



Profitable Growth by Supporting Diagnostics Industry Giants



Corporate Presentation – Spring, 2024

Forward-Looking Statements

- This presentation contains forward-looking statements about trends and objectives.
- Risks and uncertainties related to such statements could cause actual outcomes to differ materially.
- Such risks include, among others, those related to operations, customers or markets, growth drivers, products or technologies, product pricing or costs, development projects, financial results, regulatory matters, and access to capital.
- Forward-looking statements represent Microbix's current judgement, and it disclaims any obligation to update them.

Microbix Senior Management



Cameron L. Groome

CEO, President, and Director

- Has served on the MBX BoD and AC since 2012, and was appointed CEO in 2017.
- 30+ years' experience in senior life sciences and finance roles.
- Successful leader, executive, director, and advisor for public and private companies.

Phil Casselli

Senior. V.P. Business Devel.,
Sales, and Marketing

- Manages MBX's relationship with over 100 makers of infectious disease diagnostics across multiple regions.
- He holds a Bachelor of Applied Science in Chemical Engineering and has more than 30 years' experience in the biotech and pharmaceutical industries.

Jim Currie, CPA

Chief Financial Officer

- Joined MBX as CFO in 2016 after several CFO roles and a VP of Finance role at MDS SCIEX, a global leader in life science and analytical technologies.
- Jim holds a Bachelor of Commerce and holds a CPA and a CMA.

Mark Luscher, Ph.D.

Senior Vice President,
Scientific Affairs

- Responsible for scientific programs, he is a specialist in cell biology, immunovirology, and cytometry.
- He is an inventor on numerous patents and patent applications and oversees scientific and technological programs and initiatives related to MBX's products.

Ken Hughes, Ph.D.

Chief Operating Officer

- Executive and biomedical scientist with 25 years of experience in biotech and pharma.
- Previously was CEO of ITP Biomedica, VP, Sci. & Reg. Affairs at Innovative Medicines Canada and Co-founder and Advisory Board member of PlantForm Corporation.

**>20 Other Skilled
Directors & Managers,
and total of >100 Staff**

- Including but not limited to: **Steven Hagerman** – Senior Director of Operations, **Amer Alagic** – Director of R&D, **Daniel Costa** – Director of Manufacturing, **Bo Hollas** – Director, QA & Compliance, **Lucy Lin** – Director of QC, and **Pavel Zhelev** – Director, Product Management.

Microbix Board of Directors



Martin Marino

Board Chairman

- Mr. Marino has more than 30 years' experience in corporate legal roles and executive management functions, with emphasis on transaction-based corporate development.
- He also has considerable experience in conflict resolution and litigation management.

Dr. Peter M. Blecher

Director

- Dr. Blecher worked as an Emergency Room physician for ~25 years.
- He is a Medical Director of NeuPath Centres for Pain & Spine and is a credentialed pain practitioner with both the American and Canadian Academies of Pain Medicine.
- Dr. Blecher is a co-founder and CMO of both Entourage Health and FH Health.

Mark A. Cochran, Ph.D.

HRGC Chair

- Dr. Cochran was Executive Director of Johns Hopkins Medicine.
- His experience spans all levels of the drug discovery and development value chain, including operational and executive roles in the healthcare, venture capital, pharmaceutical, and biotech industries.

Vaughn C. Embro-Pantalony

AC Chair

- Mr. Embro-Pantalony has held multiple executive roles in life sciences, with responsibility for licensing, business development, and strategic planning.
- His experience includes executive roles with Bayer, Novopharm and Terra International. He is a Chartered Director and Audit Committee Certified through McMaster University.

Joe Renner

Director

- Mr. Renner, Chairman of Zydus Pharmaceuticals, of Pennington, New Jersey, has more than 30 years' experience in the pharmaceutical industry.
- He has enjoyed a successful career leading businesses with many drug approvals in the United States.

Jennifer Stewart

Director

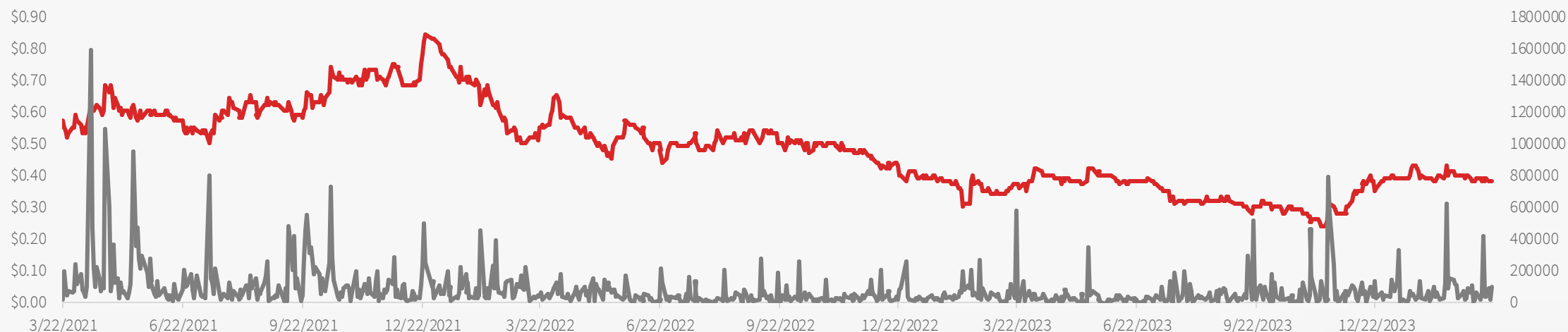
- Ms. Stewart is founder, President, and CEO of Syntax Strategic, a leading firm in the sector of advocacy and communication for the public and private sectors in Canada.
- She is a renowned expert in this field, and is actively involved with media, business, and the community.

Cameron Groome

Director

- Mr. Groome is CEO and President of Microbix.

Financials – Microbix Capital Structure

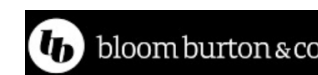


TSX LISTED, SYMBOL: MBX • OTC QX LISTED, SYMBOL: MBXBF

Current Price	\$0.375 (Mar 21)
Shares Outstanding (Basic)	136.6M**
(Fully Diluted)	180.6M**
52 Week High	\$0.47
52 Week Low	\$0.23

Market Capitalization	\$51.3M
Avg. Daily Volume	~108.2K (3 mos.)
Cash and Line of Credit	~\$14.8M**
Longer Term Debt	\$4.8M BDC & Govt.** \$4.0M debentures*

Analyst Coverage



David Martin



Bruce Krugel

*Convertible at \$0.23

** As of December 31, 2023

Products & Customers Across the Healthcare Industry



- + Supporting over 100 diagnostics, clinical lab, and lab-proficiency related customers worldwide



Medical Devices (QAPs™ & DxTM™) →

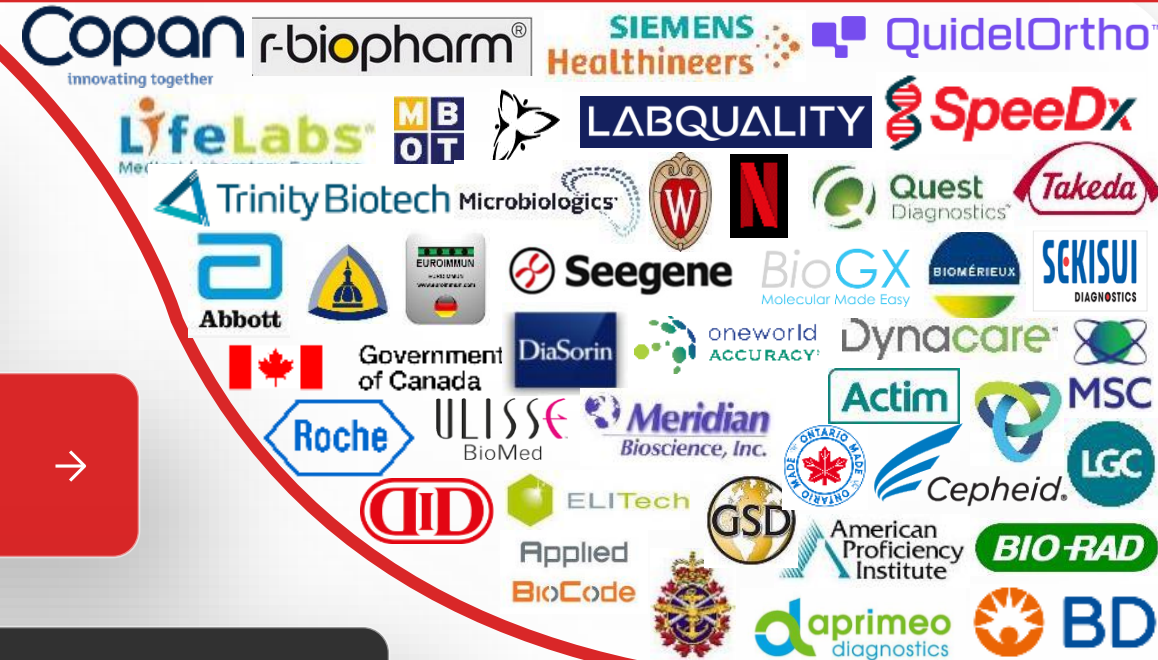


Test Ingredients (Dx Antigens) →



Kinlytic® (Fully-funded Rx program) →

Leveraging Microbix's experience to service the many needs of the global healthcare industry.



Microbix's Business Objectives – The Next Five Years

⊕ Attain Dx-Related Revenues of \geq C\$ 100 million per year by way of:



1. Cross-Selling – Sell every product category across existing customer-base of >100 Dx industry firms.



2. New Clients – Identify & secure new Dx industry clients with over C\$ 1 million per year sales potential.



3. New Product Classes – Creating or acquiring new product lines, across both user and test categories.



4. MDx & PoCTs – Support growth of Molecular and point-of-care-testing via value-added product lines.



5. Multiplex Tests – Support industry's move into multi-analyte tests for “syndromic” diagnoses.



6. Resistance/Variant Tests – Supporting tests for viral variants and for antimicrobial resistance.



Three Revenue Generating Divisions – Growth Opportunities for Microbix



MEDICAL DEVICES QAPs™, DxTM™ & Others

- QAPs mainly support accuracy of Molecular tests (MDxs), a growth market of ≥ US\$ 20 billion.
- Microbix is creating a growing portfolio of QAPs for its global MDx customers.
- MDx-based Point-of-Care-Tests (PoCTs) are largest near-term opportunities for QAPs sales.
- Sales of DxTM & reagents provide further Dx sector opportunities.

TEST INGREDIENTS Antigens

- Antigens to make immunoassays – tests detecting antibodies to pathogens in blood samples.
- The global Immunoassay market was US\$ 28.5 billion in 2021.
- The antigen market is estimated at ~5% of assay selling price and native antigens, MBX's area of expertise, is estimated at ~10% of the antigens market.
- China is the major growth market for native antigens.

KINLYTIC UROKINASE

- 2023 MBX announced Kinlytic to return to the U.S. market under an agreement with Sequel Pharma, LLC that is to provide an estimated C\$ 50 million in pre-launch project-related funding.
- The U.S. monopoly market for tPA is > US\$ 350 M is for the catheter clearance sub-indication.
- Potential for Microbix to receive US\$ 15-25M/yr in royalties from this market & sub-indication.

QAPs™ – Ensuring Test and Test-Workflow Accuracy

Example: QAPs™ Human Papillomavirus (HPV) MDx Panel

For use in laboratory-based testing & referenced by Abbott, Becton Dickinson, Roche, & Others

MBX is the sole provider of quality control materials for HPV “extended genotyping panel” PCR tests

HPV molecular diagnostics market is ~US\$ 800M at YE 2022, with ~5% of that \$# becoming accessible to MBX.

MBX supporting launch & ongoing QMS for HPV assays of leading Dx systems (e.g., Abbott Alinity, BD COR, Roche cobas)

Providing quality control materials for lab-based assay verification/validation, site onboarding, etc.

Securing contracts to supply HPV quality control materials for cervical cancer screening

National-level programs being targeted (e.g., cervical cancer screening in The Netherlands & Ireland), alongside support for MDx rollouts across Canada and the United States.



QAPs™ – Ensuring Test and Test-Workflow Accuracy

Example: QAPs™ Supporting Point-of-Care Tests (PoCTs) across multiple pathogens & settings, such as on the QuidelOrtho “Savanna” and the Cepheid “GeneXpert” PCR-based instrument systems.

MBX uniquely able to provide FLOQswab® format control materials for PoCT support
Replicates the sample-collection workflow and provides consistent sample uptake and elution.

A MBX triplex STI swab QAPs supporting PoCT for *C. trachomatis*, *N. gonorrhea*, & *T. vaginalis*
Australia’s PoCT program successful in reducing rural community re-transmission of STIs.

MBX QAPs handling stability enables lab-level QMS in a wide range of settings
Validated stability ≥2 years at temperatures of up to 30°C – eliminating need for QMS cold-chain.

QuidelOrtho Receives 510(K) Clearance for Savanna® Multiplex Molecular Platform and Savanna® HSV 1+2/VZV PCR Assay – 20 December, 2023



Test Controls - Quality Assessment Products (QAPs™)

QAPs™ Competitive Advantages



Performance

QAPs are whole-genome and whole-workflow to prevent systemic errors



Formats

Having vials & FLOQSwab® formats enable support of both lab-based & point-of-care testing



Stability

Proven stability at room temp (swabs) or 2-8°C (vials) for up to two years



Multiplexing

Multiple pathogens loaded onto one QAP to support next generation test-platforms



Resistance/Variants

Supporting tests for viral variants and tests for antibiotic resistance







Intellectual Property

Defended by issued or pending patents of both Microbix and Copan



Test Controls - Quality Assessment Products (QAPs™)

+ Product Lines & Key Achievements

Product Line	Sales Potential Current & Targeted	Target Market(s)
	Currently ~C\$ 1M/yr Targeted ~C\$ 20M/yr	<ul style="list-style-type: none">• Licensed/ registered for sale in Canada, EU, U.S., and Australia• Sold directly to clinical lab chains or via distributors (via 10 Cos., into 30+ countries)• Targeting multiple lab and distributor accounts of >\$100K/year
	Currently ~C\$ 1M/yr Targeted >>C\$ 20M/yr	<ul style="list-style-type: none">• Often sold directly to Dx makers for inclusion with their test kit consumables• The larger Dx makers can become multi-million-dollar accounts
	Currently ~C\$ 1M/yr Targeted ~C\$ 5M/yr	<ul style="list-style-type: none">• Often sold directly to Dx makers that want a “white glove” new customer experience• Used to support IQ/OQ/PQ of newly-purchased instruments and to train technicians
	Currently ~C\$ 3M/yr Targeted ~C\$ 10M/yr	<ul style="list-style-type: none">• Sold directly to a limited pool of clinical lab accreditation organizations• Have already tripled sales from historic base of ~\$1.0M/year

+ **Over 200 SKUs at favorable gross margins (~60-70%)**

+ **Attained sales of over C\$ 5.0 M in FY2023, and targeted to nearly double for FY2024**

+ **Secured first major contract with large Dx maker to supply in-kit QAPs (with QuidelOrtho, #5 Dx Co. WW)**

+ **International sales into North America, Europe, and Australia**

Medical Devices – DxTM™ (VTM) & Other Testing-related Reagents

Sample Collection Devices (SCDs), Sample or Control Elution Buffers (CEBs)

Sales Potential for SCDs & test reagents

Most lab-based PCR tests conducted require a vial of VTM and other reagents, for which security and quality of supply is often questionable. Microbix has secured such business during the pandemic and is now working to secure a broader range of customers for such products & services.

Microbix can now produce at 100,000 vials/week and pending full-process automation increases that 5-10x for support of multiple products.

Normal-time pricing for SCD/VTM is in the range of CDN \$3-5 per vial.

Two orders from Ontario Govt. totaling C\$ 8.9 million were delivered across FY2021 & FY2022.

Multiple SCD product opportunities to develop. DxTM sales to continue.



Gross margins from reagents production are favourable and other clients are now being pursued. SCDs & CEBs therefore represent a large and sustainable value-creation opportunity.

Test Ingredients - Antigens

Grows, purifies, and inactivates native bacteria and viruses for use as antigens for more than 100 leading international diagnostic companies. Microbix provides antigens on a large scale for major international diagnostic manufacturers, most often as a critical sole-source supplier.



ToRCH Antigens – Worldwide commercial leader



Respiratory Antigens – Broad range of pathogens



Childhood Disease Antigens – Unique offerings



Sexually Transmitted Infections – Full range



Tropical Disease Antigens – Insect-borne pathogens



Test Ingredients - Antigens

Growth Outlook for this Business Area

In FY2023, Antigens comprised ~50% of sales, down from 90% historically due to growth of other segments.

During the pandemic, Antigen sales suffered due to reduced testing for non-pandemic diseases.

In FY2023, antigen sales have started to return to pre-pandemic levels and remain a growth area for Microbix.



~50%
of sales

- ✓ As healthcare re-stabilizes, Antigen sales should benefit from greater global attention to respiratory and infectious disease testing following the COVID-19 pandemic.
- ✓ In the more mature markets of the USA and Europe, growth can be derived from expanding relationships with established diagnostics company clients.
- ✓ Further growth likely from adoption of public health-oriented immunoassays in new regions, such as Asia-Pacific nations.
- ✓ Microbix antigens are already being incorporated into dozens of tests seeking approval for use in China – for a large emerging-market opportunity.
- ✓ Improvements to processes, including the use of bioreactor technologies for production of multiple antigens, promise to enhance realizable gross margins for this segment.

Kinlytic - Microbix Secures Agreement With Sequel Pharma, LLC

In an agreement with Sequel Pharma, LLC, MBX is developing Kinlytic for market re-entry, initially into the U.S. market for the venous catheter-clearance sub-indication.

- ✓ In May 2023, MBX announced program to return Kinlytic to the U.S. market under an agreement intended to provide an estimated C\$ 50 million in pre-launch project-related funding from Sequel and its backers.
- ✓ Sequel specializes in developing and commercializing drugs for the U.S. market and is fully backed by a leading global life sciences private equity firm (U.S.-based).
- ✓ Kinlytic will initially be returned to market to dissolve blood clots in venous catheters in the U.S. (via sBLA), however, it is intended for its use to expand to other geographies and clinical indications.
- ✓ Sequel and Microbix undertook new consultations with the U.S. Food and Drug Administration ("FDA") and received updated guidance on the process for filing the supplemental Biologics Licensing Application ("sBLA").
- ✓ Microbix has received US \$ 4.0 million thus far and, in March 2024, Sequel executed a multi-million-dollar contract for production of new "Drug Substance" with a leading contract development and manufacturing organization (CDMO). In approximately three years, we are targeting FDA re-approval, sales-driven milestone payments of US\$ 30 million, and ongoing royalties targeted to be a double-digit percentage of net sales.

Kinlytic® Urokinase

Partnering with Sequel Pharma for re-launch of a LMW cell-culture derived urokinase

Kinlytic® Urokinase

Microbix's expertise in biologicals led to its securing rights to this clot-buster drug, that is approved in the U.S. and Canada for two clinical indications (clearing catheters & pulmonary emboli).

- To resume sales, production at a new site must be validated as equivalent to past batches.
- A path to market settled with U.S. FDA, with CDMOs to make drug substance & drug product.
- The U.S. monopoly market for tPA is ~US\$ 350 M for the catheter clearance sub-indication.

Specific Kinlytic Activities:



Refined Project Scope
Catheter Clearance
Indication U.S. market as
initial value-driver



Established Precise Costs
Quotes from qualified vendors
Removed risk for partners



Prepared Due Diligence
Data Room & detailed project
Plans ~ 3 years to market
post-funding



Pre-launch funding of
~US\$ 35M secured to fully
underwrite project cost & risk

Sequel Pharma has the funding and technical expertise to help return Kinlytic to market, which represents a massive opportunity via sBLA, sales-driven milestone payments of up to US\$ 30 million, and ongoing royalties targeted to be a double-digit percentage of net sales.

Operations - Developing New Products & Increasing Revenue Base

+ Microbix's product lines are rapidly expanding, as is our base of customers.

- + June 2023 – **Scandinavia Genital Ulcer Diseases** – EQA Program with Labquality OY
- + July 2023 – **Netherlands HPV Screening Program** – QAPs supporting BD “COR®” system
- + July 2023 – **Bacterial STI Test Support** – Using fourplex QAPs on Copan FLOQSwabs®
- + September 2023 – **C\$ 1.0+ Million in QAPs orders** – From QuidelOrtho for support of “Savanna™” systems
- + October 2023 – **Ireland HPV Screening Program** – QAPs supporting Roche “cobas®” system
- + November 2023 – **HPV testing collaboration** – with Ulisse Biomed on “Hyris bCUBE™” systems
- + December 2023 – **PoCT syndromic testing** – with BioGX on pixl™ platform
- + December 2023 – **Lab-based multiplex testing** – with Seegene USA on Novaplex™ & Allplex™
- + January 2024 – **C\$ 1.0+ Million in QAPs orders** – From one Clinical-Lab Proficiency-Testing & Accreditation Agency
- + February 2024 – **Novel Test Control for Gastric Ulcer Disease Testing** – FLOQSwab-formatted QAP for H. pylori assays
- + March 2024 – **Novel Test Control for Head & Neck Cancer Testing** – Extending QAPs sales into oncology & histology

Operations - 2023 Highlights



- Microbix now has approximately 110 staff
- CE Mark and/or FDA Registrations for over 50 IVD “REDx” Molecular Test Controls
 - FLOQSwab & Vial Formats
 - Single & Multiplex High-Risk HPVs
 - SARS-CoV-2 variants
 - Regular & AMR *M. genitalium*
 - Single & Multiplex Respiratory
 - Single & Multiplex STIs
 - Negative Controls w. Sample Adequacy
 - Developing new categories & formats
- 235 Watline Avenue (building 2) built-out fully completed and operational
 - Semi-auto liquid-vial format QAPs Mfg. suite – 150,000/month capacity
 - Semi-auto dried-swab format QAPs Mfg. suite – 200,000 swabs/month capacity
- 275 Watline Avenue (building 3) leased July 2021
 - Full-auto line for DxTM to be installed in F2024 – adaptable to other SKUs
 - Further Product Development & QC Lab Space now being built-out
- Evolving Organizational Structure
 - New IT Department Operationalized
 - Electronic QMS – MasterControl successfully being implemented
 - New ERP – NetSuite successfully implemented



Financials – A Review of Fiscal 2023

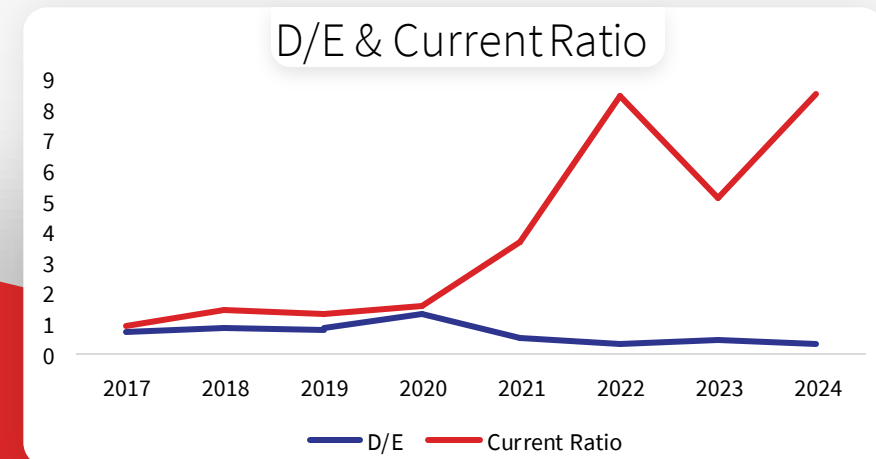
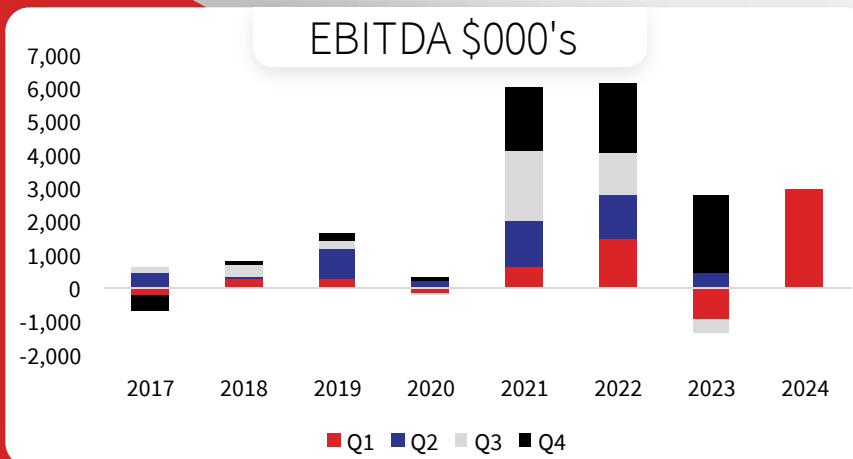
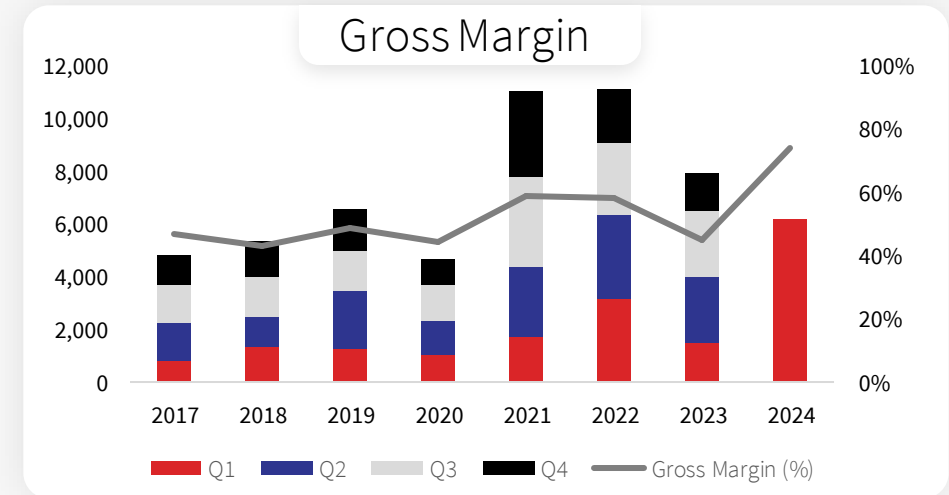
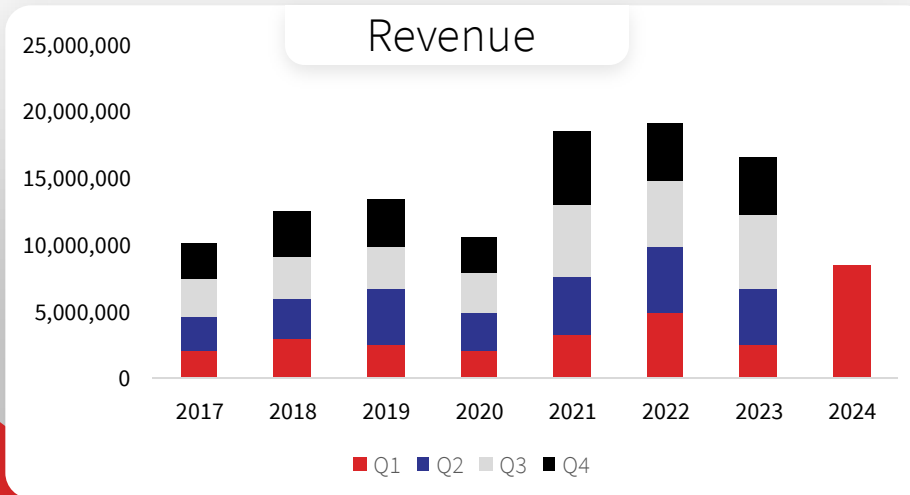
+ A year of repositioning and capacity building

- Revenues down from FY2022 as Microbix & its customers adjusted to post-pandemic conditions
- In f2023, created & launched 34 new QAPs and added to its base of major Dx industry clients, sales flattish, but poised for FY2024 breakout.
- Test ingredients (Antigens) sales recovered toward pre-pandemic levels, trending toward C\$ 1.0 million/month.
- Gross Margin under pressure due to greater proportion of lower margin ingredients sales and hiatus in DxTM reagent sales, also made major IT investments.
- Kinlytic partnership secured and successful U.S. FDA consultation for full project funding green-lighting.
- Strong financial position, with > C\$10 million in cash and profitability in Q4 FY 2023 and across FY 2024. Positioned to deliver share price growth.



Financials – The Past Several Years

+ Financial Results – 2017 to 2024 YTD



Financial
Performance

Key Takeaways about Microbix

+ Highlights & Catalysts



Creating, manufacturing, & selling innovative & proprietary products at high gross margins.



TSX-listed, on OTC QX, positive Earnings & Cash Flow outlook, equity analyst coverage, and decent trading volume.



Leadership, skills, systems, and facilities, that fulfill current needs and will enable the development of new products and acquisition of new customers.



Large opportunities across some of the most important and fastest growing segments of the global diagnostics industry



Successfully managing multiple lines of business & many customer relationships



Strong cash balance and working capital, low leverage, and to resume repurchasing shares (via NCIB).



Accreditations to enable WW sales to >30 countries, including ISO 13485, PHAC & Health Canada, U.S. FDA, EU (CE Mark), & TGA (Australia).



Expanding range of products & customers, including formal supply agreements with major test-makers

THANK YOU



Corporate Presentation – Spring, 2024

Cameron Groome

CEO, President, and Director
cameron.groome@microbix.com

