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, 2022, prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board 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 antigens, quality assessment products, and viral transport medium businesses, 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 August 8, 2023.

COMPANY OVERVIEW

Microbix Biosystems Inc. (Microbix or the Company) (TSX: MBX, OTCQX: MBXBF) is an award-winning life sciences innovator, manufacturer, and exporter making critical biological ingredients that enable the production of clinical diagnostics (antigens), creating and manufacturing medical devices, including quality assessment products that help ensure test accuracy (also known as QAPs™), and viral transport medium for enabling the collection of patient samples to test for pathogens such as the virus causing COVID-19 disease (branded as DxTM™). In the context of Microbix's business, antigens are purified and inactivated bacteria, viruses, or their components 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 or an analogue to a pathogen, that are created to resemble patient samples in order to support one or more of (i) the proficiency testing of clinical labs (usually unbranded "white label"), (ii) incorporated into kits of test consumables by multinational diagnostics companies (usually unbranded "white label"), (iii) test development, instrument validation and technician training (often branded PROCEEDx®), or (iv) the quality management of patient test-workflows by clinical laboratories (branded as REDx®). Microbix' antigens and QAPs are sold to more than 100 customers worldwide, primarily to multinational diagnostics companies and laboratory accreditation organizations. Sales of antigens and QAPs are ongoing to the respective customer categories described. The first private sector sales of Microbix's DxTM™ were recorded in fiscal Q2, 2021 followed by a material initial first order from the Province of Ontario received in April, 2021 and a material reorder secured in December, 2021. While further DxTM re-orders from Ontario are being pursued along with other private-sector and governmental customers, no material sales of DxTM have been recorded since the quarter ending June, 2022.

COMPANY OVERVIEW (Continued)

Microbix also applies its biological expertise and infrastructure to develop other proprietary products and technologies, most notably Kinlytic® urokinase (Kinyltic), a biologic thrombolytic drug used to treat blood clots. An agreement to provide funding for the return of Kinlytic to the United States market was signed in May, 2023.

The COVID-19 pandemic and its health, economic, and societal impacts have affected all industries, including medical diagnostics. As a result, trend discussions here may be disrupted. For example, from early fiscal 2020 sales of antigens were reduced due to fewer patients seeking or receiving care in relation to diseases other than COVID-19. As of the end of calendar 2022 however, Microbix has been seeing evidence of antigen demand recovering toward pre-COVID levels.

Management now believes COVID has transitioned from pandemic to endemic, leading revenue from the antigens and QAPs business (Antigens & QAPs) to resume growth for the foreseeable future. Antigen sales growth may be largely driven by certain public health tests becoming more widely used in the Asia Pacific region and, more recently, increased global testing for multiple respiratory pathogens. QAPs sales growth are expected to be driven by several factors, namely (i) Microbix's creation of new value-added and proprietary products for test-makers and clinical laboratories, (ii) by increasing American, European and international quality-management regulation of clinical laboratories, and by increasing adoption of molecular testing (e.g., "PCR") by laboratories and at the point-of-care. Sales of DxTM began in fiscal Q2 of 2021 and, based on multiple purchase orders from representatives of the Province of Ontario and interest in supply-chain security from other parties across Canada, became a material new product category for Microbix. However, production and sales of DxTM are currently paused – due in large part to an ongoing reorganization of the procurement systems of the Province of Ontario. As a result it is unclear when sales of DxTM will resume or the extent to which Microbix will be called to supply the needs of the Province of Ontario.

The sales resulting from antigens, QAPs, and DxTM activities are targeted to provide free cash flow to cover operating and debt service costs, and funding for business initiatives that leverage Microbix's expertise.

Microbix owns and operates a biologicals manufacturing facility at 265 Watline Avenue in Mississauga, Ontario. For that facility, Microbix has a Pathogen and Toxin license issued by the Public Health Agency of Canada. The Company's administrative offices, along with further company-created production and lab spaces, are in a leased building located at 235 Watline Avenue, Mississauga, Ontario. A third adjacent site at 275 Watline Avenue was leased as of July, 2021 and renovations have since been ongoing to support DxTM production, quality-control laboratory space, workstations, and warehousing. Microbix is ISO 9001 & 13485 accredited, FDA & Health Canada establishment licensed, Australian TGA registered, and provides CE marked products.

FINANCIAL OVERVIEW

For the three months ending June 30, 2023 ("Q3")

Q3 revenue was $5,530,152, an increase of 10% from Q3 2022 revenues of $5,011,025. Antigen revenues of $2,608,521 grew 14% vs. Q3 2022 revenues of $2,283,621. QAPs revenues were $1,456,905 (2022 - $1,305,896). In turn, revenue from DxTM was zero in Q3 (2022 - $1,326,410), and royalties were $116,226 (2022 - $95,099). In Q3, there were also, Kinlytic-related revenues of $1,348,500 realized in relation to a license and funding agreement (Agreement) with Sequel Pharma, LLC that was announced on May 16, 2023 and recognized during the quarter. This Agreement-related licensing revenue offset the lack of Ontario-driven deliveries of DxTM in Q3 compared to the prior year.

Q3 gross margin was 42%, down from 55% in Q3 2022, due to a greater proportion of lower margin antigen product-ingredient sales, lack of DxTM sales and, most notably a writedown of aging DxTM

FINANCIAL OVERVIEW (Continued)

For the three months ending June 30, 2023 ("Q3") (Continued)

inventory of $949,256. This was partially offset by the $1,348,500 of margin recognized on the Kinlytic license revenues. In addition, we continue to see double digit increases in our supply-chain costs, which can only be passed-through to end-customers over time.

Beyond cost of goods sold, operating expenses in Q3 increased by 46% relative to Q3 2022, principally due to increased investment in IT infrastructure to support our continued growth objectives – namely start-up costs relating to our "ERP" and "eQMS" software system implementations. Such IT systems start-up costs of $225,517 were heaviest in Q3, as Microbix drove toward a targeted "go-live" for its new ERP system in Q4 2023. In addition, foreign exchange gains in Q3 2022 were replaced by losses for an unfavourable difference of $275,698 in Q3 and $350,513 of consulting and legal fees relating to the signing of the Kinlytic agreement were recognized. Finance expenses were lower than the prior year due to repayment of debentures and long-term debt during fiscal 2022 and short-term investment of cash balances. Overall, Q3 sales led to an operating loss and net income of $769,108 versus a Q3 2022 operating income and net income of $638,502. Cash provided by operating activities was $2,131,358 in Q3, compared to cash provided by operating activities of $2,709,545 in Q3 2022, with the majority of the change coming from a relatively greater deployment of cash into working capital account balances during the quarter.

Nine Months Ending June 30, 2023 ("YTD")

YTD revenue was $12,250,547, a 17% decrease from YTD 2022 revenues of $14,747,189. Included were antigen revenues of $6,615,040 (2022 - $5,658,007), up 17% from last year. QAPs revenues of $3,892,090 largely flat year-over-year (2022 - $ 3,773,429), due in large-part to delays in the test finalization and launch timelines of customers intending to incorporate Microbix QAPs in their kits of test consumables. YTD Kinlytic revenues were $1,350,517 compared to zero in YTD 2022, the majority of which is due to the announced Agreement related to the product. In turn, YTD revenue from DxTM was zero (2022 - $ 5,004,359) due to the Province of Ontario unexpectedly returning to imported product for all its needs, and royalties were $392,898 (2022 - $ 311,394). In summary, the lower YTD sales result was driven by the lack of any deliveries of DxTM for the Province of Ontario.

YTD gross margin was 49%, down from 62% in YTD 2022, due to the lack of DxTM sales, the material writedown of DxTM inventory and the effects of a greater proportion of antigen sales that have lower margins than QAPs or DxTM. In addition, we continue to see double-digit materials price increases across our supply chain, which take time to pass-through in product pricing to Microbix customers.

Operating expenses in YTD increased by 18% relative to YTD 2022, due to increased investment in IT infrastructure, unfavourable foreign exchange impact vs. 2022 and the recognition of Kinlytic consulting costs. This was partly offset by lower finance expenses due to repayment of debentures and long-term debt during fiscal 2022 and short-term investment of cash balances. Overall, weaker YTD sales led to an operating loss and net loss of $2,036,756 versus a YTD 2022 operating income and net income of $2,252,769. Cash provided by operating activities was $361,635, compared to cash provided by operating activities of $3,318,763 in YTD 2022, with much of the change coming from the change in operating income and the repurchase of shares through our NCIB.

At the end of Q3, Microbix's current ratio (current assets divided by current liabilities) was 4.39 and its debt-to-equity ratio (total debt over shareholders' equity) was 0.51.

Financial Highlights

For the three months and nine months ended	Three months ended June 30, 2023	Three months ended June 30, 2022	Nine months ended June 30, 2023	Nine months ended June 30, 2022
Total Revenue	$ 5,530,152	$ 5,011,025	$ 12,250,547	$ 14,747,189
Gross Margin	2,342,885	2,766,146	6,056,140	9,104,303
SG&A Expenses	2,098,382	1,569,790	6,320,005	4,882,447
R&D Expense	531,121	387,400	1,482,004	1,354,758
Financial Expenses	102,490	170,454	290,887	614,329
Operating Income (Loss) for the period	(769,108)	638,502	(2,036,756)	2,252,769
Net Income (Loss) and Comprehensive Income (Loss) for the period	(769,108)	638,502	(2,036,756)	2,252,769
Cash Provided (Used) by Operating Activities	2,131,358	2,709,545	361,635	3,318,763

As at	June 30, 2023	September 30, 2022
Cash	13,409,156	13,488,075
Accounts receivable	3,347,154	3,057,797
Total current assets	23,499,042	22,408,372
Total assets	34,295,095	33,145,196
Total current liabilities	5,351,089	2,650,521
Total liabilities	11,651,812	8,206,541
Total shareholders' equity	22,643,283	24,938,655
Current ratio	4.39	8.45
Debt to equity ratio	0.51	0.33

SELECTED QUARTERLY FINANCIAL INFORMATION

	Sep-30-21 $	Dec-31-21 $	Mar-31-22 $	Jun-30-22 $	Sep-30-22 $	Dec-31-22 $	Mar-31-23 $	Jun-30-23 $
Total Revenue	5,629,694	4,855,600	4,880,564	5,011,025	4,329,052	2,502,072	4,218,323	5,530,152
Net Income (Loss) and Comprehensive Income (Loss)	778,929	880,778	733,489	638,502	(464,080)	(1,299,262)	31,616	(769,108)
Operating Income (Loss) before Impairment of Assets, Interest Accretion Expense and Finance Expenses	1,580,553	1,121,528	936,614	808,956	(256,885)	(1,202,184)	122,935	(666,618)

OUTLOOK

Microbix's business was started over 30 years ago by our founder, Bill Gastle, a skilled virologist. The first products were types of the growth media used in cell-culturing, which were sold to public health laboratories and research-oriented customers across Ontario. Eventually, this was followed by such regional lab customers asking Microbix to do some of their bacteriological, cellular, and viral culturing work. In due course, international manufacturers of diagnostic tests learned of Microbix's abilities and approached the company to grow such organisms on an industrial scale, then purify and inactivate them to become "antigens" – the biological ingredients at the heart of "immunoassay" tests used to diagnose infection with, exposure to, or immunity from, bacteria and viruses.

That test-ingredients business remained Microbix's only major source of revenues for many years, and underpins its deep expertise in matters relating to infectious disease diagnostics. During those years, Microbix sought to branch out into other areas of healthcare, such as into the production of biological therapeutics and vaccines. Although it had much of the expertise required for such initiatives, it could not gain access to the capital required to bring those projects to fruition. That being recounted, one asset from that era remains in the Microbix portfolio, a well-validated biological "clot-buster" drug called Kinlytic® urokinase. Kinlytic is not currently assigned value on Microbix's balance sheet, but, in May 2023, took a big step forward toward generating meaningful revenues by way of the partnering Agreement with a better-funded entity. As a first step of that Agreement, Microbix received an initial licensing fee of US$ 2.0 million, of which half was recognized as revenues in Q3 2023. Microbix will recognize the balance of that payment as revenues and be eligible for further milestone payments and eventual royalties should a renewed consultation with the United States Food and Drug Administration (FDA) and redevelopment work have positive outcomes. If the FDA consultation is positive, a prior Kinlytic asset-value writedown may be reversed.

Microbix's antigen test-ingredients business had been 90% or more of sales for many years. Over the past five years however, Microbix has sought to more broadly employ its deep diagnostics industry expertise and thereby incrementally build its revenues. This effort has succeeded, with test-ingredients comprising only 43% of Microbix's sales in fiscal 2022 due to its creating and growing other revenue streams. While test ingredients sales are now resuming a growth trajectory, their proportion of overall company sales is expected to continue to decline – as a result of faster-growing sales of other product categories, such as QAPs.

Notably, Microbix has been successfully transformed from being a manufacturer of less-regulated test-ingredients, into the producer of a catalogue of fully-regulated medical devices relating to infectious-disease diagnostic tests. The Company has thereby created new opportunities for both increasing sales and expanding gross margins. Specifically, Microbix medical devices products are innovative, proprietary, and branded – permitting access to new markets and customers at better margins than are usual for test-ingredients. Upgrading to the ISO 13485 medical devices quality standard, obtaining a Health Canada Medical Devices Establishment License, and taking the necessary steps to be able to sell into the EU, US, and other markets were integral to those goals.

In medical devices, the first category of Microbix products are its diagnostic-test quality assessment products, which are branded as "QAPs™" and colloquially known as test-controls. The QAPs business started with providing mimics of positive patient-samples to enable assessment of the proficiency of clinical laboratories by industry accreditation agencies. Sales of Microbix QAPs were largely limited to that customer base and had come to exceed C$ 1.0 million per year (i.e., about 10% of sales) when the COVID-19 pandemic began (the "Pandemic").

While respiratory virus tests were not the principal focus of QAPs in early 2020, Microbix suspected the Pandemic in January of that year and validated its first COVID-related product by the end of March, 2020. Microbix has since supported governments and industry with many QAPs products related to testing for respiratory pathogens – to lab accreditation agencies, international test-makers, governments and hospitals, clinical labs, and many workplaces and schools. Respiratory disease has become an important portion of QAPs sales, but the Microbix portfolio has been expanded to include QAPs for many bacteria, viruses, and parasites that can cause acute sickness, chronic disease, and even cancers. Collectively, QAPs comprised 28% of sales across fiscal 2022 and Microbix expects this segment to be its fastest-growing revenue source for the foreseeable future.

OUTLOOK (Continued)

As the Pandemic emerged, Microbix was also quick to recognize the fragility of supply-chains for testing-related medical supplies. This alertness extended to noting pending shortages of viral transport medium ("VTM"), a medical device that is essential for stabilizing collected patient-samples in order that they remain intact while transported to, and when processed at, the central laboratories conducting most PCR-based tests. Having decades of expertise in producing complex cell-culturing media, Microbix volunteered to begin domestic production of VTM for the province of Ontario. With the assistance of a grant from the Ontario Together Fund of the Ministry of Economic Development, Job Creation, and Trade, Microbix created a VTM formulation to meet the exacting requirements of Public Health Ontario, perfected its methods, scaled its production, and became the only fully-regulated and validated local supplier to the Province. Sales of Microbix's "DxTM™" brand VTM began in fiscal 2021 and comprised 26% of Microbix's revenues in fiscal 2022. However, production and sales of DxTM are currently paused – due in large part to an ongoing reorganization of the procurement systems of the Province of Ontario. At present, the procurement authorities of the Province of Ontario have returned to purchasing imported VTM to satisfy all testing needs, a practice that seems at odds with political leaders' stated objectives of security of supply and domestic manufacturing. As a result it is unclear if or when sales of DxTM will resume or the extent to which Microbix may be called to supply the needs of the Province of Ontario. Equipment purchased for DxTM production, much of which was acquired with direct encouragement and funding from government, will be redeployed for production of products for other, non-governmental, customers.

Looking ahead, Microbix believes that it has considerable opportunities to continue growing its sales to the global diagnostics and clinical laboratory industries. Most notable among its business segments is QAPs, for which it has identified the Point-of-Care-Test ("PoCT") companies as its most promising customers. While PoCT has been a promised innovation for many years, the Pandemic resulted in major investments to roll-out sophisticated and high-quality testing beyond central-lab settings. Today, table-top sized and portable PCR-based or antigen-based PoCT instruments are coming into widespread usage in settings such as local clinics, long-term care homes, pharmacies, schools, and workplaces. However, such PoCTs require accompanying test-controls to satisfy health regulators that errors relating to operators, consumables, or instruments will be quickly and reliably identified. Microbix QAPs are ideally-suited for that purpose, most notably when formatted onto the FLOQSwab™ flocked-swabs of Copan Italia S.p.A., made using Microbix's innovative techniques, and protected by the intellectual property of each firm.

The largest of such opportunities involves FLOQswab-based QAPs being incorporated into kits of PoCT cartridges at fixed ratios (e.g., 1 QAP per 20 PoCT tests) for use to help ensure test or test-workflow accuracy. With major international test-makers intending to sell millions of cartridges per month across multiple pathogen categories, it is not difficult to see how revenues may build for Microbix in this industry area. A first such alliance was announced by Microbix in August 2022, and meaningful revenues are expected as that multinational test-maker, and others, wend their way through the needed design optimizations, regulatory approvals, and marketing launches for instruments and test kits. Further alliances of this nature are being developed by Microbix, with the intention of formalizing and disclosing them in due course.

Microbix is also enhancing infrastructure to support its growth objectives and expectations. Such enhancements include investments into people, equipment, and systems. Concerning people, the Company continues to work to retain our current great team, while adding new members with further skills and capabilities. For equipment, Microbix is investing to improve reliability, enhance capacity, and remove drudgery. With systems, the Company is making material investments into modernized and scalable Enterprise Resource Planning (ERP) software, alongside moving to a paperless Quality Management System (eQMS) – both of which are essential for Microbix continuing to grow the business. In the immediate term such investments tend to compress margins, but Management is convinced of their mid- and long-term benefits.

OUTLOOK (Continued)

We thereby come to Microbix today and tomorrow. Already, a Company approaching C$ 20 million in annual sales with deep and broad life sciences capabilities that has achieved profitability for two consecutive years (fiscal 2021 and 2022) and attained a strong financial position. Now a fully-fledged medical devices firm poised to benefit from medical diagnostics being used more effectively and frequently than ever, via over 100 established international customer relationships. Management's near-term goals comprise still higher and more consistent sales volumes at expanding gross margins to drive growth in net earnings, free cash flow, and the value of Microbix's common stock for all shareholders.

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 $38,908,686 as at June 30, 2023. 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 2023, cash flow is expected to improve due to: 1) continued growth in overall product sales, 2) improvements in product pricing or other sales terms, 3) greater sales of higher percentage gross margin products, and 4) other business development and financial initiatives. Management expects these developments will continue to significantly improve the overall liquidity position, as the Company's plans come to fruition.

On July 29, 2019, the Company signed an agreement with Federal Economic Development Agency for Southern Ontario to provide a repayable government contribution where the Federal Development Agency has agreed to contribute funding for 30% of the Business Scale-up and Productivity Project expenditures made by the Company, up to $2,752,500 over the following four years. The Company is required to submit eligible expenses on a quarterly basis to receive the interest-free contributions. On February 14, 2023 the Company agreed to an amendment to the original agreement providing an additional $840,000 of repayable contributions, increasing the total funding up to $3,592,500. Repayment of all contributions does not begin until December 15, 2024.

To support the continued growth of the business, on January 30, 2020, the Company completed a non-brokered private placement offering of an aggregate of 11,800,000 units for total gross proceeds of $2,360,000. Each unit consisted of one common share of Microbix and one common share purchase warrant. Each warrant entitles the holder to purchase one additional common share at an exercise price of $0.36 for five years. The financing was non-brokered. Cash commissions of $104,300 were paid and an aggregate of 521,500 Broker's Warrants were issued in the private placement offering. Each Broker's Warrant entitles the holder to purchase one unit at a price of $0.36 for a period of five years. All securities issued under the private placement were subject to a hold period which expired four months and one day from the date of closing.

In addition, on May 19, 2021, the Company completed a public offering and concurrent private placement offering of an aggregate of 11,500,000 units for total gross proceeds of $6,900,000, and net proceeds of $6,131,568 after share issuance costs of $768,432. Each unit consisted of one common share

LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES (Continued)

***Future Liquidity and Capital Needs* (Continued)**

of Microbix and one-half of one common share purchase warrant. Each whole warrant entitles the holder to purchase one additional common share at an exercise price of $0.80 for two years. The financing was a "bought deal", with co-lead underwriters of the Offering (iA Private Wealth Inc. and Bloom Burton Securities Inc.). Cash commissions of $402,500 were paid and an aggregate of 670,833 Broker's Warrants were issued in the public offering. Each Broker's Warrant entitles the holder to purchase one unit at a price of $0.60 for a period of two years. All securities issued under the concurrent private placement were subject to a hold period which expired four months and one day from the date of closing.

On October 13, 2020, the Company announced a grant agreement with the Ontario Together Fund ("OTF") of the Ministry of Economic Development, Job Creation and Trade (the "Grant"). The Grant of $1,445,000 was to cover 50% of the cost to automate production of the Company's quality assessment products (QAPs™) that help ensure the accuracy of infectious disease diagnostic testing, and enable local, secure, and cost-effective automated production of the quantities of viral transport medium (generically "VTM" and branded "DxTM™") needed for Ontario's lab-based testing for COVID-19 disease or other tests of concern to public health or safety. An initial Grant disbursement, upon execution of the agreement, in the amount of $867,000, was received on October 13, 2020. The remaining $578,000 of the grant was paid upon project completion and a review of Eligible Project Expenditures incurred during the project, up to February 28, 2022. During the year ended September 30, 2021 the Company recognized $717,587 (2020 - nil) of grant income. The company also recorded a $680,202 reduction in capital asset costs.

During the year ending September 30, 2022, the Company received $2,637,330 from the exercise of 7,480,293 warrants and received $806,800 from the exercise of 2,960,00 options. In addition, a $500,000 debenture was converted to 2,173,913 shares during the fourth quarter of fiscal 2022.

During fiscal 2022, the Company made an early repayment of the remaining outstanding principal relating to a $2.0 million non-convertible 9% interest debenture. A payment of $1,331,758, including accrued interest, was made on October 1, 2021. In addition, in April 2022 the Company repaid a non-convertible $500,000 debenture when it came due.

On December 3, 2021 the Company prepaid in full the outstanding balance including accrued interest for a BDC loan, totaling $266,094. See the long-term debt note for further details.

On March 20, 2023, the Company announced an additional grant agreement with the Ontario Together Fund ("OTF") of the Ministry of Economic Development, Job Creation and Trade (the "Grant"). The Grant of $840,000 is to cover 50% of the cost to further expand our capabilities and capacity for manufacturing specialized products relating to diagnostic testing for infectious diseases. The Government of Ontario is supporting the expansions at Microbix's three adjacent sites in Mississauga. An initial Grant disbursement, upon execution of the agreement, in the amount of $504,000, was received on March 13, 2023. The remaining $356,000 of the grant will be paid upon project completion following a review of Eligible Project Expenditures incurred during the project.

Microbix will continue to monitor and manage its cash position, with the objective of anticipating and meeting all current and future liquidity and capital needs.

LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES (Continued)

Outstanding Share Capital

Share capital issued and outstanding as at June 30, 2023 was $49,097,340 for 137,303,874 common shares and September 30, 2022 was $49,918,916 for 138,991,373 common shares. The Company continues to repurchase shares through our NCIB, as outlined in the section below.

Global pandemic

In early 2020, a novel Corona virus (SARS-COV-2) was identified to be spreading in human populations around the world and on March 11, 2020, the World Health Organization declared a global pandemic (The "Pandemic"). The Pandemic has since caused significant health, social, and economic harms and instability that continues to be felt worldwide.

Microbix has reviewed, and continues to review, the effects of the Pandemic and its aftermath on its operations. Such effects may include impacts on the Company's business that cannot be predicted, including upon the estimates, judgments, and assumptions used in the preparation of its financial statements, the setting of strategic objectives, or the realization of such objectives.

See the "Risks and uncertainties" section of this MD&A for a further discussion of the COVID-19 pandemic.

Normal Course Issuer Bid ("NCIB")

On October 3, 2022 the Company initiated Normal Course Issuer Bid ("NCIB") program for the repurchase and cancellation of outstanding common shares. In accordance with the rules of the Toronto Stock Exchange and as detailed in the Company's news release of September 28, 2022, the NCIB enables the Company to repurchase up to 5% of its common shares over a 12-month period. During the first nine months of fiscal 2023 the Company repurchased 2,276,500 shares at a cost of $948,939 and cancelled 2,138,500 shares.

OFF-BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on its financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

TREND INFORMATION

Historical spending patterns are no indication of future expenditures. Investment in the new products and technologies is at the discretion of management and the board of directors. 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 June 30, 2023.

RISKS AND UNCERTAINTIES

The Company has exposure to credit risk, liquidity risk and market risk. The Company's Board of Directors has the overall responsibility for the oversight of these risks and reviews the Company's policies on an ongoing basis to ensure that these risks are appropriately managed, including through the use of financial instruments where appropriate. Further discussion of the management of such risks is included in note 21 to the audited consolidated financial statements for the year ended September 30, 2022.

LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES (Continued)

COVID-19 Pandemic

As previously discussed, the Company's business may be negatively impacted by the sequelae of the COVID-19 pandemic, which has created, and continues to create, significant societal and economic disruptions. The changing and evolving after-effects of the COVID-19 pandemic – the duration, extent and severity of which are currently unknown – on investors, businesses, the economy, government bodies, society and the financial markets could, among other things, add volatility to the global stock markets and change interest rate environments. The COVID-19 pandemic pricing, availability and measures to prevent its spread and associated government economic policies may negatively impact the Company, its customers, counterparties, employees, third-party service providers and other stakeholders, as applicable, in a number of ways, including, but not limited to, by: (i) adversely affecting the business operations of the Company, including the Company's planned sales and marketing processes for its approved products; (ii) disrupting the Company's supply chain, including the materials needed for its products; (iii) adversely affecting local, national or international economies and employment levels; (iv) causing business interruptions, including as a result of steps taken by the Company in compliance with government recommendations and orders, such as requiring employee to work remotely, which may cause strain on such existing resources as information technology systems, and suspension of all non-essential travel; (v) disrupting public and private infrastructure, including communications and financial services, which could disrupt the Company's normal business operations; (vi) disrupting health care delivery; disrupting or prolonging business development initiatives such as the partnering of Kinlytic® urokinase. At this point, the extent to which the COVID-19 pandemic after-effects will or may impact the Company is uncertain and these factors are beyond the Company's control; however, any of these events, in isolation or in combination, could have a material adverse effect on the Company's business, results of operations and financial condition and the market price of the Company's securities. 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 antigen product 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, as well as the value of inventories and other assets.

Environmental, safety and other regulatory

Microbix' research and manufacturing operations involve 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.

RISKS AND UNCERTAINTIES (Continued)

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.

Viral Transport Medium Products (DxTM)

Microbix's DxTM is principally reliant upon sales to designates of the Government of Ontario. There is no assurance that sales to such designates will be ongoing or that other customers will be secured.

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, QAPs and DxTM products, which is a major source of funding for its new product oriented 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.

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 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.

RISKS AND UNCERTAINTIES (Continued)

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 may have greater 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 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 June 30, 2023, five customers accounted for 85% (September 30, 2022 - five customers accounted for 56%) of the outstanding balance. In addition, for the quarter ended June 30, 2023, five customers accounted for 53% (June 30, 2022 - five customers accounted for 75%) of revenues. The Company has had minimal bad debts over the past several quarters and accordingly management has recorded an allowance of $35,000 (September 30, 2022 - $35,000).

Currency risk:

The Company is exposed to currency risk given its global customer base. 60-70% 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 June 30, 2023 and September 30, 2022, the significant balances, quoted in Canadian dollars, held in foreign currencies are:

	U.S. dollars		**Euros**	
	June 30 2023	September 30 2022	June 30 2023	September 30 2022
Cash	**$ 2,765,557**	$ 302,698	**$ 1,191**	$ 87,613
Accounts receivable	**$ 2,497,335**	$ 1,645,040	**$ 525,925**	$ 1,221,837
Accounts payable and accrued liabilities	**$ 181,519**	$ 126,716	**$ -**	$ 45,994

Based upon 2022 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 $478,300 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 $165,800. 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 $478,300 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 $165,800.

FINANCIAL RISK MANAGEMENT (Continued)

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. When employed, this facility has helped to satisfy the Company's liquidity needs and to manage the liquidity risk.

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%. As at June 30, 2023 the Company has not drawn on this line of credit. A 1% increase in the bank rate would cost the Company approximately $17,000 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 & QAPs 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.

FINANCIAL RISK MANAGEMENT (Continued)

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 or useful life of the asset. Amortization commences when the intangible asset is available for use. Intangibles with definite lives but not yet available for use are assessed at least annually for impairment or more frequently if there are indicators of impairment.

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.

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.

CRITICAL ACCOUNTING ESTIMATES (Continued)

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 unvested options pertaining to departing employees are reversed in the reporting period during which that employee leaves the Company.

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, 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 June 30, 2023, 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 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 June 30, 2023. 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 June 30, 2023 that have materially affected, or are reasonably thought to materially affect, the internal control over financial reporting.

IMPACT OF NEW ACCOUNTING STANDARDS NOT YET ADOPTED

Amendments to IAS 1

In January 2020, the IASB issued Classification of Liabilities as Current or Non-current, which amends IAS 1. The narrow scope amendments affect only the presentation of liabilities in the statement of financial position and not the amount or timing of their recognition. The amendments clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period and align the wording in all affected paragraphs to refer to the right to defer settlement by at least twelve months. That classification is unaffected by the likelihood that an entity will exercise its deferral right. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and are to be applied retrospectively. The Company is still assessing the impact of adopting these amendments on its financial statements.

Amendments to IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors ("IAS 8")

In February 2021, the IASB issued Definition of Accounting Estimates, which amends IAS 8. The amendment replaces the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty". The amendment provides clarification to help entities to distinguish between accounting policies and accounting estimates. The amendments are effective for annual periods beginning on after January 1, 2023. The Company is still assessing the impact of adopting these amendments on its financial statements.

Amendments to IAS 1 and IFRS Practice Statement 2

In February 2021, the IASB issued Disclosure of Accounting Policies, which amends IAS 1 and IFRS Practice Statement 2. The amendments are intended to help preparers in deciding which accounting policies to disclose in their financial statements. The amendment to IAS 1 requires companies to disclose their material accounting policy information rather than significant accounting policies. The amendment also clarifies that not all accounting policy information that relates to material transactions, other events or conditions is material to the financial statements. The amendment to IFRS Practice Statement 2 adds guidance and examples to the materiality practice statement, which explains how to apply the materiality process to identify material accounting policy information. The amendments are effective for annual periods beginning on or after January 1, 2023 and are to be applied prospectively. The Company is still assessing the impact of adopting these amendments on its financial statements.

Amendments to IAS 12 – Income Taxes ("IAS 12")

Amendments to IAS 12 were issued in May 2021, IASB issued Deferred Tax related to Assets and Liabilities arising from a Single Transaction, which amends IAS 12. The amendment narrows the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offset temporary differences. As a result, companies will need to recognize a deferred tax asset and deferred tax liability for temporary differences arising on initial recognition of transactions such as leases and decommissioning obligations. The amendments are effective for annual periods beginning on or after January 1, 2023 and are to be applied retrospectively.

Amendments to IAS 37: Onerous Contracts ("IAS 37")

In May 2020, the IASB issued amendments to IAS 37, Provisions, Contingent Liabilities and Contingent Assets, to specify that the cost of fulfilling a contract comprises the costs that relate directly to the contract, and can either be incremental costs of fulfilling that contract or an allocation of other costs that relate directly to fulfilling contracts. The new guidance will be effective for annual periods beginning on or after January 1, 2022 and is to be applied to contracts that have unfulfilled obligations as at the beginning of that period. The Company has not yet determined the impact of these amendments on its consolidated financial statements.