.8 International 353.2 473.1 456.0 Total net sales to external customers \$3,883.9 \$3,839.6 \$3,641.6

Property, plant and equipment, net for each major geographic area in which we operate, based on the domicile of our operations, are shown below (in millions):

,	As of December 31,		
	2018	2017	2016
Property, Plant and Equipment, net:			
United States	\$293.3	\$257.6	\$237.6
Mexico	86.7	79.8	69.4
Canada	1.7	1.7	1.4
International	26.6	58.7	53.0
Total Property, plant and equipment, net	\$408.3	\$397.8	\$361.4

#### 21. Fair Value Measurements:

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date and requires consideration of our creditworthiness when valuing certain liabilities. Our framework for measuring fair value is based on the following three-level hierarchy for fair value measurements:

Level 1 -Quoted prices for identical instruments in active markets at the measurement date.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets at the measurement date and for the anticipated term of the

instrument.

Valuations derived from valuation techniques in which one or more significant inputs or significant value
Level 3 drivers are unobservable inputs that reflect the reporting entity's own assumptions about the assumptions

market participants would use in pricing the asset or liability developed based on the best information
available in the circumstances.

Where available, the fair values were based upon quoted prices in active markets. However, if quoted prices were not available, then the fair values were based upon quoted prices for similar assets or liabilities or independently sourced market parameters, such as credit default swap spreads, yield curves, reported trades, broker/dealer quotes, interest rates and benchmark securities. For assets and liabilities without observable market activity, if any, the fair values were based upon discounted cash flow methodologies incorporating assumptions that, in our judgment, reflect the assumptions a marketplace participant would use. Valuation adjustments to reflect either party's creditworthiness and ability to pay were incorporated into our valuations, where appropriate, as of December 31, 2018 and 2017, the measurement dates. The methodologies used to determine the fair value of our financial assets and liabilities as of December 31, 2018 were the same as those used as of December 31, 2017.

Fair values are estimates and are not necessarily indicative of amounts for which we could settle such instruments currently nor indicative of our intent or ability to dispose of or liquidate them.

Assets and Liabilities Carried at Fair Value on a Recurring Basis

#### Derivatives

Derivatives, classified as Level 2, were primarily valued using estimated future cash flows based on observed prices from exchange-traded derivatives. We also considered the counterparty's creditworthiness, or our own creditworthiness, as appropriate. Adjustments were recorded to reflect the risk of credit default, but they were insignificant to the overall value of the derivatives. Refer to Note 9 for more information related to our derivative instruments.

#### Marketable Equity Securities

The following table presents the fair values of an investment in marketable equity securities, related to publicly traded stock of a non-U.S. company, recorded in Other assets, net in the accompanying Consolidated Balance Sheets (in millions). This investment was sold as part of the divestiture of our Australia and Asia business. Refer to Note 17 for details regarding divestiture of the business.

As of December 31, 2018017

Quoted Prices in Active Markets for Identical Assets (Level 1):

Investment in marketable equity securities

\$ -\$ 4.1

#### Other Fair Value Disclosures

The carrying amounts of Cash and cash equivalents, Accounts and notes receivable, net, Accounts payable, Other current liabilities, and Short-term debt approximate fair value due to the short maturities of these instruments. The carrying amount of our Domestic Credit Facility in Long-term debt also approximates fair value due to its variable-rate characteristics.

The fair value of our senior unsecured notes in Long-term debt was based on the amount of future cash flows using current market rates for debt instruments of similar maturities and credit risk. The following table presents the fair value for our senior unsecured notes in Long-term debt (in millions):

As of December 31.

2018 2017

Quoted Prices in Active Markets for Similar Instruments (Level 2):

Senior unsecured notes \$302.9 \$308.1

### 22. Selected Quarterly Financial Information (unaudited):

The following tables provide information on Net sales, Gross profit, Net income, Earnings per share and Cash dividends declared per share by quarter (in millions, except per share data):

	Net Sales (1)		Gross Profit (1)		Net Income (1)	
	2018	2017	2018	2017	2018	2017
First Quarter	\$834.8	\$793.4	\$223.2	\$210.9	\$37.9	\$43.5
Second Quarter	1,175.4	1,102.1	361.6	340.8	137.6	115.5
Third Quarter	1,030.2	1,052.3	301.9	313.7	108.0	103.5
Fourth Quarter	843.6	891.8	224.5	259.8	75.6	43.1

					Cash	
	Basic		Diluted		Dividends	
	Earnings		Earnings		per	
	per Share (2)		per Share (2)		Common	
					Share	
	2018	2017	2018	2017	2018	2017
First Quarter	\$0.91	\$1.02	\$0.90	\$1.00	\$0.51	\$0.43
Second Quarter	3.38	2.73	3.35	2.69	0.64	0.51
Third Quarter	2.68	2.47	2.65	2.44	0.64	0.51
Fourth Quarter	1.89	1.03	1.87	1.02	0.64	0.51

<sup>(1)</sup> The sum of the quarterly results for each of the four quarters may not equal the full year results due to rounding.

Summary of 2018 Quarterly Results

The following unusual or infrequent pre-tax items were included in the 2018 quarterly results:

1st Quarter. During the first quarter of 2018, we obtained board approval and signed an agreement with Beijer Ref AB, a Stockholm Stock Exchange-listed company, for the sale of our Australia and Asia business.

2nd Quarter. We completed the sale to Beijer Ref AB of our Australia and Asia business and sold our Milperra property. We obtained board approval and signed an agreement with Elgin SA, a private Brazilian company, for the sale of our South America business. Refer to Note 17 for details regarding the divestiture.

3rd Quarter. We completed the sale to Elgin SA of our South America business. Our manufacturing facility in Marshalltown, Iowa was severely damaged by a tornado. Refer to Note 17 for details regarding the divestiture and Note 11 for details related to the tornado damage.

4th Quarter. We recorded gains from insurance recoveries related to our Marshalltown facility, refer to Note 11 for further details.

Summary of 2017 Quarterly Results

<sup>(2)</sup> EPS for each quarter is computed using the weighted-average number of shares outstanding during that quarter, while EPS for the fiscal year is computed using the weighted-average number of shares outstanding during the year. Thus, the sum of the EPS for each of the four quarters may not equal the EPS for the fiscal year.

The following unusual or infrequent pre-tax items were included in the 2017 quarterly results:

1st Quarter. No significant unusual or infrequent items.

2nd Quarter. No significant unusual or infrequent items.

3rd Quarter. No significant unusual or infrequent items.

4th Quarter. As a result of recent tax legislation, we recorded a one-time charge of \$31.8 million in the fourth quarter to revalue our deferred tax assets and liabilities.

### 23. Losses (Gains) and Other Expenses, net:

Losses (gains) and other expenses, net in our Consolidated Statements of Operations were as follows (in millions):

(g)	For the	Vanre	Ended	
	For the Years Ended			
	Decem			
	2018	2017	2016	
Realized (gains) losses on settled futures contracts	\$(0.4)	\$(1.7)	\$1.1	
Foreign currency exchange losses (gains)	1.7	(1.8)	2.2	
Losses on disposal of fixed assets	0.7	0.2	0.5	
Net change in unrealized losses (gains) on unsettled futures contracts	1.5	0.9	(3.6)	
Asbestos-related litigation	4.0	3.5	6.3	
Special legal contingency charges	1.9	3.7	1.9	
Environmental liabilities	2.2	2.2	1.9	
Contractor tax payments	_	0.1	0.6	
Other items, net	1.8		0.4	
Losses (gains) and other expenses, net	\$13.4	\$7.1	\$11.3	

## 24. Supplemental Information:

Research and development

Below is information about expenses included in our Consolidated Statements of Operations (in millions):

For the Years **Ended December** 31. 2018 2017 2016 \$72.2 \$73.6 \$64.6 Advertising, promotions and marketing (1) 42.5 45.0 41.0 Cooperative advertising expenditures (2) 16.8 18.6 14.7

58.5 57.7 57.9

Interest Expense, net

Interest income

Interest expense, net

Rent expense

The components of Interest expense, net in our Consolidated Statements of Operations were as follows (in millions):

For the Years **Ended December** 31, 2018 2017 2016 Interest expense, net of capitalized interest \$39.1 \$32.1 \$28.1 1.5 0.81.1 \$38.3 \$30.6 \$27.0

<sup>(1)</sup> Cooperative advertising expenditures were not included in these amounts.

<sup>(2)</sup> Cooperative advertising expenditures were included in Selling, general and administrative expenses in the Consolidated Statements of Operations.

### 25. Condensed Consolidating Financial Statements:

The Company's senior unsecured notes are unconditionally guaranteed by certain of the Company's subsidiaries (the "Guarantor"

Subsidiaries") and are not secured by our other subsidiaries (the "Non-Guarantor Subsidiaries"). The Guarantor Subsidiaries are 100% owned, all guarantees are full and unconditional, and all guarantees are joint and several. As a result of the guarantee arrangements, we are required to present condensed consolidating financial statements.

The condensed consolidating financial statements reflect the investments in subsidiaries of the Company using the equity method of accounting. The principal elimination entries eliminate investments in subsidiaries and intercompany balances and transactions.

Condensed consolidating financial statements of the Company, its Guarantor Subsidiaries and Non-Guarantor Subsidiaries as of December 31, 2018 and December 31, 2017 and for the years ended December 31, 2018, 2017 and 2016 are shown on the following pages.

Condensed Consolidating Balance Sheets As of December 31, 2018 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiaries	Non- Guarantor Subsidiaries		ns Consolidate	ed
ASSETS						
Current Assets:						
Cash and cash equivalents	\$1.8	\$ 15.4	\$ 29.1	\$ <i>-</i>	\$ 46.3	
Accounts and notes receivable, net	_	44.3	428.4		472.7	
Inventories, net	_	411.4	103.9	(5.5	) 509.8	
Other assets	3.3	36.2	54.7	(33.6	) 60.6	
Total current assets	5.1	507.3	616.1	(39.1	) 1,089.4	
Property, plant and equipment, net	_	293.3	118.6	(3.6	) 408.3	
Goodwill	_	166.1	20.5		186.6	
Investment in subsidiaries	1,311.9	357.8	(0.5)	(1,669.2	) —	
Deferred income taxes	1.4	54.4	23.4	(12.2	) 67.0	
Other assets, net	1.5	48.1	17.8	(1.5	) 65.9	
Intercompany (payables) receivables, net	(715.5)	675.8	142.6	(102.9	) —	
Total assets	\$604.4	\$ 2,102.8	\$ 938.5	\$ (1,828.5	) \$ 1,817.2	
LIABILITIES AND STOCKHOLDERS' (DEFI	CIT) EQ	UITY				
Current liabilities:						
Short-term debt	\$	\$ —	\$ —	\$ <i>-</i>	\$ —	
Current maturities of long-term debt	29.4	2.8	268.6	_	300.8	
Accounts payable	25.5	295.7	112.1	_	433.3	
Accrued expenses	12.1	213.8	46.4	_	272.3	
Income taxes payable	(38.5)	40.6	50.8	(50.8	) 2.1	
Total current liabilities	28.5	552.9	477.9	(50.8	) 1,008.5	
Long-term debt	724.9	15.0	0.6	_	740.5	
Pensions		75.1	7.7	_	82.8	
Other liabilities	0.6	126.4	8.0	_	135.0	
Total liabilities	754.0	769.4	494.2	(50.8	) 1,966.8	
Commitments and contingencies						
Total stockholders' (deficit) equity	(149.6)	1,333.4	444.3	(1,777.7	) (149.6	)
Total liabilities and stockholders' (deficit) equity	\$604.4	\$ 2,102.8	\$ 938.5	\$ (1,828.5	) \$ 1,817.2	

Condensed Consolidating Balance Sheets As of December 31, 2017 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elimination	s Consolidated
ASSETS					
Current Assets:					
Cash and cash equivalents	\$1.6	\$ 28.0	\$ 38.6	\$ <i>-</i>	\$ 68.2
Accounts and notes receivable, net		35.3	471.2	_	506.5
Inventories, net		355.7	131.9	(3.4	) 484.2
Other assets	16.2	23.1	67.5	(28.4	78.4
Total current assets	17.8	442.1	709.2	•	1,137.3
Property, plant and equipment, net		257.6	144.4	(4.2	397.8
Goodwill		134.9	65.6		200.5
Investment in subsidiaries	1,257.7	365.8	(0.6)	(1,622.9	) —
Deferred income taxes	3.9	69.1	33.6	(12.2	94.4
Other assets, net	2.1	41.3	19.6	(1.5	) 61.5
Intercompany (payables) receivables, net	(559.3)	554.7	107.4	(102.8	) —
Total assets	\$722.2	\$ 1,865.5	\$ 1,079.2	\$ (1,775.4	\$ 1,891.5
LIABILITIES AND STOCKHOLDERS' EQUI	TY (DEF	ICIT)			
Current liabilities:					
Short-term debt	\$	\$ —	\$ 0.9	\$ <i>—</i>	\$ 0.9
Current maturities of long-term debt	29.4	2.9	0.3		32.6
Accounts payable	21.3	228.0	99.3		348.6
Accrued expenses	3.1	209.4	57.8		270.3
Income taxes payable	(64.5)	56.5	60.9	(50.8	2.1
Total current liabilities	(10.7)	496.8	219.2	(50.8	) 654.5
Long-term debt	682.8	11.7	276.0		970.5
Pensions		74.7	9.8		84.5
Other liabilities		123.2	8.7	_	131.9
Total liabilities	672.1	706.4	513.7	(50.8	1,841.4
Commitments and contingencies					
Total stockholders' equity (deficit)	50.1	1,159.1	565.5	(1,724.6	50.1
Total liabilities and stockholders' equity (deficit	\$722.2	\$ 1,865.5	\$ 1,079.2	\$ (1,775.4	\$ 1,891.5

Condensed Consolidating Statements of Operations and Comprehensive Income For the Year Ended December 31, 2018 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiaries	Non- Guarantor Subsidiaries		ns	Consolidat	ed
Net Sales	<b>\$</b> —	\$ 3,473.2	\$ 1,129.6	\$ (718.9	)	\$ 3,883.9	
Cost of goods sold	_	2,500.6	988.7	(716.6	)	2,772.7	
Gross profit	_	972.6	140.9	(2.3	)	1,111.2	
Operating expenses:							
Selling, general and administrative expenses	_	555.3	53.6	(0.7	)	608.2	
Losses (gains) and other expenses, net	2.0	5.4	6.3	(0.3	)	13.4	
Restructuring charges		1.1	1.9	_		3.0	
Pension settlement			0.4	_		0.4	
Loss (gain), net on sale of businesses and related		40.3	(13.3)			27.0	
property		40.5	(13.3)			21.0	
Insurance proceeds for lost profits		(27.4)		_		(27.4	)
Gain from insurance recoveries, net of losses incurred		(10.9)		_		(10.9	)
Income from equity method investments	(367.4)	(70.3)	(9.9)	435.6		(12.0	)
Operating income	365.4	479.1	101.9	(436.9	)	509.5	
Interest expense, net	9.0	18.5	10.8	_		38.3	
Other expense (income), net		1.5	1.8	_		3.3	
Income from continuing operations before income taxes	s 356.4	459.1	89.3	(436.9	)	467.9	
Provision for income taxes	(2.6)	92.1	18.0	0.1		107.6	
Income from continuing operations	359.0	367.0	71.3	(437.0	)	360.3	
Loss from discontinued operations	_	_	(1.3)	_		(1.3	)
Net income	\$359.0	\$ 367.0	\$ 70.0	\$ (437.0	)	\$ 359.0	
Other comprehensive (loss) income	\$(15.4)	\$ (15.3)	\$ (0.7)	\$ —		\$ (31.4	)
Comprehensive Income	\$343.6	\$ 351.7	\$ 69.3	\$ (437.0	)	\$ 327.6	

Condensed Consolidating Statements of Operations and Comprehensive Income For the Year Ended December 31, 2017 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiaries	Non- Guarantor Subsidiaries		ons Consoli	dated
Net sales	<b>\$</b> —	\$ 3,295.8	\$ 1,144.2	\$ (600.4	) \$ 3,839	.6
Cost of goods sold	_	2,359.6	953.6	(598.8	) 2,714.4	
Gross profit		936.2	190.6	(1.6	) 1,125.2	
Operating expenses:						
Selling, general and administrative expenses		553.6	85.0	(0.9	) 637.7	
Losses (gains) and other expenses, net	2.0	3.3	1.9	(0.1	7.1	
Restructuring charges		2.1	1.1		3.2	
Loss (gain), net on sale of businesses and related property	_	1.1	_	_	1.1	
(Income) loss from equity method investments	(324.3)	(74.9)	(14.5)	395.3	(18.4	)
Operational income	322.3	451.0	117.1	(395.9	) 494.5	
Interest expense, net	26.9	(2.7)	6.4	_	30.6	
Other income, net	_		(0.1)	_	(0.1	)
Income from continuing operations before income taxes	295.4	453.7	110.8	(395.9	) 464.0	
Provision for income taxes	(10.3)	136.2	31.2	(0.2	) 156.9	
Income from continuing operations	305.7	317.5	79.6	(395.7	) 307.1	
Loss from discontinued operations			(1.4)		(1.4	)
Net income	\$305.7	\$ 317.5	\$ 78.2	\$ (395.7	) \$ 305.7	
Other comprehensive income	\$1.7	\$ 5.5	\$ 30.5	\$ —	\$ 37.7	
Comprehensive income	\$307.4	\$ 323.0	\$ 108.7	\$ (395.7	) \$ 343.4	

Condensed Consolidating Statements of Operations and Comprehensive Income For the Year Ended December 31, 2016 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiaries	Non-Guaranto Subsidiaries	r Eliminatio	ons Consolidated
Net Sales	\$	\$ 3,117.6	\$ 728.0	\$ (204.0	\$ 3,641.6
Cost of goods sold		2,203.8	564.5	(203.2	) 2,565.1
Gross profit		913.8	163.5	(0.8)	) 1,076.5
Operating expenses:					
Selling, general and administrative expenses		524.3	96.7		621.0
(Gains) losses and other expenses, net	(3.3)	9.7	5.1	(0.2)	) 11.3
Restructuring charges		1.9	(0.1)		1.8
Pension settlement		30.5	0.9		31.4
(Income) loss from equity method investments	(292.4)	(40.7)	(14.4)	329.1	(18.4)
Operational income	295.7	388.1	75.3	(329.7	) 429.4
Interest expense, net	24.4	(2.2)	4.8		27.0
Other income, net			(0.3)		(0.3)
Income from continuing operations before income	271.3	390.3	70.8	(329.7	) 402.7
taxes	2/1.3	390.3	70.8	(329.1	) 402.7
Provision for income taxes	(6.5)	108.2	22.6	(0.2)	) 124.1
Income from continuing operations	277.8	282.1	48.2	(329.5	) 278.6
Loss from discontinued operations		_	(0.8)	_	(0.8)
Net income	\$277.8	\$ 282.1	\$ 47.4	\$ (329.5	) \$ 277.8
Other comprehensive income (loss)	\$14.0	\$ 8.5	\$ (14.2)	\$ 1.3	\$ 9.6
Comprehensive Income	\$291.8	\$ 290.6	\$ 33.2	\$ (328.2	) \$ 287.4

Condensed Consolidating Statements of Cash Flows For the Year Ended December 31, 2018 (In millions)

Parent	Guarantor Subsidiari	Non-Guar esSubsidiari	ant	or Eliminati	o <b>©</b> onsolid	ated
\$53.7	\$ 477.9	\$ (36.1	)	\$ -	<b>-</b> \$ 495.5	
<del>-</del>	_	0.1		_	0.1	
	(76.0	) (19.2	)		(95.2	)
	2.7	112.0			114.7	
	10.0				10.0	
	10.9	_		_	10.9	
	(62.4	92.9			30.5	
—		_		_	_	
		155.0		_	155.0	
		(163.0	)	_	(163.0	)
		) (0.1	)	_	(33.0	)
2,435.9				_	2,435.9	
(2,365.)				_	(2,365.0	)
3.3					3.3	
(26.9.)					(26.9	)
(20.7)		<del></del>			(20.)	,
(450.2)					(450.2	)
(14.5)	83.3	(68.8)	)			
487.8	(508.5	20.7		_	_	
(93.9)					(93.9	)
(53.5)	(428.1	) (56.2	)	_	(537.8	)
0.2	(12.6	0.6			(11.8	)
		(10.1	)		(10.1	)
1.6	28.0	38.6		_	68.2	
\$ 1.8	\$ 15.4	\$ 29.1		\$ -	\$ 46.3	
	\$53.7	\$53.7 \$477.9  - (76.0) - (2.7) - 10.9 - (62.4) - (62.4) - (30.0) (2.9) 2,435.9 - (2,365.0) - (3.3) - (26.9) - (450.2) - (14.5) 83.3 487.8 (508.5) (93.9) - (53.5) (428.1) 0.2 (12.6) - (1.6) 28.0	\$53.7 \$477.9 \$ (36.1)  -	\$53.7 \$477.9 \$ (36.1 )  0.1 - (76.0 ) (19.2 ) - 2.7 112.0 - 10.9 (62.4 ) 92.9 (163.0 ) (30.0 ) (2.9 ) (0.1 ) 2,435.9 (2,365.0 3.3 (26.9 ) (450.2) (14.5 ) 83.3 (68.8 ) 487.8 (508.5 ) 20.7 (93.9 ) (53.5 ) (428.1 ) (56.2 ) 0.2 (12.6 ) 0.6 (10.1 ) 1.6 28.0 38.6	\$53.7 \$477.9 \$ (36.1 ) \$	\$53.7 \$ 477.9 \$ (36.1 ) \$ —\$ 495.5

Condensed Consolidating Statements of Cash Flows For the Year Ended December 31, 2017 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiari	Non-Guara	antor Elimin es	atio <b>©</b> onsolid	ated
Cash flows from operating activities:	\$467.4	\$ 31.1	\$ (173.4	) \$	<b>-\$</b> 325.1	
Cash flows from investing activities:						
Proceeds from the disposal of property, plant and equipmen	t —	0.1	0.1	_	0.2	
Purchases of property, plant and equipment	_	(70.7)	(27.6	) —	(98.3	)
Net cash used in investing activities	_	(70.6)	(27.5	) —	(98.1	)
Cash flows from financing activities:						
Short-term borrowings, net		_	(1.5	) —	(1.5	)
Asset securitization borrowings		_	315.0		315.0	
Asset securitization payments			(89.0	) —	(89.0	)
Borrowings from credit facility	2,376.5				2,376.5	
Long-term debt payments	(200.0)	(0.3)	(0.6	) —	(200.9	)
Payments on credit facility	(2,265.5)				(2,265.5	)
Payments of deferred financing costs			(0.2	) —	(0.2	)
Proceeds from employee stock purchases	3.1				3.1	
Repurchases of common stock to satisfy employee withholding tax obligations	(26.1)	_	_		(26.1	)
Repurchases of common stock	(250.0)				(250.0	)
Intercompany debt	56.4	(34.9)	(21.5	) —		
Intercompany financing activity	(81.7)	85.6	(3.9	) —		
Cash dividends paid	(79.7)	_		_	(79.7	)
Net cash provided by (used in) financing activities	(467.0)	50.4	198.3	_	(218.3	)
Increase (decrease) in cash and cash equivalents	0.4	10.9	(2.6	) —	8.7	
Effect of exchange rates on cash and cash equivalents		_	9.3		9.3	
Cash and cash equivalents, beginning of year	1.2	17.1	31.9	_	50.2	
Cash and cash equivalents, end of year	\$1.6	\$ 28.0	\$ 38.6	\$	<b>-\$</b> 68.2	

Condensed Consolidating Statements of Cash Flows For the Year Ended December 31, 2016 (In millions)

(Amounts in millions)	Parent	Guarantor Subsidiari	Non-Guara esSubsidiarie	antor Elimin es	atio@onsolida	ated
Cash flows from operating activities:	\$17.8	\$ 218.5	\$ 137.6	\$	<b>-\$</b> 373.9	
Cash flows from investing activities:						
Proceeds from the disposal of property, plant and equipment	i —		0.2		0.2	
Purchases of property, plant and equipment	_	(71.5	(12.8)	) —	(84.3	)
Net cash used in investing activities	_	(71.5	(12.6)	) —	(84.1	)
Cash flows from financing activities:						
Short-term borrowings, net	_		(2.4	) —	(2.4	)
Asset securitization borrowings	_		145.0		145.0	
Asset securitization payments	_		(295.0	) —	(295.0	)
Long-term debt borrowings	350.0				350.0	
Borrowings from credit facility	2,336.5	_			2,336.5	
Long-term debt payments	(57.5)	(0.9	0.4	) —	(58.8	)
Payments on credit facility	(2,346.)	_			(2,346.0	)
Payments of deferred financing costs	(4.2)				(4.2	)
Proceeds from employee stock purchases	2.6				2.6	
Repurchases of common stock to satisfy employee withholding tax obligations	(33.3)	_	_	_	(33.3	)
Repurchases of common stock	(300.0)				(300.0	)
Intercompany debt	30.0	(65.8	35.8			
Intercompany financing activity	73.8	(71.0	) (2.8	) —		
Cash dividends paid	(69.0)				(69.0	)
Net cash provided by (used in) financing activities	(17.1)	(137.7	(119.8	) —	(274.6	)
Increase (decrease) in cash and cash equivalents	0.7	9.3	5.2	_	15.2	
Effect of exchange rates on cash and cash equivalents		_	(3.9	) —	(3.9	)
Cash and cash equivalents, beginning of year	0.5	7.8	30.6	_	38.9	
Cash and cash equivalents, end of year	\$1.2	\$ 17.1	\$ 31.9	\$	<b>-\$</b> 50.2	

#### 26. Subsequent Event:

For 2019, we plan to shift financial reporting of our European Commercial HVAC business from our Commercial Heating & Cooling segment to our Refrigeration segment as we will manage both our commercial HVAC and refrigeration operations in Europe together.

In 2019, we plan to divest our Kysor Warren business within our Refrigeration segment and are currently targeting to close the sale in the first quarter of 2019.

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

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

As required by Rule 13a-15 under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our current management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2018, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

See "Management's Report on Internal Control Over Financial Reporting" included in Item 8 "Financial Statements and Supplementary Data."

Attestation Report of the Independent Registered Public Accounting Firm

See "Report of Independent Registered Public Accounting Firm" included in Item 8 "Financial Statements and Supplementary Data."

Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2018, we implemented new controls as part of our efforts to adopt ASU 2016-02. We are implementing new controls related to monitoring the adoption process, implementing a new IT system to capture, calculate, and account for leases, and gather the necessary data to properly account for leases under ASC 842. There were no other changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

### **PART III**

Item 10. Directors, Executive Officers and Corporate Governance

Incorporated herein by reference from the Company's definitive proxy statement, which will be filed no later than 120 days after December 31, 2018. Also, refer to Part I, Item 1 "Business - Executive Officers of the Company" of this Annual Report on Form 10-K, which identifies our executive officers and is incorporated herein by reference.

#### Item 11. Executive Compensation

Incorporated herein by reference from the Company's definitive proxy statement, which will be filed no later than 120 days after December 31, 2018.

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

Incorporated herein by reference from the Company's definitive proxy statement, which will be filed no later than 120 days after December 31, 2018. Also, refer to Note 15 in the Notes to the Consolidated Financial Statements for additional information about our equity compensation plans.

Item 13. Certain Relationships and Related Transactions and Director Independence

Incorporated herein by reference from the Company's definitive proxy statement, which will be filed no later than 120 days after December 31, 2018.

Item 14. Principal Accounting Fees and Services

Incorporated herein by reference from the Company's definitive proxy statement, which will be filed no later than 120 days after December 31, 2018.

#### **PART IV**

Item 15. Exhibits and Financial Statement Schedules

#### **Financial Statements**

The following financial statements are included in Part II, Item 8 of the Annual Report on Form 10-K:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2018 and 2017

Consolidated Statements of Operations for the Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Stockholders' (Deficit) Equity for the Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016

Notes to the Consolidated Financial Statements for the Years Ended December 31, 2018, 2017 and 2016

## Financial Statement Schedules

The financial statement schedule included in this Annual Report on Form 10-K is Schedule II - Valuation and Qualifying Accounts and Reserves for the Years Ended December 31, 2018, 2017 and 2016 (see Schedule II immediately following the signature page of this Annual Report on Form 10-K).

Financial statement schedules not included in this Annual Report on Form 10-K have been omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or Notes thereto.

#### **Exhibits**

A list of the exhibits required to be filed or furnished as part of this Annual Report on Form 10-K is set forth in the Index to Exhibits, which immediately precedes such exhibits, and is incorporated herein by reference.

### **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.

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#### LENNOX INTERNATIONAL INC.

By: /s/ Todd M. Bluedorn
Todd M. Bluedorn
Chief Executive Officer
February 19, 2019

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

SIGNATURE	TITLE	DATE
/s/ TODD M. BLUEDORN Todd M. Bluedorn	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	February 19, 2019
/s/ JOSEPH W. REITMEIER Joseph W. Reitmeier	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 19, 2019
/s/ CHRIS A. KOSEL Chris A. Kosel	Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)	February 19, 2019
/s/ TODD J. TESKE Todd J. Teske	Lead Director	February 19, 2019
/s/ JANET K. COOPER Janet K. Cooper	Director	February 19, 2019
/s/ JOHN E. MAJOR John E. Major	Director	February 19, 2019
/s/ JOHN W. NORRIS, III John W. Norris, III	Director	February 19, 2019
/s/ KAREN H. QUINTOS Karen. H. Quintos	Director	February 19, 2019
/s/ KIM K.W. RUCKER Kim K.W. Rucker	Director	February 19, 2019
/s/ MAX H. MITCHELL Max H. Mitchell	Director	February 19, 2019
/s/ PAUL W. SCHMIDT Paul W. Schmidt	Director	February 19, 2019
/s/ GREGORY T. SWIENTON Gregory T. Swienton	Director	February 19, 2019

### LENNOX INTERNATIONAL INC.

# SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS AND RESERVES For the Years Ended December 31, 2018, 2017 and 2016 (In millions)

	be	llance at ginning year	ch to an	cost	/rite-of	fs	Re	coveries	Other	at	alance end f year
2016 Allowance for doubtful accounts 2017	\$	6.3	\$	2.4	\$ (2.7	)	\$	0.9	\$(0.2)	\$	6.7
Allowance for doubtful accounts 2018	\$	6.7	\$	3.9	\$ (5.6	)	\$	0.9	\$—	\$	5.9
Allowance for doubtful accounts	\$	5.9	\$	4.8	\$ (3.7	)	\$	0.6	\$(1.3)	\$	6.3

#### **INDEX TO EXHIBITS**

- Restated Certificate of Incorporation of Lennox International Inc. ("LII") (filed as Exhibit 3.1 to LII's Registration
- 3.1 Statement on Form S-1 (Registration Statement No. 333-75725) filed on April 6, 1999 and incorporated herein by reference).
- 3.2 Amended and Restated Bylaws of LII (filed as Exhibit 3.1 to LII's Current Report on Form 8-K filed on December 16, 2013 and incorporated herein by reference).
  - Specimen Stock Certificate for the Common Stock, par value \$.01 per share, of LII (filed as Exhibit 4.1 to LII's
- 4.1 Amendment to Registration Statement on Form S-1/A (Registration No. 333-75725) filed on June 16, 1999 and incorporated herein by reference).
  - Indenture, dated as of May 3, 2010, between LII and U.S. Bank National Association, as trustee (filed as
- 4.2 Exhibit 4.3 to LII's Post-Effective Amendment No. 1 to Registration Statement on S-3 (Registration No. 333-155796) filed on May 3, 2010, and incorporated herein by reference). Form of Supplemental Indenture among LII, the guarantors party thereto and U.S. Bank National Association, as
- 4.3 trustee (filed as Exhibit 4.11 to LII's Post-Effective Amendment No. 1 to Registration Statement on S-3 (Registration No. 333-155796) filed on May 3, 2010, and incorporated herein by reference).
  - Sixth Supplemental Indenture, dated as of November 3, 2016, among LII, each other existing Guarantor under the
- Indenture, dated as of May 3, 2010, as subsequently supplemented, and US Bank National Association, as trustee (filed as Exhibit 4.2 to LII's Current Report on Form 8-K filed on November 3, 2016, and incorporated by reference).
  - Seventh Supplemental Indenture, dated as of January 23, 2019, among LII Mexico Holdings Ltd., Lennox
- 4.5 International Inc., each other existing Guarantor under the Indenture, dated as of May 3, 2010, as subsequently supplemented, and US Bank National Association, as trustee (filed herewith).
- Form of 3.000% Notes due 2023 (filed as Exhibit A in Exhibit 4.2 to LII's Current Report on Form 8-K filed on 4.6 November 3, 2016, and incorporated by reference).
  - Sixth Amended and Restated Credit Facility Agreement dated as of August 30, 2016, among Lennox
- 10.1 International Inc., a Delaware corporation, the Lenders party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on September 2, 2016 and incorporated herein by reference)
  - First Amendment to Sixth Amended and Restated Credit Facility Agreement dated as of October 20, 2016,
- 10.2 among Lennox International Inc., a Delaware corporation, the Lenders party thereto, and JPMorgan Chase Bank. N.A., as Administrative Agent (filed as Exhibit 10.1 to LII's Quarterly Report on Form 10-Q filed on October 24, 2017, and incorporated herein by reference).
  - Second Amendment To Sixth Amended and Restated Credit Facility Agreement dated March 16, 2018, among Lennox International Inc., the lenders a party thereto, and J.P.Morgan Chase Bank, N.A., as Administrative Agent
- 10.3 (filed as Exhibit 10.2 to LII's Quarterly Report on Form 10-Q filed on April 23, 2018, and incorporated by reference).
- Third Amendment (Incremental Amendment) to Sixth Amended and Restated Credit Facility Agreement dated as 10.4 of January 22, 2019, among Lennox International Inc., a Delaware corporation, the lenders from time to time
- party thereto, and J.P.Morgan Chase Bank, N.A., as Administrative Agent (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on January 25, 2019, and incorporated by reference).
- 10.5 Form of Sixth Amended and Restated Subsidiary Guarantee Agreement for the Sixth Amended and Restated Credit Facility dated as of August 30, 2016 signed by Allied Air Enterprises LLC, Advanced Distributor Products LLC, Heatcraft Inc., Heatcraft Refrigeration Products LLC, Lennox Global Ltd., Lennox Industries Inc., LGL Australia (US) Inc., Lennox National Account Services LLC and LGL Europe Holding Co. (filed as Exhibit C in Exhibit 10.1 to LII's Current Report on Form 8-K filed on September 2, 2016 and incorporated herein by

### reference).

Amendment No. 2 to Amended and Restated Receivables Purchase Agreement, effective as of November 15, 2013, among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables

Corporation, as a Purchaser, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as Administrative Agent, a Liquidity Bank, and the BTMU Purchaser Agent, and PNC Bank, National Association as a Liquidity Bank and the PNC Purchaser Agent (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on November 19, 2013 and incorporated herein by reference).

- Omnibus Amendment No. 3 to the Amended and Restated Receivables Purchase agreement, effective as of November 21, 2014 among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables Corporation, as a Purchaser, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as
- 10.7 Administrative Agent, a Liquidity Bank, and the BTMU Purchaser Agent, and PNC Bank, National

  Association, as a Liquidity Bank and the PNC Purchaser Agent (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on November 24, 2014 and incorporated herein by reference).
  - Amendment to the Amended and Restated Receivables Purchase Agreement, effective as of December 15, 2014, among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, with Victory
- Receivables Corporation, as Purchaser, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as Administrative Agent, a Liquidity Bank and the BTMU purchaser agent, and PNC Bank, National Association, as a Liquidity Bank and the PNC purchaser agent (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on December 18, 2014 and incorporated herein by reference).
  - Amendment No. 4 to Amended and Restated Receivables Purchase Agreement among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables Corporation, as Purchaser, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as Administrative Agent, a Liquidity Bank and a
- 10.9 Purchaser Agent, and PNC Bank, National Association, as a Liquidity Bank and a Purchaser Agent, effective as of November 13, 2015 (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on November 18, 2015 and incorporated herein by reference).
  - Amendment No. 5 to Amended and Restated Receivables Purchase Agreement among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables Corporation, as Purchaser and The
- 10.10 Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as Administrative Agent, a Liquidity Bank and a Purchaser Agent, (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on July 6, 2016 and incorporated herein by reference).
  - Amendment No. 6 to Amended and Restated Receivables Purchase Agreement among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables Corporation, as Purchaser and The
- 10.11 <u>Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as Administrative Agent, a Liquidity Bank and a Purchaser Agent, (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on November 16, 2017 and incorporated herein by reference).</u>
  - Amendment No. 7 to Amended and Restated Receivables Purchase Agreement among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables Corporation, as Purchaser and The
- 10.12 <u>Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as Administrative Agent, a Liquidity Bank and a Purchaser Agent (filed as Exhibit 10.1 to LII's Quarterly Report on Form 10-Q filed on April 23, 2018, and incorporated by reference).</u>
  - Amendment No. 8 to Amended and Restated Receivables Purchase Agreement among LPAC Corp., as the Seller, Lennox Industries Inc., as the Master Servicer, Victory Receivables Corporation, as Purchaser and
- MUFG Bank, Ltd., as Administrative Agent, BTMU Liquidity Bank, Wells Fargo Bank, National Association, a Liquidity Bank and PNC Bank, N National Association, a Purchaser Agent (filed as Exhibit 10.1 to LII's Quarterly Report on Form 10-Q filed on October 22, 2018, and incorporated by reference).
  Amended and Restated Lease Agreement, dated as of March 22, 2013, by and between BTMU Capital Leasing
- 10.14 & Finance, Inc., as lessor, and Lennox International Inc., as lessee (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on March 25, 2013 and incorporated herein by reference).
   Amended and Restated Participation Agreement, dated as of March 22, 2013, by and among Lennox
- 10.15 International Inc., as lessee and BTMU Capital Leasing & Finance, Inc., as lessor (filed as Exhibit 10.2 to LII's Current Report on Form 8-K filed on March 25, 2013 and incorporated herein by reference).
  Amended and Restated Memorandum of Lease, Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filing, dated as of March 22, 2013, by and among Lennox International Inc., BTMU
- 10.16 <u>Capital Leasing and Finance, Inc. and David Parnell, as Deed of Trust Trustee, for the benefit of BTMU</u>

  <u>Capital Leasing & Finance, Inc. (filed as Exhibit 10.3 to LII's Current Report on Form 8-K filed on March 25, 2013 and incorporated herein by reference).</u>

- 10.17\* Lennox International Inc. 2010 Incentive Plan, as amended and restated (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on May 19, 2010 and incorporated herein by reference).
- 10.18\* Form of Long-Term Incentive Award Agreement for U.S. Employees Vice President and Above (for use under the 2010 Incentive Plan) (filed herewith).
- 10.19\* Form of Restricted Stock Unit Award Agreement for Non-Employee Directors (for use under the 2010 Incentive Plan) (filed herewith).
- 10.20\* Short-Term Incentive Program for Lennox International Inc. and its Subsidiaries (filed herewith).

  Lennox International Inc. Profit Sharing Restoration Plan, as amended and restated as of January 1, 2009 (filed
- 10.21\* as Exhibit 10.3 to LII's Current Report on Form 8-K filed on December 17, 2008 and incorporated herein by reference).
  - Lennox International Inc. Supplemental Retirement Plan, as amended and restated as of January 1, 2009 (filed
- 10.22\* as Exhibit 10.2 to LII's Current Report on Form 8-K filed on December 17, 2008 and incorporated herein by reference).

- 10.23\* Amendment Number One to the Lennox International Inc. Supplemental Retirement Plan, as amended and restated as of January 1, 2009, dated December 28, 2018 (filed herewith).
- 10.24\* Lennox International Inc. Supplemental Restoration Retirement Plan, effective as of January 1, 2019, dated December 28, 2018 (filed herewith).
- Form of Indemnification Agreement entered into between LII and certain executive officers and directors of 10.25\*LII (filed as Exhibit 10.15 to LII's Registration Statement on Form S-1 (Registration No. 333-75725) filed on April 6, 1999 and incorporated herein by reference).
  - Form of Employment Agreement entered into between LII and certain executive officers of LII (filed as
- 10.26\* Exhibit 10.30 to LII's Annual Report on Form 10-K filed on February 27, 2007 and incorporated herein by reference).
  - Form of Amendment to Employment Agreement entered into between LII and certain executive officers of LII
- 10.27\*(filed as Exhibit 10.2 to LII's Current Report on Form 8-K filed on December 12, 2007 and incorporated herein by reference).
- 10.28\* Form of Change of Control Agreement entered into between LII and certain executive officers of LII (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on July 17, 2012 and incorporated herein by reference). Form of Change of Control Employment Agreement entered into between LII and certain executive officers of
- 10.29\*LII (filed as Exhibit 10.1 to LII's Current Report on Form 8-K filed on December 17, 2008 and incorporated herein by reference).
  - Lennox International Inc. Directors' Retirement Plan (as Amended and Restated as of January 1, 2010) (filed as
- 10.30\* Exhibit 10.1 to LII's Current Report on Form 8-K filed on December 16, 2009 and incorporated herein by reference).
- 21.1 Subsidiaries of LII (filed herewith).
- 23.1 Consent of KPMG LLP (filed herewith).
- 31.1 Certification of the principal executive officer (filed herewith).
- 31.2 Certification of the principal financial officer (filed herewith).
- 32.1 <u>Certification of the principal executive officer and the principal financial officer pursuant to 18 U.S.C. Section 1350 (furnished herewith).</u>
- Exhibit No. (101).INS XBRL Instance Document
- Exhibit No. (101). SCH XBRL Taxonomy Extension Schema Document
- Exhibit No. (101).CAL XBRL Taxonomy Extension Calculation Linkbase Document
- Exhibit No. (101).LAB XBRL Taxonomy Extension Label Linkbase Document
- Exhibit No. (101).PRE XBRL Taxonomy Extension Presentation Linkbase Document
- Exhibit No. (101).DEF XBRL Taxonomy Extension Definition Linkbase Document

<sup>\*</sup>Management contract or compensatory plan or arrangement.