# MICROBIX BIOSYSTEMS INC.

ANNUAL REPORT 2018



## **Message to Shareholders**

Sales results of \$3.4 million for the fourth quarter (Q4) and \$12.5 million for the full year (12Mos) of fiscal 2018 have fully demonstrated that Microbix has accelerated its growth: Each quarter of fiscal 2018 recorded double-digit percentage sales growth compared to the prior year and the first three set records for a Q1, Q2 and Q3 respectively. Sales during individual quarters will continue to fluctuate, but now usually exceed \$1.0 million per month, with double-digit growth expected to continue.

In addition to strong sales growth, Microbix has also attained positive cash-flow from operations, putting it into elite company – as most life sciences firms consume cash, not generate it. This lack of a "burn rate" means Microbix can build value without adding to shares outstanding and relying on volatile capital markets. Management aims to strengthen finances in fiscal 2019, with positive cash-flow and meaningful net earnings targeted for the full year.

However, fiscal 2018 was not without challenges. Specifically, Microbix did not generate a profit for the year and incurred net losses for three of four quarters. Those losses were manageable and due principally to a yield control issue with a major conventionallyproduced antigen product. It is a pleasure to report that the issue was successfully resolved and should not recur – Positioning Microbix for improved results in fiscal 2019.

Another notable item is the decision to writedown the book value of LumiSort<sup>™</sup> technology. In accordance with applicable accounting standards, Microbix had capitalized development costs of the prototype instrument and related patent expenses. For Q4, it was decided to write-down the full value of such LumiSort-related assets – for a total noncash charge of \$7.9 million. That decision was driven by the emerging knowledge that, (1) Microbix could not provide the funding needed to complete commercialization in a timely manner, and (2) licensing terms being offered to Microbix may not adequately support LumiSort's carried value.

While the LumiSort charge to earnings has zero impact on cash, taking this step now will make

certain that targeted improvements to bottom-line results are not overshadowed by a later write-down. Also, any future value realized from LumiSort should now be entirely additive to earnings.

From here, Microbix will be focusing on profitable growth. Demand for the materials (antigens) we make for the diagnostics industry continues to increase, driven by new test makers in China as well as by increasing orders from existing western-based customers. Additionally, Microbix's line of quality assessment products (QAPs) are eliciting strong interest from instrument makers and others that need greater assurance that medical test results are fully accurate. Collectively, sales growth in the range of 20% per year is targeted.

The outlook for gross margins is also positive. Going forward, Microbix expects an increased contribution from its new bioreactor antigen production process, which is demonstrating much better margins than the conventional method it replaces. The QAPs line likewise provides strong gross margins – further enhancing Microbix's bottom-line potential. Between improving antigen production methods and enhancing the product mix, there are solid reasons for being optimistic about fiscal 2019.

One additional asset should not be overlooked – namely Kinlytic<sup>®</sup> urokinase. While Kinlytic has been in the Microbix stable for a long time, it is by no means dormant. In fiscal 2018, a great deal of work was conducted in refining project plans for re-launching this drug for its FDA and Health Canada approved indication of clearing blood clots from intravenous catheters. Partnering is needed to fund validation of new manufacturing and we will update on progress toward such an agreement in 2019.

To summarize, sales growth is strong, gross margins are expected to improve, cash-flow is already positive and meaningful net earnings are in sight. Your company is now poised for greater operational success and share price appreciation.

Personally and on behalf of our team, I thank you for your continuing support and wish you all the best.

Cameron L. Groome Chief Executive Officer and President

# MICROBIX

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE YEARS ENDED SEPTEMBER 30, 2018 AND 2017

The Company's Management's Discussion and Analysis ("MD&A") should be read in conjunction with the audited Consolidated Financial Statements and notes for the year ended September 30, 2018, prepared in accordance with International Financial Reporting Standards ("IFRS") and filed on SEDAR. Additional information relating to the Company, including its Annual Information Form ("AIF"), can be found on SEDAR at www.sedar.com. Reference to "we", "us", "our", or the "Company" means Microbix Biosystems Inc. unless otherwise stated. All amounts are presented in Canadian dollars unless otherwise stated. Statements contained herein, which are not historical facts, are forward looking statements that are subject to certain risks and uncertainties that could cause actual results to differ materially from those set forth or implied. These forward-looking statements include, without limitation, discussion of financial results or the outlook for the business, risks associated with its financial results and stability, its biologicals business, development projects such as those referenced herein, sales to foreign jurisdictions, engineering and construction, production (including control over costs, quality, quantity and timeliness of delivery), foreign currency and exchange rates, maintaining adequate working capital and raising further capital on acceptable terms or at all, and other similar statements concerning anticipated future events, conditions or results that are not historical facts. These statements reflect management's current estimates, beliefs, intentions and expectations; they are not guarantees of future performance. The Company cautions that all forward looking information is inherently uncertain and that actual performance may be affected by a number of material factors, many of which are beyond the Company's control. Accordingly, actual future events, conditions and results may differ materially from the estimates, beliefs, intentions and expectations expressed or implied in the forward looking information. All statements are made as of the date of this disclosure and represent the Company's judgment as of that date and the Company disclaims any intent or obligation to update such forward-looking statements.

The Management Discussion and Analysis is dated December 20, 2018.

## **COMPANY OVERVIEW**

Microbix Biosystems Inc. (Microbix or the Company) (TSX: MBX) specializes in developing biological and technology solutions for human health and well-being. It manufactures a wide range of critical biological materials for the global diagnostics industry, notably purified and inactivated bacteria and viruses, known as antigens, which are used in immunoassays or quality assessment products. Microbix' antigenbased products are sold to more than 100 customers worldwide, primarily to multinational diagnostics companies and laboratory accreditation organizations

Microbix has also applied its biological expertise and infrastructure to create proprietary new products or technologies. It has been working to commercialize two; (1) Kinlytic<sup>®</sup> urokinase, a biologic thrombolytic drug (used to dissolve blood clots), and (2) LumiSort<sup>™</sup> cell-sorting, a technology platform for ultra-rapid and efficient sorting of particles that can be used to enrich cell populations of interest (such as sexing semen for the livestock industry).

Revenue from the antigens business (Antigens) is expected to continue growing for the foreseeable future, with this growth recently accelerating as certain public health tests are being adopted in the Asia Pacific region. The Antigens business provides free cash flow to cover operating and debt service costs, and funding for business initiatives that leverage this expertise and are related to this field.

The Company owns and operates an Antigens manufacturing facility at 265 Watline Avenue in Mississauga, Ontario. Microbix has a Pathogen and Toxin license for its facility, issued by the Public Health Agency of Canada. The Company's administrative offices are located at 211 Watline Avenue, Mississauga, Ontario.

#### FINANCIAL OVERVIEW

#### Year Ending September 30, 2018 ("2018")

For 2018, revenue was \$12,510,558, a 23% increase over 2017 revenue of \$10,185,798, with sales to each of Microbix' two largest customers increasing significantly. Included were antigen and quality product revenues of \$12,191,357, 23% higher than 2017, due to strong sales growth in Asia and increased sales to key customers. Revenue from royalties was up 9% at \$319,201 (2017 - \$293,939).

At \$5,369,436, gross margin increased by \$557,063 or 12%, due to increased sales and changes to product mix, but with sales-related gains offset by yield-control issues with a conventionally-produced antigen. Additionally, the benefit of shifting production of a leading antigen into bioreactors was not fully-realized due to the conversion of a key customer being slower than anticipated.

Operating expenses for 2018 decreased by \$199,663 compared to 2017. This was primarily due to lower legal costs in 2018 versus prior year. However, during its review of intangible assets, Microbix determined that it has become less likely that it will fully recover the investments made in LumiSort<sup>™</sup>. The decision was therefore made to write-down all LumiSort<sup>™</sup>-related assets; namely its original investment and its capitalized development, prototyping and patenting costs. While Microbix can no longer support retaining an asset value of \$7,878,758 on its books for LumiSort, efforts to license or sell the technology will continue.

As a result, the Company experienced a net loss for the year of \$8,621,566 (versus a net loss of \$3,780,088 for 2017). Adjusting for such one-time costs in both fiscal years, operating loss before debt restructuring, settlement expenses and impairment of assets in 2018 was \$742,808 compared to a loss of \$1,499,534 for 2017.

Cash used in operations (CFO) in 2018 was \$537,005, compared to cash provided of \$297,047 in 2017. This swing was largely due to utilization of funds to reduce accounts payable in Q1 and Q2 of fiscal 2018, which deployed some of the funds from our Q1 2018 private placement. Cash used in investing activities was \$1,217,999 (2017 - \$640,750), due to increased investment on capital equipment and manufacturing facility upgrades, with the increase partly offset by lower investment in development of intangible assets. Accounting for all sources and uses, net cash provided by financing activities was \$1,744,901 (2017 - \$392,748), as a result of the company raising \$3,137,283 (net of issue costs) in a private placement in the first quarter of fiscal 2018. These funds were used primarily to pay down operating bank debt, reduce accounts payable obligations, invest in capital equipment, and as working capital to support our growth. Net of all entries, cash decreased by \$10,102 in 2018 (2017 - increase of \$49,045).

#### Quarter Ending September 30, 2018 ("Q4")

Total Q4 revenue was \$3,389,574, a 20% increase over last year's fourth quarter revenue of \$2,813,282. Included were antigen and quality product revenues of \$3,308,913, 22% higher than last year's fourth quarter, due largely to strong growth into Asian markets through our distribution partner and growth in sales to key customers. Revenue from royalties was \$80,661 (2017 - \$93,663).

Gross margin for Q4 was 41%, up from 39% in fiscal Q4 of 2017, but well below objectives. Gross margin varies with product mix but, as in Q2 and Q3 of 2018, yield-control issues with a conventionally-produced antigen meaningfully reduced gross margin (by about 10%). In dollar terms, Q4 gross margin increased by \$289,330 versus Q4 of 2017 or by 27%. Those yield-control issues are now resolved and further measures to improve yields and margins are being undertaken across multiple products which should soon begin to show positive effects.

Operating expenses for Q4 decreased by \$321,206 compared to 2017. This was primarily due to lower legal costs during the quarter, as in 2017 Microbix was incurring the costs of defending a patent lawsuit which was later settled in our favour. In addition, Microbix had lower interest costs due to lower use of bank credit facility in fiscal 2018. As outlined above the Company took a write-down during the quarter of \$7,878,758 for its Lumisort assets. As a result, the Company experienced a net loss for the quarter of \$8,185,894 (versus a net loss of \$1,009,911 for 2017). However, Microbix generated improved operating results for Q4, with a net

# **FINANCIAL OVERVIEW (Continued)**

#### Quarter Ending September 30, 2018 ("Q4") (Continued)

operating loss before one-time adjustments of \$307,135, versus a loss of \$917,673 in 2017.

Cash provided by operations (CFO) in Q4 was \$249,815, compared to cash used of \$447,812 in 2017. The impact of increased Q4 sales on CFO was blunted by the yield-control issue. As a result, the increased CFO in Q4 2018 was largely due to the reductions in accounts receivable and decreased inventory levels. Net cash used in investing activities was \$77,148 (2017 – negative \$26,157), due to continued investment in upgrading manufacturing equipment. Cash used in financing activities was \$229,435 (2017 – provided by \$312,168). Net of all entries, cash decreased by \$11,798 in Q4 2018 (2017 - \$109,486).

#### **FINANCIAL HIGHLIGHTS**

	As at	As at	
Total Revenue	Sept 30, 2018 \$ 12,510,558	Sept 30, 2017 \$ 10.185.798	
Total Revenue	\$ 12,510,558	\$ 10,185,798	
Gross Margin	5,369,436	4,812,373	
SG&A Expenses	4,170,641	4,392,734	
R&D Expense	1,089,746	994,584	
Financial Expenses	851,857	924,589	
Operating Loss before debt restructuring,			
settlement expenses and impairment of assets	(742,808)	(1,499,534)	
Net Loss and Comprehensive Loss for the year	(8,621,566)	(3,780,088)	
Cash Provided (Used) by Operating Activities	(537,005)	297,047	
Cash	44,358	54,460	
Accounts receivable	1,313,480	1,337,488	
Total current assets	6,067,018	6,161,837	
Total assets	19,310,067	26,437,611	
Total current liabilities	4,161,417	6,516,249	
Total liabilities	8,956,565	11,262,928	
Total shareholders' equity	10,353,502	15,174,683	
Current ratio	1.46	0.95	
Debt to equity ratio	0.87	0.74	

#### SELECTED QUARTERLY FINANCIAL INFORMATION

	Dec-31-16 \$	Mar-31-17 \$	Jun-30-17 \$	Sep-30-17 \$	Dec-31-17 \$	Mar-31-18 \$	Jun-30-18 \$	Sep-30-18 \$
Sales	1,952,502	2,646,649	2,773,365	2,813,282	2,885,567	3,000,193	3,235,224	3,389,574
Net Loss and Comprehensive Loss	(3,366,472)	107,649	38,646	(1,009,911)	(94,128)	(342,502)	958	(8,185,894)
Operating Loss before debt restructuring, settlement exp and Impairment of assets		107,649	(164,104)	(917,673)	(94,128)	(342,502)	958	(307,136)

## OUTLOOK

#### **Canadian Funds**

Microbix' primary business is the result of nearly three decades of experience manufacturing high quality viral and bacterial antigens – for use in the medical diagnostic testing industry. Its many antigen products have received widespread and longstanding acceptance by diagnostic test makers, with continuing growth in demand. Microbix antigens are now used by over 100 diagnostics manufacturers and are the critical biology inside tens of millions of medical tests for bacterial and viral diseases.

More recently, growth in demand for Microbix' antigens has been accelerating – as a number of diagnostics for infectious diseases important to public health are beginning to be adopted in the Asia-Pacific region. We are seeing the emergence of this Asian demand materialize in orders from our distribution partner for such markets, as well as from customers based in North America and Europe that are reporting growing sales into Asia. The long-term effect of this trend may be to take our potential market from being the population of ~700 million of North America and Western Europe to closer to the global population of 7.6 billion. As a leading global supplier of such vital antigens, Microbix believes it must prepare to fulfill such demand growth, lest unmet need spawn a new competitor.

A second line of business involves the use of antigens for purposes other than the large-scale manufacturing of medical test kits. This newer usage packages a very small amount of stabilized antigen into individual one milliliter vials. Such samples are used as tools to establish whether lab quality objectives are being met – for example to assess whether testing equipment is functioning properly and whether staff has been adequately trained. Such finished quality assessment products (QAPs<sup>™</sup>, pronounced as "caps") are a high value end-use of Microbix' antigens and there is a growing need for such products as regulators progressively tighten their surveillance of the competence of medical testing labs. A notable driver for such demand are the U.S. "CLIA" regulations, that are requiring labs to use quality products from qualified third parties across their ever-broadening portfolio of tests. Microbix now derives about 10% of its sales from providing QAPs to laboratory accreditation organizations and is building-out this business segment.

Due to the positive prospects of each of the two lines of its Antigens business, Microbix is reinvesting to better ensure that it can meet the expected growth in demand. Such work includes upgrading its manufacturing technologies, quality systems, processes and training, capacity and allocation of capacity, along with developing and launching new products. This has involved many steps to both de-bottleneck and de-risk our production processes, work that will be ongoing as Microbix continues to grow sales across our product lines. Much of the required investment was completed in the third quarter of fiscal 2018, as reflected in the news release entitled "Microbix Completes Multiple Facility Upgrades" dated May 8 that listed the 12 categories of upgrades we have completed.

Initial benefits of the manufacturing upgrades are already being seen in the sales growth of fiscal 2018. Management believes that it would have been very difficult to attain the rate of sales growth seen in fiscal 2018 (i.e., the 23% increase in sales over 2017), without such investment. Where Microbix has not yet seen the intended benefits, is in its gross margins and net profits.

Microbix is behind where it hoped to be on gross margins and profits – due largely, if not wholly, to two matters, (1) a yield-control issue with a leading conventionally-produced antigen product that led to considerable margin loss in Q2, Q3 and Q4 but has now been corrected, and (2) a delay in the acceptance of bioreactor-produced antigen by a key customer for that product – while it completes more lengthy real-time stability testing of kits made with such antigen that were unexpected by Microbix.

Both matters are being addressed and should not obstruct the drive to improve gross margins well above the 38-47% range seen across fiscal 2018. With ongoing sales growth in the range of 20% per year and improved margins in sight, it is believed that meaningful quarterly net earnings are not far off. Other very promising drivers should likewise not be ignored, starting with the QAPs

# MICROBIX

#### **OUTLOOK** (Continued)

#### **Canadian Funds**

products. The sales of QAPs to lab accreditation organizations (the PTDx<sup>™</sup> line) are already well-established, at about 10% of overall sales. A sibling of PTDx, the PROCEEDx line, was hatched in early 2018 and has been targeted to researchers, test developers and laboratories for R&D, validation/verification of instruments, troubleshooting and operator training. PROCEEDx<sup>™</sup> is now garnering accelerating interest from prospective customers and we are hopeful of material fiscal 2019 sales from this added QAPs product line. We will report on such progress as firm, material product orders are received from customers.

Headway is also being made with Kinlytic<sup>®</sup>. Microbix is actively working with a U.S. agent on outreaches to potential out-licensing and development partners. Management views progress as satisfactory at this stage and will likely update shareholders based on either of two process milestones, (i) executing a binding letter-of intent, or (ii) signing a definitive agreement. For LumiSort, it has been determined that the financial terms being discussed with livestock sex selection industry participants do not support the carrying value of the related assets. While LumiSort retains all of its technical and commercial merits, Microbix cannot afford to complete the commercialization of this asset without the involvement of such industry participants. Accordingly, the decision has been taken to provision for the full book value of LumiSort. With a zero value now assigned to LumiSort, any funds received from licensing the livestock-related or other applications of the technology should directly add to Microbix's earnings.

To summarize, the company is now growing sales at a rate of about 20% per year – faster than ever before. Gross margins and net profits are not yet where we want them to be, but plans are in place to meaningfully increase both over the coming quarters. The new QAPs products are gaining recognition from potential customers and should provide an additional source of high margin sales growth.

#### LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards ("IFRS") on a going concern basis, which presumes the Company will continue operating for the foreseeable future and will be able to realize a return on its assets and discharge its liabilities and commitments in the normal course of business.

The Company has incurred historical losses resulting in an accumulated deficit of \$35,698,403 as at September 30, 2018. Management continuously monitors the financial position of the Company with respect to working capital needs, as well as long-term capital requirements compared to the annual operating budget. Variances are highlighted and actions are taken to ensure the Company is appropriately capitalized.

#### Future Liquidity and Capital Needs

The Company primarily funds new product development activities and capital expenditures from profits earned by its business and, periodically from additional equity and/or debt.

Over the course of fiscal 2019, cash flow is expected to improve due to: 1) continued growth in antigen and quality product sales, 2) improvements in product pricing and other sales terms, 3) commencement of sales of higher margin product from the Company's bioreactor production process, and 4) other business development and financial initiatives. Management expects these developments will significantly improve the overall liquidity position, as the Company's plans come to full fruition.

The \$3.1 million of net proceeds from Microbix' October private placement have been deployed to support growth plans and ongoing operations. Principal utilizations have been to purchase needed equipment and improve working capital. Further funds were allocated to reduce bank credit utilization, which may be redrawn as needed. Microbix will continue to monitor and manage its cash position, with the objective of anticipating and meeting all future liquidity and capital needs.

# CONTRACTUAL OBLIGATIONS AND OTHER TRANSACTIONS

## New Distribution Agreement

On January 12, 2017 Microbix signed a distribution agreement with Meridian Life Science, Inc. Under the terms of the Agreement, Meridian has received exclusive distribution rights to Microbix' branded antigen products for China, Hong Kong, Taiwan and Macau. Additionally, Microbix is providing bulk-finished product to Meridian to be sold under Meridian-label to customers in the Asia-Pacific region. Both companies will explore additional collaboration opportunities in the future. The relationship enables Microbix to leverage its expanding manufacturing capacity and Meridian's substantial commercial presence to better serve the region's diagnostic customers. Overall, the distribution collaboration has significantly expanded the business relationship between the two companies, and serves as a platform for the continued growth and expansion of their respective products and services.

# **Expanded Customer Agreement**

On August 8, 2017 Microbix announced the execution of an expanded customer supply agreement. Under this agreement, Microbix is supplying an existing long-term customer with an increasing quantity of viral antigen products over the next five years, with the parties having the option to extend that term. Sales from the agreement are expected to total \$25 million, with approximately \$10 million to be incremental business. The agreement is with a major global diagnostics company with growing sales of infectious disease tests that require more antigen supply. The parties' obligations under the agreement are those customary for the supply and purchase of biological materials and its renewal and expansion provides Microbix with a secure base of business and underpins its decision to increase its production by expanding bioreactor capacity and other measures.

# **Settlement of Disputes**

On December 30, 2016 Microbix reached a final settlement with Irvine Scientific Inc. over an ongoing dispute related to the sale of the Company's Water-for-Injection business to Irvine Scientific that occurred in December 2012. Irvine Scientific had filed a Notice of Arbitration with the American Arbitration Association in New York as stipulated in its original agreement with Microbix. Prior to initiation of the arbitration proceeding the companies agreed on final settlement terms, namely Microbix will pay Irvine a total amount of (U.S.) \$192,500, which was fully paid by September 30, 2017.

# **Outstanding Share Capital**

Share capital issued and outstanding as at September 30, 2018 was \$33,912,460 for 96,972,705 common shares versus \$31,299,416 for 84,704,257 common shares at September 30, 2017.

## **Related Party Transactions**

On September 12, 2017, the Company issued two outstanding shareholder interest bearing Loans for total proceeds of \$200,000. These loans were repaid on October 23, 2017. On March 28, 2018 the board of directors approved the repricing of 1,500,000 of warrants held by a director of the Company. These warrants were repriced from \$0.55 to \$0.32 and the expiry was extended by one year. The non-cash financial impact was \$128,901, which is included in general and administrative expenses.

# **TREND INFORMATION**

Historical spending patterns are no indication of future expenditures. Investment in the new products and technologies is at the discretion of management. The Company is not aware of any material trends related to its business that have not been discussed in this Management Discussion and Analysis dated December 20, 2018.

## **RISKS AND UNCERTAINTIES**

The Company is exposed to business risks, both known and unknown, which may or may not affect its operations. Management works continuously to mitigate unacceptable risk, while still allowing the business to grow and prosper. These risk factors include the following:

# A significant portion of Antigens Product sales are dependent on key clients, open borders, international transportation systems, and access to raw materials.

A significant share of the Company's Antigens products sales are sold to a few key customers globally. These products contributed a significant share of the revenues. The loss of a key customer, or restrictions on export, import, or international transportation of its products, raw materials or insufficient marketing resources, could materially impact revenue and profitability.

# Environmental, safety and other regulatory

Microbix' research and manufacturing operations involves potentially hazardous materials. The Company takes extensive precautions to appropriately manage these materials as regulated by the applicable environmental and safety authorities. Changes in environmental and safety legislation may limit the Company's activities or increase costs. An environmental accident could adversely impact its operations. Microbix' antigen products are considered a production ingredient and not directly regulated by governments in Canada or other jurisdictions. Commercialization of certain quality assessment products require approval of regulatory agencies such as the FDA, in which case Microbix will not receive revenue until regulatory approval is obtained.

## Re-Launch of Kinlytic<sup>®</sup> urokinase

Microbix' goal is to re-launch this biologic clot-buster drug into the United States market. The Company has consulted with the United States Food and Drug Administration about the viability of its re-launch plans and secured quotations for major project tasks from third-party service providers to independently validate budgets and timelines. Outreach has been undertaken to secure project funding from development partners on the basis of the resulting re-launch plans. There is no assurance the Company will be successful in this endeavour.

## **Quality Assessment Products in development**

The Company has multiple quality assessment products under development, with the goal of building its sales of this category of product. There is no assurance that these development activities will result in the completion of new commercial products. If the Company is unable to develop and commercialize products, it will be unable to recover its related product development investments.

## Product commercialization requires strategic relationships

To commercialize large market products in development, Microbix may need to establish strategic partnerships, joint ventures or licensing relationships with pharmaceutical, biotechnology or animal genetics companies. It is possible the Company may be unable to negotiate mutually acceptable terms.

## **Operating and capital requirements**

Microbix seeks to earn a profit on the sale of its Antigens Products, which is a major source of funding for its research and development activities. The Company believes that cash generated from operations is sufficient to meet normal operating and capital requirements. However, the Company may need to raise additional funds, from time to time for several reasons including, to expand production capacity, to advance its current research and development programs, to support various collaboration initiatives with third parties, to underwrite the cost of filing, prosecuting and enforcing patents and other intellectual property rights, to invest in acquisitions, new technologies and new market developments. Additional financing may not be available, and even if available, may not be offered on acceptable terms.

#### **Canadian Funds**

## **RISKS AND UNCERTAINTIES (Continued)**

# Future success may depend on successfully commercializing new products or technologies

In the nearer term, Microbix must maintain and grow its existing product sales. To survive and prosper over the longer term, Microbix may need to commercialize new products or technologies. Such work is inherently uncertain and there is no guarantee that Microbix will be successful with its efforts.

## Failure to obtain and protect intellectual property could adversely affect business

Microbix' future success depends, in part, on its ability to obtain patents, or licenses to patents, maintain trade secret protection and enforce its rights against others. The Company's intellectual property includes trade secrets and know-how that may not be protected by patents. There is no assurance that the Company will be able to protect its trade know-how. To help protect its intellectual property, the Company requires employees, consultants, advisors and collaborators to enter into confidentiality agreements. However, these agreements may not adequately protect trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure. Protection of intellectual property may also entail prosecuting claims against others who the Company believes are infringing its rights. Involvement in intellectual property litigation could result in significant costs, adversely affecting the development of products or sales of the challenged product, or intellectual property, and divert the efforts of its scientific and management personnel, whether or not such litigation is resolved in the Company's favour.

# Microbix will continue to face significant competition

Competition from life sciences companies, and academic and research institutions is significant. Many competitors have substantially greater resources and general capabilities in the areas of scientific and product development, legal review, manufacturing, sales and marketing, and financial support than Microbix. While the Company continues to expand its technological, commercial, legal and financial capabilities in order to remain competitive, Microbix' competitors may also be making significant investments in all of these areas, which could make it more difficult for Microbix to commercialize its products and technologies.

# FINANCIAL RISK MANAGEMENT

The primary risks affecting the Company are summarized below and have not changed during the fiscal year. The list does not cover all risks, nor is there an assurance that the strategy of management to mitigate the risks is sufficient to eliminate the risk.

# Credit risk:

The Company's customers are primarily large multi-national companies with very high quality credit ratings. Given this track record, management perceives the credit risk to be low. Typically the outstanding accounts receivable balance is relatively concentrated with a few large customers representing the majority of the value. For the year ended September 30, 2018, five customers accounted for 66% (2017 - five customers accounted for 63%) of the outstanding balance. The Company has had minimal bad debts over the past several years and accordingly management has recorded an allowance of \$10,000 (2017 - \$10,000).

# **Currency risk:**

The Company is exposed to currency risk given its global customer base. Over 90% of its revenue is denominated in either U.S. dollars or Euros. The Company does not use financial instruments to hedge this currency risk. At September 30, 2018, the significant balances, quoted in Canadian dollars, held in foreign currencies are:

	US dollars		Euros	
	2018	2017	2018	2017
Cash Accounts receivable Accounts payable and	\$ 42,557 652,429	\$    52,902 458,941	247 314,402	5 413,117
accrued liabilities	\$ 204,696	\$ 406,000	-	11.987

Based upon 2018 results, the impact of a 5% increase in the U.S. dollar against the Canadian dollar would result in an increase in annual U.S. dollar based revenue of approximately \$330,400 Cdn. The impact of a 5% increase in the Euro against the Canadian dollar would result in an increase in annual Euro based revenue of approximately \$271,500. Correspondingly, the impact of a 5% decrease in the U.S. dollar against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of approximately \$330,400 Cdn. The impact of a 5% decrease in the U.S. dollar against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of approximately \$330,400 Cdn. The impact of a 5% decrease in the Euro against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of approximately \$330,400 Cdn. The impact of a 5% decrease in the Euro against the Canadian dollar would result in a loss in annual Euro-based revenue of approximately \$271,500.

# Liquidity risk

Liquidity risk measures the Company's ability to meet its financial obligations when they fall due. To manage this situation, the Company projects and monitors its cash requirements to accommodate changes in liquidity needs. In addition, during fiscal 2017 the Company announced that it has arranged a secured revolving credit facility with The Toronto-Dominion Bank ("TD Bank") and Export Development Canada ("EDC"). The credit facility is being used to fund the Company's need for working capital to grow its existing business. This facility is helping to satisfy the Company's liquidity needs and to manage the liquidity risk going forward.

# Interest rate risk

Financial instruments that potentially subject the Company to interest rate risk include those assets and liabilities with a variable interest rate. Exposure to interest rate risk is primarily on the BDC debt that has a variable rate pegged to the bank rate. The rate can be fixed, if the outlook indicates interest rates will move higher. The only other variable debt the Company has is the \$1,500,000 line of credit that bears interest at the bank's prime lending rate plus 2.25%. A 1% increase in the bank rate would cost the Company approximately \$30,000 per year for BDC and about \$15,000 on the line of credit usage if it were fully used throughout the fiscal year.

# FINANCIAL RISK MANAGEMENT (Continued)

# **Market risk**

Market risk reflects changes in pricing for both Antigens products and raw materials based on supply and demand criteria; also market forces can affect foreign currency exchange rates as well as interest rates which could affect the Company's financial performance or the value of its financial instruments. Microbix products are valuable components in our customers' products and cannot be easily replaced. The Company works closely with customers to ensure its products meet their specific criteria.

# Fair value

The fair value of a financial instrument is approximated by the consideration that would be agreed to in an arm's length transaction between willing parties and through appropriate valuation methods, but considerable judgement is required for the Company to determine the value. The actual amount that could be realized in a current market exchange could be different than the estimated value.

The fair values of financial instruments included in current assets and current liabilities approximate their carrying values due to their short-term nature.

The fair value of the long-term debt is based on rates currently available for items with similar terms and maturities. The convertible and non-convertible debenture fair values are not readily determinable as the convertible debentures have been issued to shareholders of the Company. The fair values of financial instruments in other long-term liabilities approximate their carrying values as they are recorded at the net present values of their future cash flows, using an appropriate discount rate.

# **CRITICAL ACCOUNTING ESTIMATES**

The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. The Company's audited consolidated financial statements are prepared in accordance with IFRS and the reporting currency is Canadian dollars. On an on-going basis, management bases its estimates on historical and other experience and assumptions, which it believes are reasonable in the circumstances. The significant accounting policies that the Company believes are the most critical in fully understanding and evaluating the reported financial results include:

# **Intangible Assets**

Intangible assets include technology costs, patents, trademarks and licenses. Each is recorded at cost and amortized on a straight-line basis over the term of the agreements. Intangible assets with indefinite lives are not amortized but are assessed for impairment on an annual basis.

# **Impairment of Long-lived Assets**

The Company reviews the carrying value of non-financial assets with definite lives for potential impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. The carrying value of non-financial assets with definite lives but are not ready for use, are assessed at least annually for impairment based on the impairment test on cash-generating units (CGUs). The impairment test on CGUs is carried out by comparing the carrying amount of the CGU and its recoverable amount. The recoverable amount of a CGU is the higher of fair value less costs to sell and its value in use. This complex valuation process entails the use of methods such as the discounted cash method which requires numerous assumptions to estimate future cash flows. The recoverable amount is impacted significantly by the discount rate selected to be used in the discounted cash flow model, as well as the quantum and timing of risk-adjusted future cash flows and the growth rate used for the extrapolation. The impairment loss is calculated as the difference between the fair value of the asset and its carrying value.

## **CRITICAL ACCOUNTING ESTIMATES (Continued)**

# Non-Convertible and Convertible Debentures

Management determines the fair value of the debenture using valuation techniques. Those techniques are significantly affected by the estimated assumptions used, including discount rates, expected life and estimates of future cash flows.

## **Deferred income taxes**

Deferred income tax assets and liabilities are recognized for the estimated income tax consequences attributable to differences between financial statement carrying amounts of assets and liabilities and their respective income tax bases. Deferred income tax assets and liabilities are measured using tax rates expected to be in effect when the temporary differences are expected to be recovered or settled. The effects of changes in income tax rates are reflected in future income tax assets and liabilities in the year that the rate changes are substantively enacted.

#### **Share-based payments**

The Company applies the fair value method of accounting for stock-based compensation for awards granted to officers, directors, employees and consultants of the Company. The fair value of the award at the time of granting is determined using the Black-Scholes option pricing model, and recognized as a compensation expense on a straight- line basis over the vesting period with an offsetting amount recorded to contributed surplus. The amount of the compensation cost recognized at any date at least equals the value of the portion of the options vested at that date. When stock options are exercised, the consideration paid by employees or directors, together with the related amount in contributed surplus, is credited to capital stock. When an employee leaves the Company, vested options must be exercised within 90 days, or the options expire. Any options that are unvested are reversed in the period that the employee leaves.

#### **FINANCIAL INSTRUMENTS**

The fair value of a financial instrument is approximated by the consideration that would be agreed to in an arm's length transaction between willing parties and through appropriate valuation methods, but considerable judgment is required for the Company to determine the value. The actual amount that could be realized in a current market exchange could be different than the estimated value.

The carrying amounts of cash and cash equivalents, accounts receivable, bank indebtedness and accounts payable and accrued liabilities approximate fair value due to the short-term maturities of these instruments. Based on available market information, the fair value of the obligation under capital lease approximates its carrying value.

The fair value of the long-term debt is based on rates currently available for items with similar terms and maturities. The fair value of the liability for each convertible debenture has been calculated and the residual is accounted for in equity. The Company does not have any off balance sheet financial instruments.

#### **Disclosure Controls**

The Chief Executive Officer and the Chief Financial Officer have evaluated the effectiveness of the Company's disclosure controls and procedures, as defined in the National Instrument 52-109 Certification of Disclosure in Issuer's Annual Filings (NI 52-109F1). As at September 30, 2018, management has concluded that the disclosure controls are effective in providing reasonable assurance that information required to be disclosed in the Company's reports is recorded, processed summarized and reported within the time periods specified in the Canadian Securities Administrator's rules and forms.

## **Internal Controls Over Financial Reporting**

The design of internal controls over financial reporting ("ICFR") within the company is a management responsibility to provide reasonable assurance that the reliability of financial reporting and that the preparation of financial statements for external purposes is in accordance with generally accepted

#### FINANCIAL INSTRUMENTS (Continued)

#### **Internal Controls Over Financial Reporting (Continued)**

accounting principles of IFRS. While the CEO and CFO believe that the internal controls are adequate to provide the above information, the process to evaluate and document all policies and procedures that could impact financial reporting is continuously reviewed with consultation with the Audit Committee. Shareholders should be aware that Microbix is a small company without the department resources associated with larger firms. Management is using the Committee of Sponsoring Organization of the Treadway Commission ("COSO"). Framework and has concluded that the Internal Control over Financial Reporting ("ICFR") as defined in NI 52-109 is effective as at the period ended September 30, 2018.

Examination by the Chief Executive Officer and the Chief Financial Officer showed that there were no changes to the internal controls over financial reporting during the period ended September 30, 2018 that have materially affected, or are reasonably thought to materially affect, the internal control over financial reporting.

#### ACCOUNTING PRONOUNCEMENTS ISSUED BUT NOT YET APPLIED

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the International Accounting Standards Board ("IASB") or IFRS Interpretation Committee ("IFRIC") that are mandatory at certain dates or later. Management is still assessing the effects of the pronouncements on the Company. The standards impacted that may be applicable to the Company are following:

## **IFRS 9 - Financial Instruments**

IFRS 9, Financial Instruments ("IFRS") was issued in final form by the IASB in July 2014 and will replace IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing the multiple rules in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets.

Most requirements in IAS 39 for classification and measurement of financial liabilities were carried forward unchanged to IFRS 9. The new standard also requires a single impairment method be used, replacing the multiple impairment methods in IAS 39. IFRS 9 also includes requirements relating to a new hedge accounting model, which represents a substantial overhaul of hedge accounting that will allow entities to better reflect their risk management activities in the financial statements.

The most significant improvements apply to those that hedge non-financial risk, and so these improvements are expected to be of particular interest to non-financial institutions. In addition, a single, forward-looking expected loss impairment model is introduced, which will require more timely recognition of expected credit losses. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted.

The Company has assessed the impact of IFRS 9 on the consolidated financial statements and has determined that the adoption of IFRS 9 will enhance disclosures, but will not have a material impact on the consolidated financial statements.

#### **IFRS 15, Revenue from Contracts with Customers**

IFRS 15, Revenue from Contracts with Customers ("IFRS 15") was issued by the IASB in May 2014. The core principle of the new standard is for companies to recognize revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The new 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. The new standard is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted. IFRS 15 supersedes the following standards: IAS 11 Construction Contracts, IAS 18 Revenue, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real

## ACCOUNTING PRONOUNCEMENTS ISSUED BUT NOT YET APPLIED (Continued)

# IFRS 15, Revenue from Contracts with Customers (Continued)

Estate, IFRIC 18 Transfers of Assets from Customers, and SIC-31 Revenue - Barter Transactions Involving Advertising Services.

The Company has not identified any significant differences in the timing or recognition of revenues as a result of IFRS 15. The Company continues to assess the impact of required disclosure in the notes to the consolidated financial statements.

## IFRS 16, Leases

On January 13, 2016, the IASB issued IFRS 16, which outlines requirements for lessees to recognize assets and liabilities for most leases. Lessees are required to recognize the lease liability for the obligations to make lease payments and a right-of-use asset for the right to use the underlying asset for the lease term. Lease liability is measured at the present value of lease payments to be made over the term of the lease. The right-of-use asset is initially measured at the amount of the lease liability and adjusted for prepayments, direct costs and incentives received.

The new standard will be effective for annual periods beginning on or after January 1, 2019. Early recognition is permitted, provided the new revenue standard, IFRS 15 Revenue from Contracts with Customers, has been applied, or is applied at the same date as IFRS 16. The Company has commenced a review process to assess any impact on its current revenue recognition policies and reporting processes.

# IFRS 2, Share-based Payment ("IFRS 2")

In June 2016, the IASB issued final amendments to IFRS 2, clarifying how to account for certain types of share-based payment transactions. The amendments, which were developed through the IFRS Interpretations Committee, provide requirements on the accounting for: (i) the effect of vesting and non-vesting conditions on the measurement of cash-settled share-based payments; (ii) share-based payment transactions with a net settlement feature for withholding tax obligations; and (iii) a modification to the terms and conditions of a share-based payment that changes the classifications of the transaction from cash-settled to equity-settled. The effective date for this standard is for reporting periods beginning on or after January 1, 2018, with earlier application permitted.

The Company has completed the review process to assess the impact and application of the aforementioned amendments and has determined it will have no impact on the Company.

# IFRIC 22, Foreign Currency Transactions and Advance Consideration

In 2016, the IASB issued IFRIC Interpretation 22, Foreign Currency Transactions and Advance Consideration ("IFRIC 22") which provides requirements about which exchange rate to use in reporting foreign currency transactions (such as revenue transactions) when payment is made or received in advance. IFRIC 22 is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. On initial application, entities have the option to apply either retrospectively or prospectively. The Company is in the process of evaluating the impact of adopting these amendments on the Company's consolidated financial statements.

# **INDEPENDENT AUDITORS' REPORT**

#### To the Shareholders of Microbix Biosystems Inc.

We have audited the accompanying consolidated financial statements of **Microbix Biosystems Inc.** which comprise the consolidated statements of financial position as at September 30, 2018 and 2017, and the consolidated statements of loss and comprehensive loss, changes in shareholders' equity and cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

#### 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, 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. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' 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, the auditors consider internal control relevant to the entity'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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies 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 basis for our audit opinion.

#### Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of **Microbix Biosystems Inc.** as at September 30, 2018 and 2017, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards.

December 20, 2018 Toronto, Canada

Ernst + young LLP

Chartered Professional Accountants Licensed Public Accountants

# MICROBIX

CONSOLIDATED	STATEMENTS	ΟΕ ΕΙΝΔΝΟΙΔΙ	POSITION

As at September 30, 2018 and 017		Canadian Fund
	2018	2017
ASSETS		
CURRENT ASSETS		
Cash	\$ 44,358	\$ 54,460
Accounts receivable	1,313,480	1,337,488
Inventory (Note 5)	4,446,968	4,467,106
Prepaid expenses and other assets (Note 6)	169,965	152,989
Investment tax credit receivable (Note 18)	92,247	149,794
TOTAL CURRENT ASSETS	6,067,018	6,161,837
LONG-TERM ASSETS		
Deferred tax asset (Note 18)	1,580,000	1,580,000
Property, plant and equipment (Note 7)	6,646,730	12,211,770
Intangible assets (Note 8)	5,016,319	6,484,004
TOTAL LONG-TERM ASSETS	13,243,049	20,275,774
TOTAL ASSETS	\$ 19,310,067	\$ 26,437,611
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	\$ 1,766,592	\$ 2,841,950
Bank indebtedness (Note 10)	260,000	1,355,000
Current portion of finance lease obligation	80,627	23,070
Current portion of long-term debt (Note 10)	438,120	536,480
Current portion of debentures (Note 9)	684,953	614,564
Deferred revenue (Note 11)	931,125	1,145,185
TOTAL CURRENT LIABILITIES	4,161,417	6,516,249
Finance lease obligation	249,526	74,327
Non-convertible debentures (Note 9)	779,536	802,819
Convertible debentures (Note 9)	1,304,960	1,268,623
Long-term debt (Note 10)	2,461,126	2,600,910
TOTAL LONG-TERM LIABILITIES	4,795,148	4,746,679
TOTAL LIABILITIES	\$ 8,956,565	\$ 11,262,928
SHAREHOLDERS' EQUITY		
Share capital (Note 12)	\$ 33,912,460	\$ 31,299,416
Equity component of		
convertible debentures (Note 9)	2,903,789	2,903,789
Contributed surplus (Note 13)	9,235,656	8,048,315
Accumulated deficit	(35,698,403)	(27,076,837
TOTAL SHAREHOLDERS' EQUITY	\$ 10,353,502	\$ 15,174,683
TOTAL LIABILITIES & SHAREHOLDERS' EQUITY	\$ 19,310,067	\$ 26,437,611

Commitments and Contingencies (Note 27)

On behalf of the Board:

(Signed) "William J. Gastle"

WILLIAM J. GASTLE DIRECTOR (Signed) "Cameron L. Groome" CAMERON L. GROOME

DIRECTOR

# MICROBIX

For the years ended September 30, 2018 and 2017		Canadian Fun
	2018	2017
SALES		
Antigen products and technologies	\$ 12,191,357	\$ 9,891,859
Royalties	319,201	293,939
FOTAL SALES	12,510,558	10,185,798
COST OF GOODS SOLD		
Antigen products and technologies (Notes 5, 17)	7,076,797	5,287,781
Royalties	64,325	85,644
TOTAL COST OF GOODS SOLD	7,141,122	5,373,425
GROSS MARGIN	5,369,436	4,812,373
EXPENSES		
Selling and business development (Note 17)	556,414	464,909
General and administrative (Note 17)	3,614,227	3,927,825
Research and development (Note 17)	1,089,746	994,584
Financial expenses (Note 20)	851,857	924,589
OPERATING LOSS BEFORE DEBT RESTRUCTURING, SETTLEMENT EXPENSES AND IMPAIRMENT OF ASSETS	(742,808)	(1,499,534)
Debt restructuring expense (Note 9)	-	2,457,014
Settlement expense (Note 28)	_	273,540
Impairment of long-term assets (Notes 7, 8)	7,878,758	
LOSS AND COMPREHENSIVE LOSS		
FOR THE YEAR, BEFORE INCOME TAXES	(8,621,566)	(4,230,088)
FOR THE YEAR, BEFORE INCOME TAXES	(8,621,566)	
FOR THE YEAR, BEFORE INCOME TAXES		(4,230,088) (450,000)
FOR THE YEAR, BEFORE INCOME TAXES	(8,621,566) - -	
FOR THE YEAR, BEFORE INCOME TAXES NCOME TAXES Deferred income taxes Current income taxes NET LOSS AND COMPREHENSIVE LOSS	-	(450,000) -
FOR THE YEAR, BEFORE INCOME TAXES NCOME TAXES Deferred income taxes Current income taxes	(8,621,566) - - \$ (8,621,566)	
FOR THE YEAR, BEFORE INCOME TAXES  NCOME TAXES Deferred income taxes Current income taxes NET LOSS AND COMPREHENSIVE LOSS FOR THE YEAR NET LOSS PER SHARE	- - \$ (8,621,566)	(450,000) - \$ (3,780,088)
FOR THE YEAR, BEFORE INCOME TAXES INCOME TAXES Deferred income taxes Current income taxes NET LOSS AND COMPREHENSIVE LOSS	-	(450,000) -

CONSOLIDATED STATEMENTS OF CASH FLOWS				
For the years ended September 30, 2018 and 2017		Canadian Fund		
		2018		2017
OPERATING ACTIVITIES				
Net Loss for the Year	\$ (	8,621,566)	\$	(3,780,088
Items not affecting cash				
Amortization and depreciation (Note 17)		690,078		510,159
Accretion of debentures (Note 9)		161,934		198,560
Stock options and warrants expense (Note 15)		458,525		485,086
Share and warrant issuance for services (Notes 12, 13)		99,969		-
Debt restructuring expense (Note 9)		-		2,379,776
Deferred tax asset (Note 18)		-		(450,000
Impairment of long-term assets (Notes 7, 8)		7,878,758		-
Change in non-cash working capital balances (Note 19)		(1,204,703)		953,554
CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES		(537,005)		297,04
INVESTING ACTIVITIES Purchase of property, plant and equipment (Note 7)		(944,252)		(182,055
Additions from internal development		(944,252)		(182,055
of intangible assets (Note 8)		(273,747)		(458,695
		(213,141)		(400,000
CASH USED IN INVESTING ACTIVITIES		(1,217,999)		(640,750
FINANCING ACTIVITIES				
Repayments of long-term debt (Note 10)		(362,050)		(340,106
Proceeds from Equipment Loan (Note 10)		323,906		-
Repayments of convertible and				
non-convertible debentures (Note 9)		(91,127)		(83,367
Repayments of shareholders' loans (Note 10)		(200,000)		-
Repayments of finance lease		(72,719)		(13,779
Proceeds (repayments) of credit facility (Note 10)		(1,095,000)		830,00
Proceeds from exercise of stock options and warrants		104,608		-
Issue of common shares and warrants, net of issue costs (Notes 12, 13)		3,137,283		-
CASH PROVIDED BY FINANCING ACTIVITIES		1,744,901		392,748
NET CHANGE IN CASH - DURING THE YEAR	\$	(10,102)	\$	49,045
CASH - BEGINNING OF YEAR		54,460		5,415
CASH - END OF YEAR	Ś	44,358	\$	54,460
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# MICROBIX

# CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

As at September 30, 2018 and	2017				C	anadian Funds
	Share Capi Number of Shares	TAL (Note 12) Stated Capital	Contributed Surplus	Deficit	EQUITY Component of Debenture	Total Shareholders' Equity
BALANCE, SEPTEMBER 30, 2016	84,704,257	\$31,299,416	\$4,937,649	\$(23,296,749)	\$2,351,425	
Stock option expense			485,086			485,086
Issuance of Warrants pursuant to refinancing of convertible debentures			245,860			245,860
Conversion of a convertible debenture to a non- convertible debenture			86,680		(86,680)	-
Extinguishment of convertible debentures			2,293,040		(2,264,745)	28,295
Refinancing of convertible debentures					2,903,789	2,903,789
Net comprehensive loss for the year				(3,780,088)		(3,780,088)
BALANCE, SEPTEMBER 30, 2017	84,704,257	\$31,299,416	\$8,048,315	\$(27,076,837)	\$2,903,789	\$15,174,683
Stock option and warrant exp	oense		458,525			458,525
Share Issuance pursuant to Stock Options Exercised	400,000	181,516	(77,516)			104,000
Share Issuance pursuant to Warrants Exercised	1,815	811	(203)			608
Issue of Warrants pursuant to Private Placement	)		743,905			743,905
Issuance of Broker Warrants			120,328			120,328
Share Issuance pursuant to Private Placement	11,666,633	2,756,085				2,756,085
Share Issue Costs pursuant to Private Placement	)	(380,368)	(102,667)			(483,035)
Share Issuance for Services	200,000	55,000				55,000
Warrants Issuance for Services			44,969			44,969
Net comprehensive loss for the year				(8,621,566)		(8,621,566)
BALANCE, SEPTEMBER 30, 2018	96,972,705	\$33,912,460	\$9,235,656	(35,698,403)	\$2,903,789	\$10,353,502

# **1. NATURE OF THE BUSINESS**

Microbix Biosystems Inc. (the "Company" or "Microbix"), incorporated under the laws of the Province of Ontario, develops and commercializes proprietary biological and technology solutions for human health and wellbeing. Microbix manufactures a wide range of critical biological materials for the global diagnostics industry, notably antigens used in immunoassays or quality assessment and proficiency testing controls (the Antigen Business).

Microbix has also applied its biological expertise and infrastructure to create proprietary new products or technologies. It has been working to commercialize two; (1) Kinlytic<sup>®</sup> urokinase, a biologic thrombolytic drug (used to dissolve blood clots), and (2) LumiSort<sup>™</sup> cell-sorting, a technology platform for ultra-rapid and efficient sorting of particles that can be used to enrich cell populations of interest (such as sexing semen for the livestock industry).

The registered office and principle place of business of the Company is located at 265 Watline Avenue, Mississauga, Ontario, L4Z 1P3.

# 2. BASIS OF PREPARATION

The Company's management prepared these consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB"). The Board of Directors approved these consolidated financial statements on December 20, 2018.

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## **Basis of Measurement**

The consolidated financial statements have been prepared under the historical cost convention, except for the revaluation of certain financial assets and financial liabilities to fair value. The consolidated financial statements are presented in Canadian dollars.

## **Basis of consolidation**

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, Crucible Biotechnologies Limited, over which the Company has control. Control exists when the entity is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The non-controlling interest component, if any, of the Company's subsidiaries is included in equity.

The financial statements of the Company's subsidiary is prepared for the same reporting period as the Company, using consistent accounting policies. All intra-company balances, transactions, unrealized gains and losses resulting from intra-company transactions and dividends are eliminated in full.

There has been no business activity in the subsidiary during the years ended September 30, 2018 and 2017. All significant intercompany transactions and balances have been eliminated upon consolidation.

## Use of estimates and judgments

The preparation of financial statements requires management to make estimates and judgements that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from estimates and such differences could be material.

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

# Use of estimates and judgements (Continued)

Key areas of managerial judgements and estimates are as follows:

i) Property, plant and equipment:

Measurement of property, plant and equipment involves the use of estimates for determining the expected useful lives of depreciable assets. Management's judgement is also required to determine depreciation methods and an asset's residual value and whether an asset is a qualifying asset for the purposes of capitalizing borrowing costs.

ii) Internally generated intangible assets:

Management monitors the progress of each internal research and development project. Significant judgement is required to distinguish between the research and development phases. Development costs are recognized as an asset when the following criteria are met: (i) technical feasibility; (ii) management's intention to complete the project; (iii) the ability to use or sell; (iv) the ability to generate future economic benefits; (v) availability of technical and financial resources; (vi) ability to measure the expenditures reliably. Research costs are expensed as incurred. Management also monitors whether the recognition requirements for development assets continue to be met and whether there are any indicators that capitalized costs may be impaired. The amortization period and amortization method for intangible assets are reviewed at least at the end of each reporting period.

iii) Financial assets and liabilities:

Estimates and judgements are also made in the determination of fair value of financial assets and liabilities and include assumptions and estimates regarding future interest rates, the relative creditworthiness of the Company to its counterparties, the credit risk of the Company's counterparties relative to the Company, the estimated future cash flows and discount rates.

iv) Income taxes:

The Company recognizes deferred tax assets, related tax-loss carry-forwards and other deductible temporary differences where it is probable that sufficient future taxable income can be generated in order to fully utilize such losses and deductions. This requires significant estimates and assumptions regarding future earnings, and the ability to implement certain tax planning opportunities in order to assess the likelihood of utilizing such losses and deductions.

v) Fair value of share-based compensation:

The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date on which they are granted. Estimating fair value for share-based compensation transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the share option, volatility, dividend yield and forfeiture rates and making assumptions about them.

vi) Impairments:

The recoverable amount of intangible assets and property, plant and equipment is based on estimates and assumptions regarding the expected market outlook and cash flows from each CGU.

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### **Revenue Recognition**

Revenues from product sales are recognized when persuasive evidence of an arrangement exists, the product is shipped, received or accepted by the customer, there are no future performance obligations, the purchase price is fixed and determinable, and collectability is reasonably assured.

Revenues from licensing are recognized when the service is rendered or the deliverables are substantially complete and other revenue recognition criteria are met.

Amounts the Company expects to earn over the next year are included in deferred revenue. The term over which upfront fees are recognized is revised if the period over which the Company maintains substantive contractual obligations changes.

## Cash

Cash consists of cash on hand and deposits with banks and investments in highly liquid instruments with original maturities of three months or less. There are no cash equivalents held at September 30, 2018 or 2017.

## **Financial assets and liabilities**

All financial instruments, including derivatives, are included on the consolidated statement of financial position and are measured either at fair market value or, in limited circumstances, at cost or amortized cost. Subsequent measurement and recognition of the changes in fair value of financial instruments depends upon their initial classifications as follows:

- Held-for-trading financial assets, measured at fair value with subsequent changes in fair value recognized in current period net income;
- Held-to-maturity assets, loans and receivables and other financial liabilities, initially measured at fair value and subsequently measured at amortized cost with changes recognized in current period net income; and
- Available-for-sale financial assets, measured at fair value with subsequent gains or losses included in other comprehensive income until the asset is removed from the consolidated statements of financial position.

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

# Financial assets and liabilities (Continued)

The following summarizes the Company's classification and measurement of financial assets and liabilities as at September 30:

	Classification	Measurement	2018	2017
Financial assets:				
Cash	Held-for-trading	Fair value	\$ 44,358	\$ 54,460
Accounts receivable	Loans and receivables	Amortized cost	1,313,480	1,337,488
Financial liabilities:				
Accounts payable and				
accrued liabilities	Other liabilities	Amortized cost	\$ 1,766,592	\$ 2,841,950
Bank Indebtedness	Other liabilities	Amortized cost	260,000	1,355,000
Deferred revenue	Other liabilities	Amortized cost	931,125	1,145,185
Finance lease obligation	Other liabilities	Amortized cost	330,153	97,398
Non-convertible debentures	Other liabilities	Amortized cost	1,184,014	1,170,117
Convertible debentures	Other liabilities	Amortized cost	1,585,435	1,515,888
Long-term-debt	Other liabilities	Amortized cost	2,899,246	3,137,390
Total Financial liabilities			\$ 8,956,565	\$ 11,262,928

Transaction costs that are directly attributable to the acquisition or issuance of financial assets or financial liabilities, other than financial assets and financial liabilities measured at fair value through profit and loss ("FVTPL"), are accounted for as part of the carrying amount of the respective asset or liability at inception. Transaction costs related to financial instruments measured at amortized cost are amortized using the effective interest rate over the anticipated life of the related instrument.

Transaction costs on financial assets and financial liabilities measured at FVTPL are expensed in the period incurred. Financial assets are derecognized when the contractual rights to the cash flows from financial assets expire or have been transferred. All derivative instruments, including embedded derivatives, are recorded in the financial statements at fair value.

## Inventories

Inventory is carried at the lower of cost and market. Cost consists of direct materials, direct labour and an overhead allocation and is determined on a first-in, first-out basis. Market is defined as net realizable value, which is defined as the summation of the estimated selling price less the cost to complete less the cost to sell. Management reviews its reserve for obsolete inventory at each reporting date for finished goods and work-in-process.

## Property, plant and equipment

Property and equipment are measured at cost less accumulated depreciation and impairment (if any). Cost includes the cost of material, labour and other costs directly attributable to bringing the asset to a working condition for its intended use.

Depreciation is calculated at rates which will reduce the original cost to estimated residual value over the estimated useful life of each asset. Depreciation commences once the asset is available for use.

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

## Property, plant and equipment (Continued)

Depreciation is provided for at the following basis and rates:

Research and development equipmentDeclining balance, 10-100%Other equipment and fixturesDeclining balance, 10-30%BuildingsStraight line, 50 years

Land is not depreciated. Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted prospectively, if appropriate.

#### **Finance lease obligation**

Leases that transfer substantially all of the benefits and risks of ownership of the asset to the Company are accounted for as finance leases. At the time a finance lease is entered into, an asset is recorded together with its related long-term obligation, reflecting the fair value of future lease payments, discounted at the appropriate interest rates. Finance lease obligations are amortized over their estimated useful lives at the same rates used for other equipment and fixtures. All other leases are classified as operating leases and expensed on a straight-line basis.

#### **Intangible assets**

Intangible assets represent technology costs, patents and trademarks, and rights and licenses. Each is recorded at cost and is amortized on a straight-line basis over the term of the agreements or over the useful life of the asset. Amortization commences when the intangible asset is available for use. Intangible assets with definite lives but not yet available for use are assessed annually for impairment.

#### Impairment of long-lived assets

An impairment charge is recognized for long-lived assets, including intangible assets with definite lives, when an event or change in circumstances indicates that the assets' carrying value may not be recoverable. The impairment loss is calculated as the difference between the carrying value of the asset and the recoverable amount. The recoverable amount is the higher of the fair value less costs to sell and value in use.

#### **Borrowing costs**

Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period they are incurred.

#### Share-based compensation

The Company applies the fair value method of accounting for share-based compensation for awards granted to officers, directors and employees of the Company. The fair value of the award at the time of granting is determined using the Black-Scholes option pricing model, and recognized as a compensation expense over the vesting period with an offsetting amount recorded to contributed surplus. Each tranche in an award is considered a separate award with its own vesting period and grant date fair value.

Share options issued to consultants of the Company are based on the fair value of the services provided. The amount of the compensation cost recognized at any date at least equals the value of the portion of the options vested at that date. When stock options are exercised, the consideration paid by employees or directors, together with the related amount in contributed surplus, is credited to share capital. When an employee leaves the Company, vested options must be exercised within 90 days, or the options expire. Any options that are unvested are reversed in the period that the employee leaves. No

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

## **Share-based compensation (Continued)**

forfeiture rate is incorporated into the Company's assumptions on awarding options. To the extent actual forfeitures occur, share-based compensation related to these awards will be different from the Company's estimate and are revised.

## Foreign currency translation

For each entity, the Company determines the functional currency and items included in the financial statements of each entity are measured using the functional currency, which represents the currency of the primary economic environment in which each entity operates.

Foreign currency denominated revenues and expenses are translated by use of the exchange rate in effect at the end of the month in which the transaction occurs. Foreign currency denominated monetary assets and liabilities are translated at the year-end date. Exchange gains and losses arising on these transactions are included in the consolidated statements of loss and comprehensive loss for the year.

## Income (loss) per common share

The Company calculates basic income per share amounts for profit or loss attributable to ordinary equity holders. Basic income (loss) per share is calculated using the weighted average number of common shares outstanding during the period. Diluted income per share is calculated in the same manner as basic income per share except for adjusting the profit or loss attributable to ordinary equity holders and the weighted average number of shares outstanding for the effects of all dilutive potential ordinary shares.

# **Deferred taxes**

Deferred income tax assets and liabilities are recognized for the estimated income tax consequences attributable to differences between financial statement carrying amounts of assets and liabilities and their respective income tax bases. Deferred income tax assets are recognized to the extent that it is probable that future taxable income will be available against which temporary differences can be utilized. Deferred income tax assets and liabilities are measured using tax rates expected to be in effect when the temporary differences are expected to be recovered or settled. The effects of changes in income tax rates are reflected in deferred income tax assets and liabilities in the year that the rate changes are substantively enacted, with a corresponding charge to income. The amount of deferred tax assets recognized is limited to the amount that is more likely than not to be realized.

## **Research and development expenses**

Costs associated with research and development activities are expensed during the year in which they are incurred net of tax credits earned, except where product development costs meet the criteria under IFRS for deferral and amortization.

## **Investment tax credits**

The Company is entitled to Canadian federal and provincial investment tax credits which are earned as a percentage of eligible research and development expenditures incurred in each taxation year. Investment tax credits are accounted for as a reduction of the related expenditure for items of a current nature and a reduction of the related asset cost for items of a long-term nature. These credits are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the credits in the foreseeable future.

## 4. ACCOUNTING PRONOUNCEMENTS ISSUED BUT NOT YET APPLIED

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB or IFRS Interpretation Committee ("IFRIC") that are mandatory at certain dates or later. Management is still assessing the effects of the pronouncements on the Company. The standards impacted that may be applicable to the Company are following:

## IFRS 9 - Financial Instruments

IFRS 9, Financial Instruments ("IFRS") was issued in final form by the IASB in July 2014 and will replace IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing the multiple rules in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets.

Most requirements in IAS 39 for classification and measurement of financial liabilities were carried forward unchanged to IFRS 9. The new standard also requires a single impairment method be used, replacing the multiple impairment methods in IAS 39. IFRS 9 also includes requirements relating to a new hedge accounting model, which represents a substantial overhaul of hedge accounting that will allow entities to better reflect their risk management activities in the financial statements.

The most significant improvements apply to those that hedge non-financial risk, and so these improvements are expected to be of particular interest to non-financial institutions. In addition, a single, forward-looking expected loss impairment model is introduced, which will require more timely recognition of expected credit losses. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted.

The Company has assessed the impact of IFRS 9 on the consolidated financial statements and has determined that the adoption of IFRS 9 will enhance disclosures, but will not have a material impact on the consolidated financial statements.

## IFRS 15, Revenue from Contracts with Customers

IFRS 15, Revenue from Contracts with Customers ("IFRS 15") was issued by the IASB in May 2014. The core principle of the new standard is for companies to recognize revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The new standard will also result in enhanced disclosures for 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. The new standard is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted. IFRS 15 supersedes the following standards: IAS 11 Construction Contracts, IAS 18 Revenue, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers, and SIC-31 Revenue - Barter Transactions Involving Advertising Services.

The Company has not identified any significant differences in the timing or recognition of revenues as a result of IFRS 15. The Company continues to assess the impact of required disclosure in the notes to the consolidated financial statements.

## IFRS 16, Leases

On January 13, 2016, the IASB issued IFRS 16, which outlines requirements for lessees to recognize assets and liabilities for most leases. Lessees are required to recognize the lease liability for the obligations to make lease payments and a right-of-use asset for the right to use the underlying asset for the lease term. Lease liability is measured at the present value of lease payments to be made over the term of the lease. The right-of-use asset is initially measured at the amount of the lease liability and adjusted for prepayments, direct costs and incentives received.

The new standard will be effective for annual periods beginning on or after January 1, 2019. Early recognition is permitted, provided the new revenue standard, IFRS 15 Revenue from Contracts with Customers, has been applied, or is applied at the same date as IFRS 16. The Company has commenced a review process to assess any impact on its current revenue recognition policies and reporting processes.

# 4. ACCOUNTING PRONOUNCEMENTS ISSUED BUT NOT YET APPLIED (Continued)

## IFRS 2, Share-based Payment ("IFRS 2")

In June 2016, the IASB issued final amendments to IFRS 2, clarifying how to account for certain types of share-based payment transactions. The amendments, which were developed through the IFRS Interpretations Committee, provide requirements on the accounting for: (i) the effect of vesting and non-vesting conditions on the measurement of cash-settled share-based payments; (ii) share-based payment transactions with a net settlement feature for withholding tax obligations; and (iii) a modification to the terms and conditions of a share-based payment that changes the classifications of the transaction from cash-settled to equity-settled. The effective date for this standard is for reporting periods beginning on or after January 1, 2018, with earlier application permitted.

The Company has completed the review process to assess the impact and application of the aforementioned amendments and has determined it will have no impact on the Company.

# IFRIC 22, Foreign Currency Transactions and Advance Consideration

In 2016, the IASB issued IFRIC Interpretation 22, Foreign Currency Transactions and Advance Consideration ("IFRIC 22") which provides requirements about which exchange rate to use in reporting foreign currency transactions (such as revenue transactions) when payment is made or received in advance. IFRIC 22 is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. On initial application, entities have the option to apply either retrospectively or prospectively. The Company is in the process of evaluating the impact of adopting these amendments on the Company's consolidated financial statements.

# **5. INVENTORIES**

Inventories as at September 30 consist of the following:

	2018	2017
Raw material	<b>\$</b> 488,060	\$ 379,661
Work in process	1,679,926	1,593,158
Finished goods	2,278,982	2,494,287
	\$ 4,446,968	\$ 4,467,106

During the year ended September 30, 2018, inventories in the amount of \$7,051,611 (2017 - \$5,287,781) were recognized as an expense through cost of sales. The allowance for inventory impairment as at September 30, 2018 was \$55,747 (2017 - \$30,561).

## 6. PREPAID EXPENSES AND OTHER ASSETS

Prepaid expenses and other assets as at September 30, 2018 were \$169,985 (2017 - \$152,989), consisting of insurance policy premiums, deposits for trade shows and other prepaid amounts.

# 7. PROPERTY, PLANT, AND EQUIPMENT

The freehold land and buildings have been pledged as security for bank loans under a mortgage (see Note 10). Property, plant and equipment consists of:

		Research &	Other		
	Building	Development	Equipment	Land	Total
		Equipment	and Fixtures		
соѕт					
Balance, as at Sept 30, 2016	4,562,383	6,794,312	4,472,883	800,000	16,629,578
Additions	2,996	145,420	132,157	-	280,573
Disposals	-	-	-	-	-
Balance, as at Sept 30, 2017	4,565,379	6,939,732	4,605,040	800,000	16,910,151
Additions	357,654	147,637	744,435	-	1,249,726
Impairment	-	(6,586,660)	-	-	(6,586,660)
Balance, Sept 30, 2018	4,923,033	500,709	5,349,475	800,000	11,573,217
	ON				
Balance, as at Sept 30, 2016	1,095,112	559,099	2,723,383		4,377,594
Depreciation	152,420	23,869	144,498	-	320,787
Disposals	-	-	-	-	-
Dispositio					
Balance, as at Sept 30, 2017	1,247,532	582,968	2,867,881	-	4,698,381
Depreciation	159,266	20,662	228,453	-	408,382
Impairment	-	(180,276)	-	-	(180,276)
Balance, Sept 30, 2018	1,406,798	423,354	3,096,334	-	4,926,487
NET BOOK VALUE					
Balance, Sept 30, 2016	3,467,271	6,235,213	1,749,500	800,000	12,251,984
Balance, Sept 30, 2017	3,317,847	6,356,764	1,737,159	800,000	12,211,770
Balance, Sept 30, 2018	\$3,516,234	\$77,355	\$2,253,141	\$800,000	\$6,646,730

As of September 30, 2018, the Company determined that the Lumisort related research and development equipment that was classified as not yet available for use was impaired. See note 8 for discussion.

# 8. INTANGIBLE ASSETS

Intangible assets are depreciated on a straight line basis at the following rates:

License agreement, LumiSort™ (Note 8a)	5%
Technology investments:	
LumiSort™ (Note 8a)	5%
Kinlytic <sup>®</sup> (Note 8b)	0%
Bioreactor (Note 8c)	7%

#### Intangible assets consist of:

		Capitalized Patents and Trad Development Costs		l Trademarks	emarks Licenses		
	LumiSort™	Bioreactor	Kinlytic <sup>®</sup>	LumiSort™	LumiSort™	Total	
	(a)	(c)	(b)	(a)	(a)	, o tut	
COST							
Balance, as at September 30, 2016	30,532	2,000,975	2,770,529	2,041,777	278,528	7,122,341	
Additions from internal development	nts -	87,600	308,057	73,459	-	469,116	
Balance, as at September 30, 2017	30,532	2,088,575	3,078,586	2,115,236	278,528	7,591,457	
Additions from internal development	nts -	-	-	286,384	-	286,384	
Impairment (a)	(30,532)	-	-	(2,401,620)	(278,528)	(2,710,680)	
Balance, as it September 30, 2018	-	2,088,575	3,078,586	-	-	5,167,161	
ACCUMULATED AMORTIZATION							
Balance, as at September 30, 2016	5,757	-	-	676,646	235,676	918,079	
Amortization expense	991	11,603	-	155,352	21,426	189,372	
Balance, as at September 30, 2017	6,748	11,603	-	831,998	257,102	1,107,451	
Amortization expense	951	139,238	-	120,079	21,426	281,694	
Impairment (a)	(7,699)	-	-	(952,077)	(278,528)	(1,238,304)	
Balance, as at September 30, 2018	-	150,842	-	-	-	150,842	
NET BOOK VALUE							
Balance, as at September 30, 2016	24,775	2,000,975	2,770,529	1,365,131	42,852	6,204,262	
Balance, as at September 30, 2017	23,784	2,076,972	3,078,586	1,283,238	21,426	6,484,006	
Balance, as at September 30, 2018	\$-	\$1,937,733	\$3,078,586	\$-	\$-	\$5,016,319	

At each reporting date, the Company is required to assess its long-lived assets for potential indicators of impairment. If any such indication exists, the Company estimates the recoverable amount of the asset or cash generating unit ("CGU") and compares it to the carrying value. In addition, irrespective of whether there is any indication of impairment, the Company is required to test long-lived assets with definite lives which are not yet available for use at least annually.

# 8. INTANGIBLE ASSETS (Continued)

## a) Lumisort™

The Company acquired a license agreement from Sequent Biotechnologies Inc. ("Sequent"), a biotechnology company solely involved in the development and commercialization of the LumiSort<sup>™</sup> technology under license. Subsequent to the acquisition, the Company continued to incur new intellectual property with the issue of patents has resulted from this research program, as well as the cost incurred for the research and development equipment that is not yet available for use.

The Company has assessed that it cannot fund the development of LumiSort<sup>™</sup> assets in a timely manner and that licensing terms may not adequately support its continued value. The decision was therefore made to writedown all of the LumiSort<sup>™</sup> related assets, including the original investment, capitalized research and development equipment, prototype costs and patent related costs.

## b) Kinlytic<sup>®</sup>

The Company acquired the assets and rights pertaining to development, production, and licensing of Kinlytic<sup>®</sup> from ImaRX Therapeutics, Inc. in 2008. The asset is not yet available for use, accordingly no amortization has been recorded.

The recoverable amount of the Kinlytic<sup>®</sup> intangible has been determined based on its fair value less cost to sell. This estimate uses risk-adjusted cash flow projections based on financial budgets.

Management made these assumptions based on probabilities of technical, regulatory and clinical acceptances and financial support. Management believes that any reasonably-possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount to exceed its recoverable amount. The discount rate has been determined based on the Company's best estimate of a risk adjusted discount rate.

## c) Bioreactor

The Company has internally developed an improved bioreactor production process ("Bioreactor") to increase the efficiency and output of manufacturing certain Antigen products.

## 9. DEBENTURES

The Company has convertible and non-convertible debentures issued and outstanding as at September 30, 2018. The carrying values of the debt component of these debentures are as follows:

	Non-convertible Debentures	<u>j</u>	Total Non-convertible Debentures		Convertible Debentures	Total Convertible Debentures
	(a)	(b)		(c)	(d) (e)	
Date of issue Face value	Jan, 2014 \$ 2,000,000	Apr, 2017 \$ 500,000	\$ 2,500,000 \$	Oct, 2016 1,500,000	Oct, 2016 Oct, 2016 \$ 500.000 \$ 2,500.000	\$ 4,500,000
	+ _,,	,,	+ _, +	_,,	· ···,··· · _,···	+ .,,
Liability component at						
the date of issue	928,373	268,955	-	461,550	223,050 780,750	
Balance, September 30, 2017	894,955	275,162	1,170,117	470,692	247,265 797,931	1,515,888
Accretion	75,312	29,712	105,024	12,637	33,210 23,700	69,547
Repayments	(91,127)	-	(91,127)	-		-
Balance, September 30, 2018	879,140	304,874	1,184,014	483,329	280,475 821,631	1,585,435
Less: current portion Non-current portion	99,604 779,536	304,874 -	404,478 779,536	- 483,329	280,475 - 821,631	280,475 1,304,960
Balance, September 30, 2018	\$ 879,140	\$ 304,874	\$ 1,184,014 \$	483,329	\$ 280,475 \$ 821,631	\$ 1,585,435
Equity component at September 30, 2018 and 2017	-		-	574,435	631,222 1,698,132	2,903,789
Conversion price per common share	\$-	\$-	\$	0.23	\$ 0.23 \$ 0.23	
Effective interest rate charged Payment frequency Maturity of financial instrument Stated interest rate	25.69% Quarterly Jan, 2029 9%	30.20% Quarterly Apr, 2022 12%		31.07% Quarterly Jan, 2029 9%	30.20%         30.85%           Quarterly         Quarterly           Feb, 2022         Sep, 2028           9%         9%	
Terms of repayment	Principal	Interest		Interest	Interest Interest	
Blended quarterly repayment	and interest \$61,071	only N/A		only N/A	only only N/A N/A	

As discussed in note 10, the Company arranged a new secured revolving credit facility jointly with The Toronto-Dominion Bank ("TD Bank") and Export Development Canada ("EDC"). To accommodate the additional security required by TD Bank and EDC, effective October 12, 2016, the Company negotiated amended terms with the holders of its issued and outstanding convertible debentures. With the exception of debenture (a) above, all the other debentures were amended in exchange for reducing their security position to one of unlimited subordination to the credit facility lenders.

The \$2,500,000 debenture, (e) above, maturing in 2028 was originally convertible at \$0.65 per common share, and the \$1,500,000 debenture, (c) above, maturing in 2029 was originally convertible at \$0.35 per common share. The conversion price for both of these debentures were amended to \$0.23 per common share, and these debentures are now subject to restricted conversion privileges of a combined total of 1 million shares per year for the next five years, with the remaining balances being eligible for conversion through the end of their expiry dates in 2028 and 2029, respectively.

## 9. DEBENTURES (Continued)

The two \$500,000 debentures, (b) and (d) above, were originally convertible at \$0.90 per common share and matured on October 12, 2016 and February 15, 2017, respectively. The first \$500,000 debenture, (b) above was modified to extend its maturity date to April 30, 2017 and was modified to become non-convertible. In addition, the stated interest rate was modified from 9% to 12% for the remaining term (see paragraph below for further details on this debenture). The second \$500,000 debenture, (d) above, were modified to extend its maturity date to February 15, 2022, and the conversion price were modified from \$0.90 to \$0.23 per common share. The debenture is now callable at the option of the holder at any time after February 15, 2017 for outstanding principal and accrued interest. In addition, the debenture holder of both \$500,000 debentures (b) and (d) received 1.5 million common share purchase warrants, with an exercise price of \$0.23 per common share and a term of five years.

The Company has accounted for the modifications to each of the debentures as an extinguishment with the recognition of a new instrument. Upon extinguishment of the debentures, the Company has recognized a non-cash loss of \$2,379,776 in the 2017 comprehensive consolidated statement of loss. The Company measured the non-cash loss based on the change in fair value of the debentures under the original and modified terms. In addition, a value of \$245,860 were ascribed to warrants issued at the time of the grant. The value is determined using the Black-Scholes option pricing model, which is affected by the Company's share price as well as assumptions regarding a number of subjective variables.

On April 28, 2017, the Company announced it has reached an agreement with one of its debenture holders to extend the maturity date on the \$0.5 million non-convertible debenture set to mature on April 30, 2017, (b) above, to April 30, 2022. The debenture is callable at the option of the holder upon sixty days written notice to the Company. The Company has accounted for the modifications to each of the debentures as an extinguishment with the recognition of a new instrument. Upon extinguishment of the debenture, the Company recognized a non-cash gain of \$202,750 in the consolidated statement of income and comprehensive income. In addition, as part of the amendment, the Company amended the terms of 300,000 outstanding common share purchase warrants held by the debenture holder. The terms of the warrants were modified to extend the life of the warrants from August 21, 2019 to August 21, 2022 and modify the exercise price from \$0.55 to \$0.25 per share. The modification of the debenture was accounted for as an extinguishment with recognition of a new instrument. In addition, the modification of the warrants resulted in a non-cash loss of \$28,295.

The debentures denoted as (a), (c), and (e) above are secured against the real property and the personal property of the Company including, without limiting the foregoing, a registered second mortgage on the property at 265 Watline Avenue, Mississauga, Ontario, in favour of the holder, its successors and assigns subordinate only to indebtedness to a Canadian chartered bank or similar financial institution on normal commercial terms up to their maximum principal. The debentures denoted as (b) and (d) are secured by a subordinated security agreement covering all of the Company's property and assets.

Convertible debentures contain two components: liability and equity elements. The equity element is presented in equity under the heading of "equity component of debentures". Convertible debentures are initially accounted for in accordance with their substance and are presented in the consolidated financial statements in their component parts measured at the time of issue. The debt components were valued first with the residual to shareholders' equity. The convertible debentures are convertible at the option of the holder, at any time, into fully paid and non-assessable common shares of the Company at the conversion price then in effect.

All of the debentures were issued to shareholders of the Company. A holder of a debenture has an economic interest in future earnings of the Lumisort asset and will receive a distribution equal to 10% of any future earnings that are derived from the Lumisort asset. Over the term of the convertible debentures, the debt components will be accreted to the face value of the debentures by the recording of additional interest expense using the effective interest rate, as detailed above.

# **10. LONG-TERM DEBT, BANK INDEBTEDNESS AND OTHER DEBT**

a) The Company has term loans with the Business Development Bank ("BDC") for a variety of purposes. The following summarizes these loans as at September 30, 2018:

Term Loans with the Business							
Development Bank ("BDC")	(a)	(b)	(c)	(d)	(e)	(f)	Total
Effective date of loan	Jun, 2008	Oct, 2014	Oct, 2015	Oct, 2015	Nov, 2015	Jul, 2015	
Initial Loan Amount	\$ 3,000,000	\$ 615,000	\$ 50,000	\$ 200,000	\$ 250,000	\$ 323,906	\$ 4,438,906
Balance, September 30, 2017	2,268,700	348,500	28,080	129,870	162,240	-	2,937,390
Proceeds from loan	-	-	-	-	-	323,906	323,906
Loan repayments during the period	(111,120)	(123,000)	(12,480)	(39,960)	(49,920)	(25,570)	(362,050)
Balance, September 30, 2018	\$ 2,157,580	\$ 225,500	\$ 15,600	\$ 89,910	\$ 112,320	\$ 298,336	\$2,899,246
Current Portion Non-current portion	\$ 111,120 2,046,460	\$ 123,000 102,500	\$ 12,480 3,120	\$	\$ 49,920 62,400	\$ 101,640 196,696	\$ 438,120 2,461,126
Payment frequency Maturity of loan Terms of repayment	Monthly Feb, 2038 Principal and interes	Monthly Jul, 2020 Principal t and interest	Monthly Dec, 2019 Principal and interest	Monthly Dec, 2020 Principal and interest	Monthly Dec, 2020 Principal and interest	Monthly Sep, 2021 Principal and interest	

Notes: (a) Loan for the purchase of manufacturing facility and building improvements.

(b) Loan for the purchase of equipment for our bioreactor project

(c) Loan for the purchase of building improvements.

(d) Loan for the purchase of manufacturing equipment

(e) Working Capital loan

(f) Loan for the purchase of manufacturing equipment

All BDC loans have a floating interest rate based on BDC's floating base rate plus 0.5% - 1.8%. At September 30, 2018, the floating base rate was 5.8% (2017 – 5.3%). The loans are secured with the building and equipment.

As at September 30, 2018, the commitments for the next five fiscal years and thereafter for the BDC loans is as follows:

	Amou	int
2019	\$ 438,1	20
2020	408,2	60
2021	228,64	45
2022	111,12	20
2023	111,12	20
2024 and thereafter	\$ 1,601,9	81

On October 20, 2016, the Company arranged a new revolving line of credit agreement with its Canadian chartered bank. That agreement allowed the Company to draw on to a limit of \$1,000,000 bearing interest at the bank's prime lending rate plus 2.25%. This credit facility was implemented in November 2016, replacing the Company's previous credit facility of \$0.5 million. Accounts receivable and inventory were pledged as collateral for the bank credit facility.

On April 28, 2017, the Company received approval from its Chartered Bank to increase the borrowing limit on its credit facility to \$1.5 million. The newly expanded credit facility was available on May 4, 2017.

As at September 30, 2018 the Company had drawn on \$260,000 of the facility (2017 - \$1,355,000).

# 10. LONG-TERM DEBT, BANK INDEBTEDNESS AND OTHER DEBT (Continued)

- b) On September 12, 2017, the Company issued two outstanding shareholder interest bearing loans for total proceeds of \$200,000. These loans were repaid on October 23, 2017.
- c) On May 3, 2017, the Company signed an agreement with Business Development Corporation for a new equipment credit facility in the amount of \$610,000. On July 4, 2018 the Company received funds in the amount of \$323,906, drawn on this facility.

## **11. DEFERRED REVENUE**

As at September 30, 2018, the Company has received payment, in the amount of \$931,125 (2017 - \$1,145,185), for a portion of product sales which was not yet shipped. This amount has been recognized as deferred revenue under the current liabilities in the consolidated statements of loss and comprehensive loss.

# **12. SHARE CAPITAL**

The Company is authorized to issue an unlimited number of common shares with no par value and an unlimited number of preference shares with no par value.

On October 18, 2017 and October 26, 2017 (the "Closing Date"), the Company completed a private placement offering of an aggregate of 11,666,633 units for total gross proceeds of \$3,499,990, net proceeds of \$3,137,283 after share issuance costs of \$362,707. Each unit consists of one common share of Microbix and one half of a common share purchase warrant. Each whole warrant entitles the holder to purchase one additional common share at an exercise price of \$0.36 for three years. Fair value of the common share purchase warrants was determined to be \$ 1,102,144. Gross proceeds were allocated to common shares and common share purchase warrants in the amount of \$ 2,756,085 and \$ 743,905 respectively. The financing was brokered. Cash commissions of \$226,729 were paid and an aggregate of 755,764 Broker's Warrants were issued in the private placement offering. Fair value of the broker warrants was determined to be \$120,328 using the Black-Scholes option pricing model. The volatility of the stock for the Black-Scholes options pricing model was based on 5-year historic volatility of the Company's stock price on the Toronto Stock Exchange (86%), a risk free rate of interest of 1.45% based upon the two year Government of Canada Bond Yield at the date of the award of the Broker's warrants and a two year term. Management believes that the historic stock volatility provides a fair and appropriate basis of estimate for the expected future volatility of the stock. Each Broker's Warrant entitles the holder to purchase one unit at a price of \$0.335 for a period of two years. All securities issued under the private placement will be subject to a holding period, expiring four months and one day from the date of closing.

During 2018, the Company issued 200,000 shares at a price of \$0.275 and 250,000 warrants at an exercise price of \$0.30 as partial compensation for a consulting agreement. The transaction was measured at the fair value of the common shares issued and warrants awarded, as the fair value of the services provided could not be measured reliably. The number of issued and outstanding common shares and the stated capital of the Company as at September 30, 2018 are presented below:

	Number of Shares	Stated Capital
Balance, as at September 30, 2017	84,704,257	\$ 31,299,416
Issued on private placement	11,666,633	2,375,717
Issued for services	200,000	55,000
Exercise of Warrants	1,815	811
Exercise of stock options	400,000	181,516
Balance, as at September 30, 2018	96,972,705	\$ 33,912,460

### **13. CONTRIBUTED SURPLUS**

Changes in contributed surplus up to September 30, 2018 are described as follows:

Balance, as at September 30, 2016	\$ 4,937,649
Issuance of Warrants pursuant to refinancing of convertible debentures	245,860
Reclassification of equity portion of a convertible debenture converted	
to a non-convertible debenture	86,680
Extinguishment of convertible debenture	2,293,040
Stock options expensed	485,086
Balance, as at September 30, 2017	\$ 8,048,315
Share Issuance pursuant to Stock Options Exercised	(77,516)
Share Issuance pursuant to Warrants Exercised	(203)
Issuance of Warrants pursuant to Private Placement	743,905
Issuance of Broker Warrants pursuant to Private Placement	120,328
Issuance of Warrants for Services	44,969
Share warrants issue costs pursuant to Private Placement	(102,667)
Stock options expensed	458,525
Balance, as at September 30, 2018	\$ 9,235,656

### **14. COMMON SHARE PURCHASE WARRANTS**

A continuity of the Company's warrants outstanding as at September 30, 2018 and September 30, 2017 is presented in the following table:

Balance, September 30, 2018	15,168,579	\$ 0.40
Expired	-	-
Exercised	(1,815)	\$ 0.34
Issued	6,839,081	\$ 0.36
Outstanding, September 30, 2017	8,331,313	\$ 0.48
Expired	(193,079)	\$ 0.25
Exercised	-	-
Issued	1,500,000	\$ 0.23
Outstanding, September 30, 2016	7,024,392	\$ 0.54
	Units	price
		average exercise
		eighted

### 14. COMMON SHARE PURCHASE WARRANTS (Continued)

A summary of the Company's warrants outstanding as at September 30, 2018 and September 30, 2017 is presented in the following table:

	Se	ptem	ber 30, 2	018	Sept	tember 30, 2	2017
		Weighted					Weighted
		We	eighted	average		Weighted	average
		a	verage	remaining		average	remaining
	Number	ex	kercise	contractual	Number	exercise	contractual
	outstanding		price	life	outstanding	price	life
				years			years
Range of exercise prices:							
\$0.47 to \$0.55	4,949,763	\$	0.55	1.24	6,531,313	\$ 0.55	2.18
\$0.23 to \$0.46	10,218,816		0.33	2.37	1,800,000	0.23	3.65
	15,168,579	\$	0.40	2.00	8,331,313	\$ 0.48	2.50

### **15. STOCK OPTION PLAN**

On March 28, 2018 the shareholders of the Company approved a resolution to amend the Company's stock option plan. This amendment changed the total number of common shares available to be issued under the plan from a maximum of 12,000,000 common shares to a rolling maximum of 10% of issued and outstanding common shares. Under the plan as at September 30, 2018, the Company has a total of 5,590,000 options (2017 – 6,470,000) issued and pending and is eligible to issue up to a total of 9,697,270 options.

The exercise price of each option equals no less that the market price at the date immediately preceding the date of the grant. In general, options issued under the plan vest and are exercisable in equal amounts in three steps, at the issue date and at the anniversary date in the subsequent two years. Management does not expect any remaining unvested stock options at the year-end to be forfeited before they vest.

The activity under the Company's stock option plan for the year ended September 30, 2018 is as follows:

	Units	Weighted a exercis	average e price
Outstanding, September 30, 2016 Stock options exercised Stock options expired or forfeited Stock options issued	4,007,000 3,220,000 (757,000)	\$	0.47 0.28 0.54
Outstanding, September 30, 2017 Stock options exercised Stock options forfeited Stock options issued	6,470,000 (400,000) (480,000)	\$	0.39 0.26 0.54
Balance, September 30, 2018	5,590,000	\$	0.39
Exercisable, September 30, 2018	3,523,458	\$	0.39

### 15. STOCK OPTION PLAN (Continued)

The exercise price of each option equals the closing market price of the Company's capital stock on the day preceding the grant date. The following table reflects the number of options, their weighted average price and the weighted average remaining contract life for the options grouped by price range as of September 30, 2018 and September 30, 2017:

	September 30, 2018				Sept	tember 30, 2	2017
		Weighted				Weighted	
		Ν	/eighted	average		Weighted	average
		ć	average	remaining		average	remaining
	Number	e	exercise	contractual	Number	exercise	contractual
	outstanding		price	life	outstanding	price	life
				years			years
Range of exercise prices:							
\$0.54	2,440,000	\$	0.54	2.33	2,920,000	\$ 0.54	3.00
\$0.23 to \$0.28	3,150,000	\$	0.28	4.18	3,550,000	\$ 0.27	4.33
	5,590,000	\$	0.39	3.41	6,470,000	\$ 0.39	3.73

Stock options are assumed to be exercised at the end of the option's life, as management believes the probability of an early exercise is remote. During the period, the fair value of the options vested in the year were expensed and credited to contributed surplus. During the year, the Company recorded share-based compensation expense of \$458,525 (2017 - \$485,086).

### **16. INCOME PER SHARE**

Basic income per share is calculated using the weighted average number of shares outstanding. Diluted income per share reflects the dilutive effect of the exercise of stock options, warrants and convertible debt. The following table reconciles the net income and the number of shares for the basic and diluted loss per share computations:

For the years ended September 30	2018	2017
Numerator for basic income per share:		
Net loss available to common shareholders	\$ (8,621,566)	\$ (3,780,088)
Denominator for basic income (loss) per share:		
Weighted average common shares outstanding	96,198,810	84,704,257
Effect of dilutive securities:		
Warrants	-	294,624
Stock Options	-	21,792
Convertible debentures	-	-
Denominator for diluted net loss per share	96,198,810	82,020,673
Net loss per share:		
Basic	(\$0.090)	(\$0.045)
Diluted	(\$0.090)	(\$0.045)

The following represents the warrants, stock options and convertible debentures not included in the calculation of diluted EPS due to their anti-dilutive impact:

	2018	2017
	15 100 570	0.026.600
Pursuant to warrants Under stock options	15,168,579	8,036,689
Pursuant to convertible debentures	5,590,000 19,565,217	6,448,208 19,565,217
	40,323,796	34,050,114

### **17. EXPENSES BY NATURE**

The Company has chosen to present its consolidated statements of loss and comprehensive loss based on the functions of the entity and include the following expenses by nature:

#### Depreciation and amortization

	2018	2017	
Included in:			
Cost of goods sold	\$ 526,958	\$	308,521
General and administrative expenses	951		991
Reasearch and development	162,169		200,647
Total depreciation and amortization	\$ 690,078	\$	510,159

Amortization expense included within cost of goods sold includes amortization of Bioreactor development costs that were capitalized in previous years and began amortization at the beginning of fiscal 2018.

### Employee costs

	2018	2017
Included in:		
Short-term wages, bonuses and benefits	\$ 5,797,619	\$ 5,011,506
Share based payments	180,121	290,962
Total employee costs	5,977,740	5,302,468
Included in:		
Cost of goods sold	\$ 3,222,526	\$ 2,764,397
Research and development	788,367	786,305
General and administrative expenses	1,551,893	1,408,859
Selling and business development	414,954	342,907
Total employee costs	\$ 5,977,740	\$ 5,302,468

Short-term wages, bonuses and benefits in 2018, fully includes CEO salary that had been reflected in consulting costs in the previous year.

### **18. INCOME TAXES**

	2018		2017	
Provision based on combined federal and provincial	¢ (2.155.201)	ć	(045.022)	
statutory rates of 25.00 % (2017 – 25.00%) Increase (decrease) resulting from:	\$ (2,155,391)	Ş	(945,022)	
Non deductible expenses	2,076		552	
Non deductible expenses	125,874		121,272	
Non deductible expenses	2,098,271		(22,903)	
Adjustments to prior years' tax returns	(70,830)		396,101	
Current income tax expense	_		(450,000)	

The Company has unclaimed research and development expenses, research and development investment tax credits and accumulated losses for income tax purposes. Certain of these credits have been recognized to the extent that it is probable that there will be sufficient taxable income against which to utilize the benefits of the credits in the foreseeable future.

The accumulated non-capital losses may be used to reduce taxable income in future years and must be claimed no later than September 30:

	\$
2031	1,029,000
2032	1,223,000
2037	132,000
	2,384,000

The significant components of deferred income tax assets are summarized as follows:

	2018	2017
Deferred income tay accete		
Deferred income tax assets:		
Non-capital loss carry-forwards	\$ 595,897	\$ 780,350
Difference in net book value compared to undepreciated capital cost	2,606,720	529,057
Deferred financing fees and other reserves	95,811	18,028
Unclaimed research and development expenses	3,908,332	3,864,446
Deferred income tax liability related to debentures	(965,644)	(1,009,781)
Tax assets not recognized	(6,241,116)	(4,182,100)
Deferred tax assets	-	-

In fiscal 2018 the Company incurred \$362,707 of share issuance costs recorded directly to equity and which will be deducted from taxable income at \$72,541 over five years. The deferred tax asset for this transaction has not been recognized.

### **18. INCOME TAXES (Continued)**

The unclaimed research and development investment tax credits may be carried forward and used to reduce federal income taxes. These must be claimed no later than September 30:

2022	\$ \$15,00
2023	160,00
2024	149,00
2025	303,00
2026	293,00
2027	304,00
2028	394,00
2029	175,00
2030	220,00
2031	170,00
2032	123,00
2033	107,00
2034	67,00
2035	159,00
2036	126,00
2037	96,00
2038	41,00
	2,902,00

The associated tax benefits relating to the unclaimed credits are as follows:

	2018	2017
Unclaimed research and development tax credits	\$ 2,449,453	\$ 2,410,197
Tax assets not recognized	(869,453)	(830,197)
Deferred tax assets related to investment tax credits	1,580,000	1,580,000

### **19. CHANGES IN NON-CASH WORKING CAPITAL**

		2018		2017
Accounts receivable	¢	24,008	¢	684,384
Inventory	Ļ	20,138	ې (	1,071,113)
Prepaid expenses and other assets		(16,976)		(97,448)
Investment tax credits receivable		57,547		32,604
Deferred Revenue		(214,060)		461,691
Accounts payable and accrued liabilities		1,075,358)		943,436
	\$ (	1,204,703)	\$	953,554

**Canadian Funds** 

#### **20. FINANCIAL EXPENSES**

		2018	2017
Cash interest:			
Interest on long-term debt	\$ 17	2,565	\$ 164,305
Interest on debentures		3,158	490,292
Interest other	3.	4,373	71,454
Interest income		(172)	(22)
Non-cash interest:		-	-
Accretion on debentures	16	1,934	198,560
Financial expenses	\$ 85	1,857	\$ 924,589

#### **21. CAPITAL MANAGEMENT**

The Company's capital management objective is to safeguard its ability to function as a going concern to maintain and grow its operations and to fund its development activities. Microbix defines its capital to include the revolving line of credit, shareholders' equity, the Business Development Bank capital loans, and the debentures. The capital at September 30, 2018 was \$16,282,197 (2017 - \$22,153,078).

To date, the Company has used cash provided by operating activities, common equity issues, debentures, bank mortgage and other financing to fund its activities. The equity is through private placements, the debentures are all controlled by private individuals known to the Company and the mortgage and other financing are with the Business Development Bank and TD Bank. If possible, the Company tries to optimize its liquidity needs by non-dilutive sources, including cash provided by operating activities, investment tax credits, grants and interest income. The Company has a revolving line of credit of \$1,500,000 with its Canadian chartered bank, Note 10 (b).

The Company's general policy is to not pay dividends and retain cash to keep funds available to finance the Company's growth. However, the Board of Directors may, from time to time, choose to declare a dividend in assets if warranted by circumstances. There was no change during the year in how the Company defines its capital or how it manages its capital.

#### **22. FINANCIAL INSTRUMENTS**

The Company categorizes its financial assets and liabilities measured at the fair value into one of three different levels depending on the observation of the inputs used in the measurement.

For the years ended September 30, 2018 and 2017, the Company has carried at fair value financial instruments in Level 1. At September 30, 2018, the Company's only financial instrument measured at fair value is cash, which is considered to be a Level 1 instrument. There were no transfers between levels during the year.

The three levels are defined as follows:

- a) Level 1: Fair value is based on unadjusted quoted prices for identical assets or liabilities in active markets.
- b) Level 2: Fair value is based on inputs other than quoted prices included within Level 1 that are not observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- c) Level 3: Fair value is based on valuation techniques that require one or more significant unobservable inputs.

### 22. FINANCIAL INSTRUMENTS (Continued)

	Date of valuation		Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets measured at fair value:				
Cash	30-Sep-18	\$ 44,358	-	-
Liabilities for which fair values are discl	osed:			
Non-convertible debentures	30-Sep-18	-	-	\$ 1,184,014
Convertible debentures	30-Sep-18	-	-	1,585,435
Long-term-debt and other debt	30-Sep-18	-	\$ 3,159,246	-

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities.

	Date of valuation	Quoted prices in active markets (Level 1)	obser inp	ficant vable uts el 2)		Significant unobservable inputs (Level 3)
Assets measured at fair value: Cash	30-Sep-17	\$ 54,460		-		-
Liabilities for which fair values are discl						
Non-convertible debentures	30-Sep-17	-		-	Ş	1,170,117
Convertible debentures	30-Sep-17	-		-		1,515,888
Long-term-debt and other debt	30-Sep-17	-	\$ 4,492	2,390		-

The fair value of a financial instrument is approximated by the consideration that would be agreed to in an arm's length transaction between willing parties and through appropriate valuation methods, but considerable judgement is required for the Company to determine the value. The actual amount that could be realized in a current market exchange could be different than the estimated value.

The fair values of financial instruments included in current assets and current liabilities approximate their carrying values due to their short-term nature.

The fair value of the long-term debt is based on rates currently available for items with similar terms and maturities. The convertible and non-convertible debenture fair values are not readily determinable as the convertible debentures have been issued to shareholders of the Company. The fair values of financial instruments in other long-term liabilities approximate their carrying values as they are recorded at the net present values of their future cash flows, using an appropriate discount rate.

### 23. FINANCIAL RISK MANAGEMENT

The primary risks that affect the Company are set out below and the risks have not changed during the reporting periods. The list does not cover all risks to the Company, nor is there an assurance that the strategy of management to mitigate the risks is sufficient to eliminate the risk.

### Risks arising from financial instruments and risk management

The Company's activities expose it to a variety of financial risks: market risk (including foreign exchange risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance.

Risk management is the responsibility of the corporate finance function. Material risks are monitored and are regularly discussed with the Audit Committee of the Board of Directors.

### Credit risk

The Company's cash is held in accounts or short-term interest bearing accounts at one of the major Canadian chartered banks. Management perceives the credit risk to be low. Typically the outstanding accounts receivable balance is relatively concentrated with a few large customers representing the majority of the value. As at September 30, 2018, five customers accounted for 66% (2017 - five customers accounted for 63%) of the outstanding balance. The Company has had minimal bad debts over the past several years and accordingly management has recorded an allowance of \$10,000 (2017 - \$10,000).

Trade accounts receivable are aged as follows at September 30:

	2018	2017
	A	
Current	\$ 1,171,341	\$ 1,084,414
0 - 30 days past due	117,975	176,002
31 - 60 days past due	18,686	73,268
61 days and over past due	5,478	3,804
	\$ 1,313,480	\$ 1,337,488

### 22. FINANCIAL RISK MANAGEMENT (Continued)

### Market risk and foreign currency risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, will affect the Company's income or the value of its financial instruments. The Company's activities that result in exposure to fluctuations in foreign currency exchange rates consist of the sale of products and services to customers invoiced in foreign currencies and the purchase of services invoiced in foreign currencies. The Company does not use financial instruments to hedge these risks. As at September 30 the significant balances, quoted in Canadian dollars, held in foreign currencies are:

	US	dollars	Euros		
	2018	2018 2017		2017	
Cash		ć 52.002	247	F	
Cash	\$ 42,557	\$ 52,902	247	5	
Accounts receivable	652,429	458,941	314,402	413,117	
Accounts payable and accrued liabilities	204,696	406,000	-	11,987	

The Company's revenue and expenses by foreign currency for the quarters ended September 30, 2018 and 2017 are as follows:

	2018	2017
_		
Revenue		
Euros	43%	40%
U.S. dollars	53%	56%
Expenses		
U.S. dollars	6%	7%

Based upon prior year results, the impact of a 5% increase in the U.S. dollar against the Canadian dollar would result in an increase in annual U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% increase in the Euro against the Canadian dollar would result in an increase in annual Euro based revenue of about \$271,500. Correspondingly, the impact of a 5% decrease in the U.S. dollar against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% decrease in the U.S. dollar against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% decrease in the U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% decrease in the Euro against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% decrease in the Euro against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% decrease in the Euro against the Canadian dollar would result in a loss in annual U.S. dollar based revenue of about \$330,400 Cdn. The impact of a 5% decrease in the Euro against the Canadian dollar would result in a loss in annual Euro-based revenue of about \$271,500.

### Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulties in meeting its financial liability obligations as they become due. The Company has a planning and budgeting process in place to help determine the funds required to support the normal operating requirements on an ongoing basis. The Company has financed its cash requirements primarily through issuance of securities, short-term borrowings, long-term debt and debentures. The Company controls liquidity risk through management of working capital, cash flows and the availability of sourcing of financing.

### Interest rate risk

Financial instruments that potentially subject the Company to cash flow interest rate risk are those assets and liabilities with a variable interest rate. Interest rate risk exposure is primarily on the BDC debt that has a variable rate that is pegged to the bank rate. The rate can be fixed at the Company's option, if the outlook for interest rates should move higher. The only other variable debt the Company has is the \$1,500,000 line of credit that bears interest at the bank's prime lending rate plus 2.25%. A 1% increase in the bank rate would cost the Company approximately \$30,000 per year for BDC and about \$15,000 on the line of credit usage if it were fully used throughout the fiscal year.

### 24. SEGMENTED INFORMATION

The Company operates in two ways: (i) the development, manufacturing and sales of antigens as materials for the medical diagnostic industry or as quality assessment products and, (ii) the development and commercialization of novel and proprietary products or technologies such as Lumisort and Kinlytic. The following is an analysis of the Company's revenues and profits from continuing operations for the year, segmented between antigens, Lumisort and Kinlytic:

	Segm	ent revenue	Segment loss
	2018	2017	2018 2017
Antigen Products and Technologies Lumisort ™ Kinlytic®	\$ 12,510,558 - -	\$ 10,185,798 - -	\$ (407,379) \$ (3,510,718) (8,101,911) (269,370) (112,276) -
Total for continuing operations	\$ 12,510,558	\$ 10,185,798	\$ (8,621,566) \$ (3,780,088)

Segment revenue reported above represents revenue generated from external customers. There were no intersegment sales in the current period (2017 - \$Nil).

The accounting policies of the reportable segments are the same as the Company's accounting policies described in Note 3. Segment loss represents the profit (loss) before tax earned by each segment without allocation of central administration costs, directors' fees, and finance costs. These general costs are reflected in the Antigen Products and Technologies segment. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance. The Lumisort segment loss includes impairment of long-term assets of \$7,878,758 (2017-NIL), which is recognized in loss and comprehensive loss for the year.

Segmented assets and liabilities as at September 30 are as follows:

	Segm	ient assets	Segmen	t liabilities
	2018		2018	2017
Antigen Products and Technologies	\$ 14,651,481	\$ 14,181,887	\$ 8,696,565	\$ 11,262,928
Lumisort ™	-	7,597,138	-	-
Kinlytic®	3,078,586	3,078,586	-	-
	\$ 17,730,067	\$ 24,857,611	\$ 8,696,565	\$ 11,262,928

All assets are allocated to reportable segments other than interests in associates and current and deferred tax assets. Assets used jointly by reportable segments are allocated on the basis of the revenues earned by individual reportable segments. All liabilities are allocated to reportable segments other than borrowings and current and deferred tax liabilities. Liabilities for which reportable segments are jointly liable are allocated in proportion to segment assets.

Segmented depreciation and amortization and additions to non-current assets as at September 30 are as follows:

	 Depreciation and amortization				Addit non-curi	
	 2018		2017	-	2018	2017
Antigen Products and Technologies Lumisort ™	\$ 537,680 152,398	\$	321,342 188,817		\$ 1,102,089 434,021	\$ 203,260 238,372
Kinlytic®	-		-			308,057
-	\$ 690,078	\$	510,159		\$ 1,536,110	\$ 749,689

The Company operates in three principal geographical areas – North America (where it is domiciled), Europe and in other foreign countries. The Company's revenue from external customers is tracked based on the bill-to location. Information about its non-current assets by location of assets are also detailed below. It should be noted that our distribution partner for Asia is based in the United States, so most sales destined to Asia are reflected in the North American total.

	Revenue from external customers		Non-current assets	
	2018	2017	2018	2017
North America	\$ 5,863,529	\$ 4,082,094	\$ 13,243,049	\$ 20,275,774
Europe	6,493,927	5,470,037	-	-
Other foreign countries (directly)	153,102	633,667	-	-
	\$ 12,510,558	\$ 10,185,798	\$13,243,049	\$ 20,275,774

### **26. RELATED PARTY TRANSACTIONS**

### Key management compensation

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company. Key management includes directors and key management executive officers. Compensation for the Company's key management personnel was as follows:

	2018	2017
Short-term wages, bonuses and benefits	\$ 901,575	\$ 815,443
Share-based payments	403,744	423,599
Total key management compensation	\$ 1,305,318	\$ 1,239,042

On September 12, 2017, the Company issued two outstanding shareholder interest bearing loans for total proceeds of \$200,000. These loans were repaid on October 23, 2017. On March 28, 2018 the board of directors approved the repricing of 1,500,000 of warrants held by a director of the Company. These warrants were repriced from \$0.55 to \$0.32 and the expiry was extended by one year. The non-cash financial impact was \$128,901, which is included in general and administrative expenses.

### **27. COMMITMENTS AND CONTINGENCIES**

Lease commitments

	Amount
2019	\$ 191,243
2020	91,700
2021	91,238
2022	82,388
2023	11,339
2024 and thereafter	-
	\$ 467,908

Payments on convertible and non-convertible debentures (Note 9)

	Amou
2019	\$ 709,24
2020	709,24
2021	709,24
2022	1,657,99
2023	604,24
2024 and thereafter	7,132,16
	\$ 11,522,12

Commitments for the Company's long term debt and bank indebtedness are discussed in note 10.

Contingencies

The Company is not party to any legal proceedings arising out of the normal course of business.

# MICROBIX

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS As at and for the years ended September 30, 2018 and 2017

### **28. SETTLEMENT OF DISPUTES AND LAWSUITS**

### Sale of Microbix' WFI business to Irvine Scientific

On December 30, 2016 Microbix reached a final settlement with Irvine Scientific Inc. over an ongoing dispute related to the sale of the Company's Water-for-Injection business to Irvine Scientific that occurred in December 2012. Irvine Scientific had filed a Notice of Arbitration with the American Arbitration Association in New York as stipulated in its original agreement with Microbix. Prior to initiation of the arbitration proceeding the companies agreed on final settlement terms, namely Microbix will pay Irvine a total amount of (U.S.) \$192,500, which was fully paid by September 30, 2017.

### **Settlement of Zeptometrix Lawsuit**

On October 5, 2016, Zeptometrix Corporation filed a statement of claim against Microbix in Canadian Federal Court, alleging infringement of its Canadian patent. During fiscal 2017 Microbix defended itself against these allegations, maintaining it did not infringe this patent. On October 11, 2017 Microbix announced the court approval of a legal dispute settlement with Zeptometrix Corporation, with the latter party's claims of patent infringement being withdrawn. The withdrawal of the lawsuit was "with prejudice", following a settlement agreement between the parties that was to Microbix's satisfaction.

### 29. COMPARATIVE CONSOLIDATED FINANCIAL STATEMENTS

The comparative consolidated financial statements have been reclassified from statements previously presented to conform to the presentation of the 2018 consolidated financial statements.

### MICROBIX

## DIRECTORS

Peter M. Blecher Ontario, Canada Staff Emergency Physician Lakeridge Health Hospital

Mark A. Cochran Virginia, USA Managing Director Johns Hopkins Medicine

Vaughn C. Embro-Pantalony<sup>(1) (2)</sup> Ontario, Canada Pharmaceutical Executive

William J. Gastle<sup>(2)</sup> Ontario, Canada Executive Chairman Microbix Biosystems Inc.

Cameron Groome<sup>(2)</sup> Ontario, Canada Chief Executive Officer and President Microbix Biosystems Inc.

Martin A. Marino<sup>(1)(2)</sup> Ontario, Canada Pharmaceutical Executive

Joseph D. Renner<sup>(1) (2)</sup> New Jersey, USA Pharmaceutical Executive

<sup>(1)</sup>Member of Audit Committee. <sup>(2)</sup>Member of the Human Resources, Compensation and Governance Committee.

### SENIOR MANAGEMENT

William J. Gastle Executive Chairman

Cameron L. Groome Chief Executive Officer and President

James S. Currie Chief Finanical Officer

Dr. Mark Luscher Senior Vice-President, Scientific Affairs

Phillip Casselli Senior Vice-President, Sales & Business Development

Kevin J. Cassidy Vice-President, Biopharmaceuticals

Kathryn Froh Vice-President, Diagnostics

Christopher B. Lobb General Counsel & Secretary

# MICROBIX

# CORPORATE INFORMATION

Corporate Counsel	Boyle & Co. LLP
Auditors	Ernst Young LLP Chartered Accountants
Transfer Agent	AST Trust Company Inc. as the Administrative Agent for CIBC Mellon Trust Company 416-682-3860 1-800-387-0825
Bankers	The Toronto Dominion Bank
Head Office	Microbix Biosystems Inc. 265 Watline Avenue, Mississauga, Ontario Canada L4Z 1P3 Tel: 905-361-8910 Fax: 905-361-8911 www.microbix.com

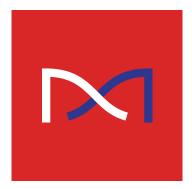
### NOTICE OF ANNUAL MEETING

The Annual Meeting of the Shareholders will be held at the University Club, 380 University Avenue, Toronto, Ontario on Wednesday, March 27, 2019 at 1:00 PM.

### ANNUAL REPORT

Additional copies of the Company's 2018 Annual Report are available by contacting Microbix' head office.







265 Watline Avenue, Mississauga, ON Canada L4Z 1P3 Tel: 905-361-8910 Fax: 905-361-8911 1-800-794-6694 Web Site: www.microbix.com