MICROBIX BIOSYSTEMS INC.

ANNUAL INFORMATION FORM

For the financial year ended September 30, 2019

As at December 19, 2019

Forward Looking Information

This Annual Information Form contains forward-looking statements and information, which involve various risks and uncertainties. There can be no assurance the statements will prove to be accurate and actual results and future events may differ materially. See “Forward Looking Information”.

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Forward Looking Statements

This Annual Information Form contains certain forward-looking statements and information relating to the Company including, but not limited to, the Company's operations, anticipated financial performance, business prospects and strategies. Forward-looking information typically contains statements with words such as "anticipate", "could", "expect", "seek", "may", "will", "intend" "believe", "plan" or similar words or expressions suggesting future outcomes.

All statements, other than statements of historical fact, included in this Annual Information Form are forward-looking statements that involve various risks and uncertainties, both known and unknown. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements.

By its nature, the Company's forward-looking statements and information involves numerous assumptions, inherent risks and uncertainties, including but not limited to the following factors: changes in business strategies; general global economic and business conditions; the effects of competition and pricing pressures; industry overcapacity; shifts in market demand; changes in laws and regulation changes; uncertainties of litigation; patent registration; the regulatory marketing application processes; labour disputes; timing of completion of projects; currency and interest rate fluctuations; availability of financing, either equity or debt; conducting business in foreign jurisdictions and applicability of foreign laws; results of research and development; commercialization of technologies and procedures and technological changes.

The Company undertakes no obligation to update publicly or otherwise revise forward-looking information, whether as a result of new information, future event or otherwise, except as required by applicable law.

Corporate Structure

Name, Address and Incorporation

Microbix Biosystems Inc. ("Microbix", the "Company", "us", "we", or "our") was amalgamated under the laws of the Province of Ontario by articles of amalgamation dated October 1, 1990. The predecessor companies of Microbix were Animal Health Laboratories Inc., a private company incorporated on October 3, 1978 under the laws of the Province of Ontario which changed its name to Microbix Biosystems Inc. on May 4, 1984, and Autocrown Corporation Limited, a public company amalgamated under the laws of the Province of Ontario on April 27, 1980.

The registered office and principal place of business of the Company is located at 265 Watline Avenue, Mississauga, Ontario. The Company also maintains business offices at 235 Watline Avenue, Mississauga, Ontario.

Intercorporate Relationships

On December 14, 2012, the wholly owned subsidiary Crucible Biotechnologies Limited was incorporated in Ontario for future purposes, and later applied to an influenza vaccine business opportunity. During fiscal 2019 there was no business activity in this subsidiary.

General Development of the Business

Business Overview

Microbix Biosystems Inc. 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 in two categories, (1) antigens and (2) as quality assessment products (QAPs™).

In the context of Microbix's business, antigens are purified and inactivated bacteria and viruses, which are used in the immunoassay format of medical tests to assess exposure to, or immunity from, those pathogens. In turn, QAPs are inactivated and stabilized samples of a pathogen that are created to resemble patient samples in order to support one or more of (i) the proficiency testing of clinical labs, (ii) test development, instrument validation and technician training, or (iii) the quality management of patient tests by clinical laboratories.

Microbix's antigens and QAPs are sold to more than 100 customers worldwide, primarily to multinational diagnostics companies and laboratory accreditation organizations. Its fiscal 2019 revenues of $13.4 million were largely from these product lines.

The company also applies its biological expertise to develop other innovative and proprietary technologies and products. Currently it has two; (1) Kinlytic® Urokinase for injection, a thrombolytic biologic drug used to treat blood clots, and (2) LumiSort™ cell-sorting, a technology for ultra-rapid and efficient sorting of particles that can be used to enrich cell populations of interest, such as in sexing semen.

Three-Year History (October 1, 2016 through September 30, 2019)

Over the past three years, Microbix has been working to advance both its revenue-oriented antigens and quality assessment products businesses (collectively, the "Antigens Business" and to increase the value of its pre-revenue development projects, such as Kinlytic® urokinase for injection (Kinlytic).

Over the period, sales of the Antigens Business have grown by 41% to $13.4 million in fiscal 2019, up from $9.5 million in fiscal 2016. This growth has been driven by expanding sales and production efforts by Microbix and as a result growing demand from its customers. Another key contributor to sales growth is the distribution agreement that was signed in January 2017, which is focussed on sales to Asian markets. As will be described later in this document, Microbix's management believes that demand for such products is increasing and has therefore taken steps to modernize and de-bottleneck its production to meet that growth.

An important advancement made by Microbix in its Antigens Business has been the development and validation of bioreactor-based antigen production. Starting with its highest-selling product, the Company has developed and validated a process to move production away from the traditional roller-bottle cultures to a more efficient method that uses state-of-the-art bioreactors. Management believes that the move to bioreactors will expand its capacity, reduce per-unit costs, improve in-process controls and, potentially, enhance product quality.

The bioreactor process development became commercial with the September 2017 announcement of the first full-scale shipment of antigen produced in bioreactors to a customer. In November 2017, Microbix announced plans to increase its bioreactor capacity by 500%, with that increased capacity becoming fully available in May, 2018. After many incremental external delays, Microbix was able to confirm the conversion of its largest customer to bioreactor-made product in August, 2019. Microbix expects to derive margin benefits from this conversion in fiscal 2020 and beyond, alongside the benefits of other concurrent actions it has taken to improve production efficiency.

The adoption of new technology for antigen production is expected to enable Microbix to meet growth in demand without the need to expand its facilities or payroll – Making it well-positioned to benefit from the adoption of immunoassay testing for infectious diseases in new markets, such as China and other Asia-Pacific nations. Microbix's Asia-Pacific distributor advises it that Microbix antigens have been incorporated into dozens of new tests seeking Chinese FDA approval, providing sales growth opportunities that appear considerable.

About 10% of Microbix's sales are realized by way of using its inactivated pathogen samples as quality assessment products, broadly branded as QAPs™. Microbix has long sold such products to laboratory accreditation agencies for use in their proficiency testing programs – generally as unbranded "white-label" product.

In January 2018, Microbix added a second QAPs product line to its offerings, the PROCEEDx™ line of products. PROCEEDx products are offered for use in research, test development validation/verification of instruments, troubleshooting, and operator training. Several diagnostic test and instrument makers (Dx OEMs) are now purchasing PROCEEDx brand QAPs to include with newly-purchased instruments to qualify the instruments for clinical use.

In December 2018, Microbix attained an important new quality certification, ISO 13485, which opened an additional potential market for QAPs – namely sales to clinical laboratories. ISO 13485 is the certification required to produce regulated medical devices and is required in order to sell QAPs to support the real-time accuracy of patient testing in clinical labs. Microbix completed its first registration files for such products over the summer and received its European Union "CE mark" and United States FDA registrations in September, 2019. Microbix is now in the process of launching the first such lab-focused products under its REDx™ Controls brand name (for high-risk types of Human Papilloma Virus).

Microbix intends to launch a series of well-targeted QAPs under its PROCEEDx and REDx Controls branding that are innovative, value-added, proprietary, and targeted to multi-million dollar market opportunities. Several such products are already in development and sales are

expected to be realized via a combination of direct customer service by Microbix and a series of regional distribution partners.

As the first of its non-revenue generating projects, Microbix has long been interested in the market potential for a human protein drug known as urokinase. A low molecular weight form of urokinase, Kinlytic® urokinase for injection, has had a long history of successful use in U.S. and Canadian patients — successfully treating a number of disorders relating to blood clots. After first exploring the market-introduction of a generic (i.e., biosimilar) version of the original drug, Microbix ultimately acquired all rights to the original drug in 2008. Since that time, Microbix has been pursuing means to re-launch the drug into North American markets, following the dating expiry of the last lot of originator-manufactured product in 2009.

After its acquisition of the product, Microbix was focused on identifying partners to fund the construction of a new manufacturing site capable of supporting the re-launch of Kinlytic for a number of its prior clinical indications, such as pulmonary embolism, deep vein thrombosis, stroke, heart attack, and clearance of clots from implanted catheters. The funds needed for the construction and qualification of that scale of facility, coupled with the cost of human trials to revalidate the process, would have been on the order of US$100 million. Finding a source for such funding understandably proved to be difficult, regardless of attractive project economics.

More recently, Microbix has refocused on a specific clinical indication previously approved by FDA, which has reduced the manufacturing and clinical trial budgets to a fraction of those for the complete range of prior indications and may therefore make the project more appealing to prospective partners. Microbix has determined that an investment of US$20 million over a period of three years should enable the re-introduction of Kinlytic for a clinical indication where it could achieve annual North American sales of over US$200 million. The Company reasons that such economics should be attractive to potential partners that are able to provide the needed investment.

Additionally, Microbix conducted a formal consultation with FDA about such plans in April 2017 and received guidance that it believes to be confirmatory and supportive. Since its FDA meeting, Microbix focused on defining the budgets and timelines for the more focused project, with those validated by way of obtaining quotations from third parties for all critical elements of the project. Microbix reasoned that having quotations from qualified contractors would provide the project greater credibility than could be obtained from its internal estimates.

In 2018, Microbix has made further progress with regards to Kinlytic. After receiving all third-party contractor information, it sought-out and engaged an experienced drug licensing agent, with its agreement announced in April, 2018. Since then, work has progressed in creating and organizing a due diligence “data room” in support of the project. During 2019, the agent continued their outreach to potential development partners and a series of such parties have been undertaking confidentiality agreements with Microbix as a predicate to conducting their evaluations.

An alliance partner for returning Kinlytic to the market has to have interest in the project, sufficient capital, a U.S.-based and hospital-directed sales force, comfort with biological drugs,

and an appropriate timeline for receiving its return on capital. Such parties do exist, and Microbix remains optimistic that an acceptable development alliance will be struck to return Kinlytic to the United States market and that its shareholders will benefit from that work.

Microbix's second non-revenue-generating project, LumiSort™ cell-sorting technology, focused upon rapidly and accurately sorting semen cells by sex (i.e., into male-only or female-only lots) while maintaining their viability. Such sex-sorted sperm cells are a value-added product in livestock industries where artificial insemination dominates reproductive technology, and where differences in the value of male and female offspring significantly affect farm economics (for example, dairy and beef cattle). In spite of this market presenting a large opportunity, in 2018 Microbix examined the funding and other needs to complete the commercialization and launch of LumiSort and concluded that it could not fund or partner for the commercialization of this asset in a timely manner and therefore made the decision to write-down all LumiSort-related assets. While LumiSort is now carried at a zero value, there remains potential to recover value from this asset.

Financial matters over the past three years are also noteworthy. Historically, growth in sales and resulting margins was more than offset by accelerating spending on pre-revenue development projects, most notably Kinlytic and LumiSort. Such spending necessitated periodic private placement financings to fund the large sums needed to advance those projects. That approach changed in 2017, as the decision was taken to focus upon the growth of Microbix's antigens and QAPs businesses. However, further funding was still needed to provide working capital, complete the antigen-related bioreactor project, and to make needed improvements to the manufacturing facility. A private placement was therefore undertaken on October 18, 2017 and October 26, 2017 (the "Closing Date"), when the Company completed a private placement offering of an aggregate of 11,666,633 units for total gross proceeds of $3,499,990, and net proceeds of $3,137,283 after share issuance costs of $362,707. Presently, cashflow from operations, along with credit facilities, appears adequate to support baseline funding requirements for our core antigens business. However, as we expand and accelerate new projects such as QAPs, incremental funding may be deemed advisable or required.

Another important financial matter was addressed in December 2016, with the arrangement of a secured revolving credit facility jointly provided by the Toronto-Dominion Bank and Export Development Canada. This credit facility has been employed to assist the growth of the company's revenue businesses, providing additional working capital and financial flexibility.

The credit facility required for the subordination of Microbix's outstanding $7.0 million of debentures, a concession that was provided following the renegotiation of certain terms of those instruments, most notably the conversion prices of the convertible debenture portion. Similarly, an amendment to the terms of a $500,000 non-convertible debenture was recorded in April 2017, with its term extended by five years to April 30, 2022. Non-cash charges to earnings totaling $2,457,014 were recorded in Q1 and Q3 of fiscal 2017 to reflect the changes to the terms of these debentures and the warrants associated with them.

In July 2019, the Company announced a FedDev Ontario contribution agreement of up to $2,752,500 for Microbix to scale-up production at its state-of-the-art antigen manufacturing facilities, over a four and a half year period. These matching funds will be utilized to support the ongoing growth of our Antigen and QAPs business.

Three changes to senior management occurred over the three-year period from October 2016 to September 2019. On November 1, 2016 Mr. Jim Currie was appointed as CFO to replace Mr. Charles Wallace, who was retiring. On July 24, 2017, Mr. Cameron Groome was appointed as CEO and President to replace Mr. Vaughn Embro-Pantalony, who has chosen to retire from full-time work, but remains on Microbix's Board of Directors. On April 18, 2019, Mr. Ken Hughes was appointed COO of Microbix, to replace and expand upon the role of Ms. Kathryn Froh, who retired from her position as Vice President, Diagnostics.

Jim Currie most recently served as CFO of SMTC Corporation, a publicly-traded global electronic manufacturing services company. Previously, he was Vice President, Finance at MDS SCIEX, a global leader in life sciences and analytical technologies.

Cameron Groome has been in the life sciences industry for more than 25 years, with success as a CEO, director, advisor, senior executive, investment banker and equity research analyst. Prior to being appointed CEO, he served for five years on Microbix's board of directors and audit committee.

Ken Hughes has also been in the life sciences industry for more than 25 years, and has worked as a CEO, senior executive, consultant and corporate director. Ken received his PhD from the University of London (UK) and has previously served as VP of Scientific Affairs at Microbix. Prior to his appointment as COO, he was a consultant to Microbix – helping to optimize operational processes and with the ongoing partnering program for Kinlytic® urokinase.

Share Capital Transactions over the 3-year period

On November 1, 2016, 320,000 options were issued to employees of the Company. The options have a five-year vesting period, with a six-year term and an exercise price of $0.23 per common share.

On August 3, 2017, 2,900,000 options were issued to an employee and directors of the Company. The options have a two-year vesting period, with a five-year term and an exercise price of $0.28 per common share.

On October 18, 2017 and October 26, 2017, 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. 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. Each Broker's Warrant entitled 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 were subject to a hold period that expired four months and one day from the date of closing.

At Microbix's annual general meeting of March 28, 2018, two further share capital transactions were approved by shareholders. The first related to amending the terms of warrants held by a director – changing their price and term in lieu of providing additional stock options that would have otherwise been granted. The second related to changing its stock option plan to a 10% rolling plan from one that provided a fixed number of options. A detailed description of each matter is provided in the Management Information Circular dated February 9, 2018.

In April 2018, the Company issued 200,000 shares at a price of $0.275 as partial compensation for a consulting agreement.

On February 21, 2019, the Company issued 1,920,000 options to employees and directors of the Company. The options vest after three years, with a five-year term and an exercise price of $0.23 per common share.

In April 2019, the Company issued 150,000 options at an exercise price of $0.25 as partial compensation for a consulting agreement. These options vest over a one year period and have a five year term. In April 2019, the Company issued 100,000 options at an exercise price of $0.25 to an employee. These options vest over a one year period and have a five year term.

Microbix intends to continue to use its stock option plan on an annual basis, as part of its compensation programs to incentivize and retain its board of directors, executives and managers.

Significant Acquisitions

Microbix has not made any significant acquisitions over the past three fiscal years. Over the history of the Company, it has made three material acquisitions:

1. The purchase of a building as the site for expanded production of its antigen products, which was completed in 2008.
2. The acquisition of Kinlytic® urokinase for injection, the only FDA-approved Urokinase product in the US, in 2008.
3. The acquisition of rights to the precursor technology to LumiSort™ cell-sorting technology in 2005.

Business of the Company

General

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 in two categories, (1)

antigens and (2) quality assessment products (QAPs™).

In the context of Microbix's business, antigens are purified and inactivated bacteria and viruses, which are used in the immunoassay format of medical tests to assess exposure to, or immunity from, those pathogens. QAPs are inactivated and stabilized samples of a pathogen, that are created to resemble patient samples in order to support one or more of (i) the proficiency testing of clinical labs, (ii) test development, instrument validation and technician training, or (iii) the quality management of patient tests by clinical laboratories. Microbix's antigens and QAPs 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. Currently it has two; (1) Kinlytic® urokinase, a biologic thrombolytic drug (used to dissolve blood clots), and (2) LumiSort™ cell-sorting, a technology for ultra-rapid and efficient sorting of particles that can be used to enrich cell populations of interest.

Antigens Business

An antigen is defined as a substance foreign to the (human) body that evokes an immune response and binds a product of the immune response (e.g., with an antibody). As relates to Microbix, an antigen is best considered a preparation of concentrated, purified, intact and inactivated bacteria, parasites, or viruses (or purified fractions of such organisms), that is used as a key ingredient in diagnostic tests that establish the presence or extent of human antibodies to that bacteria or virus.

Such "immunoassay" medical tests are used to determine whether patients have been exposed to a disease organism (e.g., to bacteria causing a respiratory illness such as pneumonia) or to measure pre-existing exposure or immunity to a disease by establishing the presence of circulating antibodies to it (e.g., a pregnant woman's immunity to a virus that could harm her baby in-utero). Immunoassays to establish exposure to disease or resistance to it are a mainstay of medical testing in North America, Europe and other regions of the developed world.

Microbix's business of producing high quality antigens is the result of nearly three decades of experience in the field, including strain selection, safe, reliable and efficient organism culture at scale, purification, and methods of inactivation. As a result of Microbix's expertise, its products have received widespread and longstanding customer acceptance, with continuing growth in demand. Microbix's current catalogue of antigens covers over 30 bacterial and viral pathogens that are implicated in maternal, pediatric, childhood, respiratory, sexually-transmitted and insect-borne diseases.

Microbix is a leading supplier of natural pathogen-derived antigens to many multinational producers of immunoassays, with over 100 customers principally located in the United States and Europe. Two customers, with whom Microbix has contracts, account for more than 50% of annual antigen sales, and the top five customers account for approximately 69% of sales.

Pathogen	Antigen products	Available Controls
Respiratory Disease Testing		
Adenovirus	✓	✓
Chlamydophila pneumoniae	✓	✓
Cytomegalovirus	✓	
Influenza A H1N1	✓	✓
Influenza A H3N2	✓	
Influenza B	✓	✓
Parainfluenza type 3	✓	✓
Respiratory Syncytial Virus	✓	✓
Sexually Transmitted Disease Testing		
Chlamydia trachomatis	✓	✓
Neisseria gonorrhoea		✓
Trichomonas vaginalis		✓
Human Papilloma Virus (multiple strains)		✓
Vaccine Immunity Testing		
Measles	✓	
Mumps	✓	
Rubella	✓	
Varicella zoster	✓	
ToRCH Pregnancy Immunity Testing		
Cytomegalovirus	✓	
Herpes Simplex type 1 (HSV1)	✓	✓
Herpes Simplex type 2 (HSV2)	✓	✓
Rubella	✓	
Toxoplasma Gondii	✓	
Tropical Disease and Other Testing		
Dengue type 1	✓	
Epstein Barr Virus	✓	
Hepatitis A Virus	✓	
Rotavirus	✓	✓
Shigella (toxin)		✓

TABLE 1: Antigens and Control Products (e.g. Proficiency Testing) available from Microbix

Due to a multi-month production cycle, customers under contract typically order product well in advance of targeted delivery dates, with Microbix maintaining a backlog of open purchase orders. To improve its management of working capital in the face of growing demand, Microbix has been moving to partial sales deposits upon the order of product by contract customers, with such deposits being accounted for as “deferred revenues” and totaling $640,463 at September 30, 2019.

More recently, growth in demand for its antigen products has been accelerating as a number of diagnostic protocols for infectious diseases important to public health gain adoption in the

Asia-Pacific region. Microbix's distribution agreement for the Asia-Pacific region, as previously discussed in the Three-Year History section, positions it to capture this growth.

Microbix's expertise in large-scale roller bottle cultures remains a mainstay of its production process even as bioreactor culture ramps up for key products.

Based on projections from its customers, management expects that sales of antigens will continue to grow for the foreseeable future. Accordingly, the company is increasing its production by expanding the capacity to make antigen using bioreactors, reallocating its traditional (e.g., roller-bottle) antigen production space, and improving its in-process controls and downstream production capacity and methods. It is intended that these steps increase the revenue potential of current facilities while also improving margins. As a result of these efforts, management expects to grow sales and improve profitability. See the preceding discussion in the Three-Year History section of this document for further bioreactor information.

Quality Assessment Products

Immunoassays using natural pathogen-derived antigens are not the only means of diagnosing diseases. In some cases, antigens can be made synthetically for immunoassays — generally where a single antigen is highly abundant and conserved within a pathogen species. In other instances, medical tests can look for the genetic material of a pathogen to identify disease — using a class of techniques called nucleic-acid amplification (e.g., PCR, polymerase chain reaction-based amplification of DNA), with tests based on such techniques broadly dubbed "molecular diagnostics." There can be advantages to using synthetic antigens or molecular diagnostics, but for certain vital applications such as assessing maternal immunity, natural antigens such as those made by Microbix are not readily substituted.

To capture growth opportunities beyond the natural antigens market, Microbix has begun to exploit its expertise for an emerging new class of products that assist diagnostics industry participants with meeting quality objectives or requirements — broadly characterized as quality assessment products and broadly branded as QAPs™. At present, such products comprise approximately 10% of annual sales, with that proportion expected to increase.

Microbix's quality assessment products consist of samples of pure, intact and inactivated pathogen samples that may also include human cells or nucleic acids (and negative "mock" samples) that are used to establish whether or not an immunoassay or molecular test is being performed properly. Such QAPs samples may be used to establish test operator/lab proficiency (as either "white label" product or under the PTDx™ line), whether a test or testing instrument is functioning properly (PROCEEDx™ line), or as part of a formal laboratory quality management system (REDx Controls™ line). For all such usage, it is vital that the sample be that of a real pathogen that is inactivated, stable over time and retaining an intact organism or be equivalent to, including its antigens and genetic material. Microbix's expertise is well-suited for the creation of such products, with longstanding success in growing and inactivating pathogens in relation to its Antigens Business.

The manufacture of Microbix's quality assessment products is done according to the requirements of the ISO 13485 quality management system standard (Europe) and 21CFR part 820 (USA). Microbix was certified as compliant with the 13485 standard in December of 2018. The Company's first REDx Control products, the "REDx HPV family of controls" are unassayed (not quantitatively certified) controls intended for clinical laboratories to evaluate testing performance and workflow with nucleic acid assays that detect Human Papillomaviruses (HPV). The family includes controls for several types of HPV viruses and a negative control. The REDx HPV family of controls received CE mark registration in Europe in September 2019. Microbix initiated registration of the REDx HPV product family with the US FDA in September 2019.

Microbix incurred significant legal expenses in fiscal 2017 in connection with an allegation that it infringed another party's intellectual property relating to the quality assessment products market. A settlement of that dispute (including withdrawal of the allegations with prejudice) was reached at the end of fiscal 2017. That outcome was satisfactory to Microbix, as the dispute should not recur and the settlement maintains for Microbix the full scope of opportunities in this growing market area.

Microbix already has a selection of QAPs for the proficiency sub-set of applications (its PTDx line) which represented approximately 10% of its fiscal 2019 sales. Additions to its catalogue of offerings and the creation of the PROCEEDx product line are expected to significantly increase QAPs sales in fiscal 2020. Additionally, Microbix's initial formal laboratory control products (REDx Controls) have been developed and registered for sale in Europe and the United States. Management believes these moves will enable it to realize the full scope of opportunities for quality assessment product sales. Microbix's current catalogue of proficiency testing products is set out in Table 1.

Development Projects

Microbix has two sizeable development projects that have not generated revenues from product sales over the last three years — Kinlytic® urokinase (Kinlytic) and LumiSort™ technology (LumiSort). Each of these development projects would require material additional

investment to complete their commercialization, in amounts much greater than can be supported from the near-term free cash flow realizable from the Antigens Business.

In 2017, management determined that full realization of the value of these assets will best be accomplished by partnering the projects, as opposed to funding them with company resources.

In 2018, Microbix assessed that LumiSort could not be advanced in a timely or satisfactory manner in large part due to intellectual property litigation between the largest companies in that field and into which Microbix could not risk getting entangled. Consequently, the book value of LumiSort was written down to zero in fiscal 2018.

Partnering efforts are ongoing in relation to Kinlytic and Microbix therefore retains a material book value for this asset.

Kinlytic® urokinase

Kinlytic® urokinase for injection is an FDA-approved biologic drug that has a long history of successfully clearing blood clots in a variety of conditions — including pulmonary embolism, deep vein thrombosis, stroke, heart attack and in implanted catheters. The drug is a natural human protein that acts by activating another human protein called plasminogen, converting plasminogen to the active form plasmin that in turn dissolves the protein fibrin which forms much of the structural substance of a blood clot. It is through this mechanism that the drug dissolves clots.

Kinlytic is a low molecular weight form of urokinase, a protein naturally excreted by human kidney cells and that was developed into a drug by a major international drug company in the 1970s. Peak annual U.S. sales were estimated to be US$275 million in 1998, principally for its two FDA-approved indications of treating pulmonary embolism and catheter-based clots. An estimated 4 million patients have been treated over the commercial history of the drug, with an excellent record of safety and efficacy.

The drug is produced by propagating small seeding quantities of donated human kidney cells into greater numbers of urokinase-excreting cells using roller-bottle cultures. Mammalian cell culture in roller-bottles is a process that has been successfully practiced by Microbix for many years, as such methods are used for the production of the host cells for its viral antigen products. It is that closely-related expertise that led Microbix to first pursue the introduction of a “biosimilar” to the original product and later, after regulatory missteps, a corporate restructuring and divestment by the drug's innovator, to purchase all rights to the original drug in 2008.

The acquisition of all rights to the product included its U.S. “NDA” regulatory approval, all manufacturing process information and regulatory files, along with a substantial amount of finished product inventory and raw material to produce new drug. However, the transaction did not include facilities for manufacturing, which meant that no new product could be made without a new and fully-validated manufacturing site. The purchased product inventory reached its expiration in 2009 and no Kinlytic has been available for treating patients since that time.

Microbix's Kinlytic Urokinase for injection

The need for a clot-busting drug in the U.S. has since been fulfilled by a single product, another protein-based drug called tissue Plasminogen Activator (tPA). tPA is produced by culturing of genetically-engineered (recombinant) cells from the ovaries of Chinese hamsters (CHO cells). The drug was approved for sale in the U.S. in 1996 and it has had an effective monopoly there since Kinlytic became unavailable in 2009. U.S. sales of tPA are currently estimated at over US$1.2 billion per year, growing by approximately 10% per year via a combination of modest unit volume growth and more substantive annual price increases.

From 2008 until 2017, Microbix pursued financial partners to fund its construction of a manufacturing facility of sufficient scale to enable the reintroduction of Kinlytic urokinase for its prior systemic applications, such as pulmonary embolism. This project would have required a large production facility, one or more large Phase III clinical trials to re-establish the clinical efficacy of the product and a process for regularly obtaining human kidney cell donations.

The economics of the product fully-justified such investment, but a high overall project cost, likely totalling US$100 million or more, limited the list of potential partners. One such partner was secured in August of 2012, but shifting strategic priorities of the partner firm led to the project being returned to Microbix in December of 2013. Since that time, Microbix has not secured a partner to fund a full product re-introduction.

More recently, Microbix has refined its thinking around the project. The continuing monopoly for clot-busting drugs in the U.S. market has expanded the market for each clinical sub-indication to the point where it is attractive to re-introduce Kinlytic® urokinase for a single such sub-indication — clearance of blood clots from implanted catheters. Given Microbix's status as holder of the original NDA, such a focused indication reduces the overall project cost and complexity – by reducing the scale of manufacturing requirements, the cost, risk and duration of clinical trial work, and eliminating the need for a regular source of cell donations.

In fact, when it was available, Kinlytic urokinase (under its prior brand name of Abbokinase®) was the standard of care for the clearance of blocked biomedical catheters, including catheters placed deep within the body (central venous catheters or CVCs). Millions of such venous catheters are used annually in the US for indications such as oncology, infection, nutrition and dialysis, and use of these devices has continued to grow. These types of catheters often become blocked through the deposition of blood clots inside the catheter lumen (catheter occlusion).

This results in the inability to remove blood for sampling and/or the inability to infuse medications though the catheter into the body.

Specifically, catheter-related thrombosis occurs in approximately 1.5 million patients per year, indicating a high incidence of clotting given the estimated 7 to 8 million annual catheter placements. Replacement of clot-occluded catheters can cost approximately $7,000 per patient and brings the risk of serious complications such as catheter-related bloodstream infections and catheter-related thrombosis. Both of those complications entail considerable personal and healthcare costs.

Microbix undertook to consult with the U.S. FDA in April 2017 about the refined manufacturing, clinical and regulatory plans for the re-introduction of the product into the U.S. market for the indication of clearing blood clots from catheters. Management believes that the formal feedback received from FDA was supportive, clarifies important questions about Kinlytic's return to market and greatly de-risks the project.

Following the FDA consultation, Microbix has obtained third-party quotations for the key elements of its re-introduction plan. The result of this process has been to develop an overall project cost to the filing of a supplemental NDA (sNDA) of under US$20 million on the basis of full out-sourcing to qualified third-parties. With annual revenue potential for the targeted sub-indication estimated at over US$200 million, the economics of the project appear very compelling for partners capable of committing US$20 million over a three-year term.

Across fiscal 2018, Microbix perfected its detailed development plans for returning Kinlytic to the U.S. market for its catheter-clearance indication. This work has included non-confidential outreach presentations and an extensive electronic "data room" of confidential materials to support the due diligence investigations of prospective development partners. This work was completed to management's satisfaction subsequent to the fiscal 2018 year-end.

The U.S. agent engaged by Microbix has assisted in the editing and organization of partnering materials. During fiscal 2019 the agent has been leading the program of outreaches to prospective partners, with the goal of securing an optimal agreement with an appropriately-resourced party. Many initial approaches have now been conducted and parties have and continue to enter into confidential discussions. The objective is for an agreement beneficial to Microbix to be concluded in fiscal 2020, although no assurances of success can be offered.

LumiSort™ technology

LumiSort™ technology evolved from a precursor technology that Microbix acquired in 2005 and involves a wholesale reinvention of established cell selection and sorting methods (*i.e.,* of a series of techniques called "flow-cytometry").

With LumiSort, Microbix endeavored to remove all of the limitations of conventional flow-cytometry. Inventions relating to LumiSort have been detailed in prior company disclosures and resulted in the development of robust patent families that are now fully-issued in a growing list of countries. For the time being, Microbix is continuing to maintain these patents.

International patent filing	Patents granted in countries including
WO/2016/142785 METHODS, SYSTEMS AND APPARATUS FOR SORTING AND PROCESSING ANALYTES	Pending
WO/2012/112641 METHODS, SYSTEMS, AND APPARATUS FOR PERFORMING FLOW CYTOMETRY	US, Canada, Europe, Russia, Mexico, Australia, Colombia, and others
WO/2011/001201 METHOD AND APPARATUS FOR LIMITING EFFECTS OF REFRACTION IN CYTOMETRY	US, Canada
WO/2010/001254 METHOD AND APPARATUS FOR SORTING CELLS	US, Canada, Europe, Russia, Mexico, Ukraine, and others

Microbix worked with a leading flow-cytometry engineering firm to develop a working prototype of the LumiSort cell-sorter instrument. This prototype was completed in Q3 of fiscal 2015 and demonstrated the successful functioning of all component technologies, proving the notable technological advances of LumiSort for the important market of dairy and beef cattle genetics.

However, and regardless of LumiSort's apparent value, Microbix was required to invest considerable further funding to complete the commercialization of LumiSort, including navigating a contentious market dynamic fraught with patent litigation. In the review of corporate assets associated with its fourth quarter of 2018, Microbix determined that it could not fund commercialization of Lumisort in a timely manner and that it was less likely that it will fully recover the investments made in LumiSort™. The decision was therefore made to write-down all LumiSort related assets; namely its original investment and its capitalized development, prototyping and patenting costs.

Summary of the Business of the Company

To summarize, management believes that the outlook for Microbix's antigens and controls business is positive and that increased sales, margins and profits are likely from those operations. In turn, Microbix is working toward a successful partnering of Kinlytic and, at some later time, may derive value from LumiSort.

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 and QAPs sales are dependent on key clients, open borders, international transportation systems, and access to raw materials.

A significant share of the Company's sales are 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's 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's 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® urokinase

Microbix's goal is to re-launch this biologic clot-buster drug into the United States market. The Company has consulted with the United States FDA 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 existing products, which is a major source of funding for its new product 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 new product 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.

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's 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 or securing its freedom to operate relative to the rights of other parties. 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's 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 period ended September 30, 2019, five customers accounted for 78% (2018 - five customers accounted for 66%) of the outstanding balance. The Company has had minimal bad debts over the past several years and accordingly management has recorded an allowance of $25,625 (2018- $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, 2019, the significant balances, quoted in Canadian dollars, held in foreign currencies are:

	US Dollars		Euros	
	2019	2018	2019	2018
Cash	$ **88,820**	$ 42,557	$ **5,223**	$ 247
Accounts receivable	**797,352**	652,429	**591,454**	314,402
Accounts payable	**197,551**	204,696	-	-

Based upon 2019 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 $354,100 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 $298,700. 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 $354,100 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 $298,700.

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 $2,000,000 line of credit that bears interest at the bank's prime lending rate plus 2.0%. A 1% increase in the bank rate would cost the Company approximately $30,000 per year for BDC and about $20,000 on the line of credit usage if it were fully used throughout the fiscal year.

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.

Business Conduct and Ethics

The Company has a Code of Business Conduct and Ethics, which governs the behaviour of board members, management and employees. The Code is posted on SEDAR and its website at www.microbix.com. Microbix is an equal opportunity employer as set out in its Human Resources Policies and Procedures.

Dividends

Microbix has never declared dividends on its common shares. Other than the generally applicable corporate law provisions respecting the declaration and payment of dividends there are no constraints or restrictions that could prevent the Company from paying dividends.

Description of Capital Structure

The Company is authorized to issue an unlimited number of Common Shares without nominal or par value.

Common Shares

The holders of the Company's Common Shares are entitled to dividends as and when declared by the board of directors of the Company, to one vote per share at meetings of shareholders of the Company and, upon liquidation, to receive such assets of the Company as are distributable to the holders of the Common Shares. All of the Common Shares are fully paid and non-assessable.

Market for Securities

The Common Shares of the Company are listed for trading on the Toronto Stock Exchange (the "TSX") under the trading symbol "MBX". The following charts set forth the reported high and low prices and the volume of trading of the Common Shares on the TSX for the periods indicated.

Monthly Summary — Common Shares

Date	High	Low	Volume
9/30/2019	0.26	0.22	1,113,645
8/31/2019	0.30	0.20	3,221,270
7/31/2019	0.29	0.24	1,518,090
6/30/2019	0.35	0.26	2,446,760
5/31/2019	0.39	0.27	3,795,640
4/30/2019	0.29	0.23	2,200,900
3/31/2019	0.26	0.23	910,645
2/28/2019	0.27	0.22	806,180
1/31/2019	0.28	0.22	865,260
12/31/2018	0.25	0.16	1,959,900
11/30/2018	0.22	0.18	1,068,600
10/31/2018	0.25	0.20	1,183,700

Directors and Officers

The board of directors currently consists of seven (7) directors to be elected annually. The following table states the names of the current directors, all other positions and offices with the Company now held by them, their principal occupations or employments, the period or periods of service as directors of the Company and the number of voting securities of the Company beneficially owned, directly or indirectly, or over which control or direction is maintained.

Name, Office and Principal Occupation	Director/Officer Since	No. of Voting Securities Owned, Controlled or Directed[1]
Peter Blecher Ontario, Canada Director Medical Director Centres for Pain Management	December 6, 2005	1,390,656 1.43%
Mark A. Cochran Virginia, USA Director Managing Director Johns Hopkins Medicine Solutions	October 1, 1990 to August 28, 2002 and since October 16, 2002	524,277 0.54%
Vaughn Embro-Pantalony[2][3] Ontario, Canada Director Pharmaceutical Executive	February 6, 2007	1,450,037 1.50%
William J. Gastle[3] Ontario, Canada Director Executive Chairman Microbix Biosystems Inc.	October 1, 1990	5,383,836 5.55%
Cameron Groome[3] Ontario Canada Director President and Chief Executive Officer Microbix Biosystems Inc.	March 8, 2012	640,000 0.66%
Martin Marino[2][3] Director Ontario Canada Pharmaceutical Executive	February 17, 2009	200,000 0.21%
Joseph D. Renner[2][3] New Jersey, USA Director Pharmaceutical Executive	February 25, 2003	5,423,370 5.59%
Jim Currie Ontario, Canada Chief Financial Officer Microbix Biosystems Inc.	January 1, 2017	50,000 0.05%
Ken Hughes Ontario, Canada Chief Operating Officer Microbix Biosystems Inc.	June 3, 2019	135,000 0.14%

Notes:
(1) The information as to voting securities beneficially owned, controlled or directed, not being within the knowledge of the Company, has been furnished by the respective directors and
(2) Member of the Audit Committee.
(3) Member of the Human Resources, Compensation and Governance Committee.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the knowledge of Microbix, no director or officer of Microbix, or any shareholder holding a sufficient number of securities of Microbix to materially affect, its control, is or has been, within 10 years preceding the date of this annual information form, a director or officer of any other issuer which, while that person was acting in that capacity:

- was the subject of a cease trade or similar order, or any order that denied the relevant company access to any statutory exceptions for a period of more than 30 consecutive days;
- was subject to an event that resulted, after the director or officer ceased to be a director or officer, in the issuer being the subject of a cease trade or similar order
- or an order that denied the relevant issuer access to any exemption under securities legislation, for a period of more than 30 consecutive days; or
- or within a year of ceasing to act in that capacity became bankrupt, made a proposal under any legislation relating to the bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, manager or trustee appointed to hold its assets.

To the knowledge of the Company, no director or officer of the Company or any shareholder holding a sufficient number of securities of the Company to affect materially its control, or a personal holding company of any such persons has, within 10 years before the date of this annual information form, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or been subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver manager or trustee appointed to hold the assets of the director, officer or shareholder.

To the knowledge of Microbix, no director or officer of Microbix or any shareholder holding a sufficient number of securities of Microbix to materially affect its control, has:

- been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- been subject to any other penalties or sanctions imposed by a court or regulatory body that would be likely to be considered important to a reasonable investor making an investment decision.

Conflicts of Interest

Certain of the directors of the Corporation also serve as directors and officers of other companies involved in a wide range of industry sectors, including biotechnology; consequently, there exists the possibility for such directors to be in a conflict of interest.

Conflicts of interest will be subject to the applicable provisions of the Business Corporations Act (Ontario) and may result in a director abstaining from voting on a resolution of the board of directors which involves a conflict in order to have the matter resolved by the independent directors, or the matter may be presented to the shareholders of the Corporation for

ratification. When a conflict of interest arises, the directors of the Corporation must, in accordance with the applicable provisions of the Business Corporations Act (Ontario) act honestly and in good faith with a view to the best interests of the Corporation and must exercise the care, diligence and skill a reasonably prudent person would exercise in comparable circumstances.

Transfer Agent and Registrar

The Company's transfer agent and registrar is AST Trust Company, 320 Bay Street, Toronto, Ontario, M5H 4A6.

Audit Committee Information

Members

The members of the Audit Committee are Martin Marino (Chair), Joseph Renner and Vaughn Embro-Pantalony, with William Gastle, Cameron Groome and Jim Currie participating in a non-voting capacity. Mr. Marino, Mr. Renner and Mr. Embro-Pantalony are considered independent. Mr. Groome is President and Chief Executive Officer, Mr. Gastle is Executive Chairman of the Company and Mr. Currie is Chief Financial Officer. All members of the Audit Committee are financially literate.

Mr. Marino is the Chairman of the Committee. Mr. Martin Marino's background is legal and financial. He has a law degree and has been general counsel to companies in the pharmaceutical industry. He has had co-responsibility for financial statements related to large transactions. He has a thorough knowledge of the global industry in which Microbix practices its business.

Mr. Renner's background is principally as a senior executive in the pharmaceutical industry. He currently serves as CEO of the U.S. division of an established international firm and has served as COO of other such firms, with more than 25 years of experience in the industry.

Mr. Embro-Pantalony's background is financial and general management. He has a degree in economics, an MBA and he is a Fellow Chartered Professional Accountant. He also holds the designations Chartered Director and Audit Committee Certified. Professionally, he was CFO and General Manager in large companies including a large reporting issuer.

Mr. Groome's background is in the financial, human life sciences and animal health industries. He has held senior executive roles with life sciences companies, headed life sciences investment banking for a major national investment dealer and has over 25 years of experience as an equity research analyst, corporate advisor and director.

Mr. William J. Gastle's educational background is in microbiology and virology. He was the CEO of Microbix from 1990 until 2012 and has had responsibility for Microbix's financial statements since the Company became public in 1990. He is now the Executive Chairman of the Board of Directors. He has attended all Audit Committee meetings since 1990 in his role as either a senior manager or as a Member.

Mr. James S. (Jim) Currie most recently served as CFO of SMTC Corporation, a publicly-traded global electronic manufacturing services company. Previously, he was Vice President, Finance at MDS SCIEX, a global leader in life sciences and analytical technologies.

Auditors

The following table summarizes the fees billed to the Company for services provided by its external auditors, Ernst & Young LLP, Chartered Accountants for the fiscal year ended September 30, 2019:

Fiscal Year	Audit Fees	Tax Fees	Other Fees
2019	$139,000	$3,500	$0

Audit Fees

Audit Fees were for professional services provided by Ernst & Young LLP, Chartered Accountants, for the audit of our annual consolidated financial statements.

Tax Fees

Tax Fees were for tax compliance, tax advice, tax review and tax planning professional services.

Audit Committee Charter

A copy of the Company's Audit Committee Charter can be found at Appendix "A".

Additional Information

Additional information relating to Microbix may be found on SEDAR at www.sedar.com. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans is contained in the Company's information circular for the annual meeting held March 27, 2019 available on SEDAR at www.sedar.com. Additional information is provided in the Company's audited financial statements and Management Discussion and Analysis, both for the most recently completed financial year ended September 30, 2019 available on SEDAR at www.sedar.com.

Glossary

Antigen — A foreign substance which, when introduced into the body, stimulates the production of antibodies, which are part of the protective immune response. In general, disease-causing organisms, including viruses, fungi and bacteria, are antigens in humans. Microbix manufactures disease causing organisms and provides them in various forms for use in detecting infections and immune responses in diagnostic tests. For this reason, the disease-causing organisms manufactured by Microbix are often referred to as antigens.

Bioreactor — equipment for the growth of cells in relatively large numbers and in a small footprint, providing a high degree of control and monitoring of the nutrients, waste products, and growth environment.

Biosimilar — biologic medical product which is almost an identical copy of an original product that is manufactured by a different company.

Diagnostics — Tests used to help identify a disease or medical condition.

DNA — a molecule that carries the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms and many viruses.

Drug Master File (DMF) — files submitted to the FDA by a drug's developer (a DMF Holder) that contain detailed confidential information about facilities, processes, controls, or articles used in the manufacturing, processing, packaging, and storing of a human drug or its components.

FDA — the U.S. Food and Drug Administration.

Immunoassay — a test that measures some aspect of the immune response to an antigen.

Pathogen — an organism, including a virus, fungus, or bacterium, that is capable of causing disease.

PCR — Polymerase Chain Reaction. A technology for the highly sensitive and specific detection of genetic material. PCR permits (among other things) the detection of disease-causing organisms in very small quantities. When used to diagnose disease, PCR is part of a group of related technologies referred to as Molecular Diagnostics.

Thrombolytic — a protein or drug that is capable of breaking down a blood clot ('thrombus'), or more generally a protein such as Urokinase that is capable of initiating a process that leads to the breakdown of a blood clot. Thrombolytic drugs are used to treat conditions involving blockage of blood vessels in the lung (pulmonary embolism), heart (coronary artery thrombosis) or brain (ischemic stroke).

Urokinase — a naturally occurring protein enzyme capable of initiating the process leading to the breakdown of a blood clot by the degradation of the fibrin; an FDA approved drug owned by Microbix under the brand name Kinlytic® urokinase.

Trademarks

Trademarks used in this document are:

Kinlytic® (Microbix Biosystems Inc.)

LumiSort™ (Microbix Biosystems Inc.)

Microbix® (Microbix Biosystems Inc.)

PROCEEDx™ (Microbix Biosystems Inc.)

QAPs™ (Microbix Biosystems Inc.)

REDx™ Controls (Microbix Biosystems Inc.)

Appendix "A"

Microbix Biosystems Inc.

Audit Committee Charter

Role

The purpose of the Audit Committee of the Board of Directors (the "Board") of Microbix Biosystems Inc. (the "Company") is to assist the Board in fulfilling its responsibility for oversight of the quality and integrity of the accounting, auditing, and reporting practices of the Company, and such other duties as directed by the Board. The Audit Committee's role includes a particular focus on the qualitative aspects of financial reporting to shareholders, on the Company's processes to manage business and financial risk, and on compliance with applicable legal, ethical and regulatory requirements.

Membership

The membership of the Audit Committee shall consist of at least three directors who are (or within a reasonable period of time become) financially literate and generally knowledgeable in financial and auditing matters, including at least one member with accounting or related financial management expertise. Each member of the Audit Committee must be financially literate, that is having the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. Each member shall be independent, meaning that the member shall be free of any direct or indirect material relationship with the Company. A material relationship means a relationship that, in the view of the Board, could reasonably interfere with the exercise of the member's independent judgment. The provisions and requirements of Multilateral Instrument 52-110 "Audit Committee" related to determining the independence of individuals shall apply to members of the Audit Committee. In addition, each member of the Audit Committee shall be an "unrelated director" within the meaning of the rules of the Toronto Stock Exchange (the "TSX").

The Chair of the Audit Committee shall be appointed by the full Board.

Communications and Reporting

The Committee is expected to maintain free and open communication with the external auditors, the internal accounting staff, and the Company's management. This communication shall include private executive sessions, at least annually, with each of these parties. The Committee chairperson shall report on Audit Committee activities to the full Board.

Authority

In discharging its oversight role, the Audit Committee is empowered to investigate any matter brought to its attention, with full power to retain outside counsel or other advisors and experts for this purpose. The Audit Committee shall be empowered to set and pay the compensation for any such advisors employed by the Audit Committee. The Audit Committee shall have the authority to communicate directly with the internal and external auditors of the Company.

Responsibilities

Oversight

The Audit Committee is directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management of the Company and the external auditor regarding financial reporting.

Recommend Auditor

The Audit Committee must recommend to the Board the external auditor to be nominated (subject to shareholder approval) for the purpose of preparing and issuing an auditor's report or performing other audit, review or attest services for the Company and the compensation of the external auditor.

Pre-Approve Non-Audit Services

The Audit Committee must pre-approve all non-audit services to be provided to the Company (or any of its subsidiary entities) by the Company's external auditor.

Review Financial Disclosure

The Audit Committee must review the Company's financial statements, management's discussion and analysis (MD&A) and annual and interim financial press releases before the Company publicly discloses this information.

The Audit Committee must be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements, and must periodically assess the adequacy of those procedures.

Whistle Blower Procedures

The Audit Committee must establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

Reliance on Management and Auditors

The Audit Committee relies on the expertise and knowledge of management, the internal auditors, and the external auditor in carrying out its oversight responsibilities. Management of

the Company is responsible for determining the Company's financial statements are complete, accurate, and in accordance with generally accepted accounting principles. The external auditor is responsible for auditing the Company's financial statements. The Audit Committee should assure itself that the Company's internal policies, procedures and controls are adequate and are being implemented and followed.

Relationship with Auditors

The Audit Committee is also responsible for ensuring that the Company's external auditors submit on a periodic basis to the Committee a formal written statement delineating all relationships between the external auditors and the Company and actively engaging in a dialogue with the external auditors with respect to any disclosure relationships or services that may impact the objectivity and independence of the external auditors and for taking appropriate action to ensure the independence of the external auditors within the meaning of applicable Canadian law.

The Audit Committee must review and approve the Company's hiring policy regarding partners, employees and former partners and employees of the present and former external auditor of the Company.

Guidelines for Audit Committee

With respect to the exercise of its duties and responsibilities, the Audit Committee should, among other things:

- report regularly to the Board on its activities, as appropriate;
- exercise reasonable diligence in gathering and considering all material information;
- remain flexible, so that it may be in a position to best react or respond to changing circumstances or conditions;
- understand and weigh alternative courses of conduct that may be available;
- focus on weighing the benefit versus harm to the Company and its shareholders when considering alternative recommendations or courses of action;
- if the Audit Committee deems it appropriate, secure independent expert advice and understand the expert's findings and the basis for such findings, including retaining independent counsel, accountants or others to assist the Audit Committee in fulfilling its duties and responsibilities; and
- provide management and the Company's independent auditors with appropriate opportunities to meet privately with the Audit Committee.

Meetings

The Audit Committee shall meet with such frequency and at such intervals as it shall determine is necessary to carry out its duties and responsibilities. As part of its purpose to foster open communications, the Audit Committee shall meet at least annually with management and the Company's external auditors in separate executive sessions to discuss any matters that the Audit Committee or each of these groups or persons believe should be discussed privately. In addition, the Audit Committee should meet or confer with the external auditors and

management to review the Company's interim consolidated financial statements and related filings prior to their filing with the Ontario Securities Commission, or any other regulatory body. The Chairman should work with the Chief Financial Officer and management to establish the agendas for Audit Committee meetings. The Audit Committee, in its discretion, may ask members of management or others to attend its meetings (or portions thereof) and to provide pertinent information as necessary. The Audit Committee shall maintain minutes of its meetings and records relating to those meetings and the Audit Committee's activities and provide copies of such minutes to the Board to be included in the minute books of the Company.

Disclosure and Review of Charter

This Charter shall be published in the Company's annual report, information circular or annual information form of the Company as required by law. The Audit Committee should review and assess annually the adequacy of this Charter as required by the applicable rules of the TSX or applicable Canadian securities regulators.