

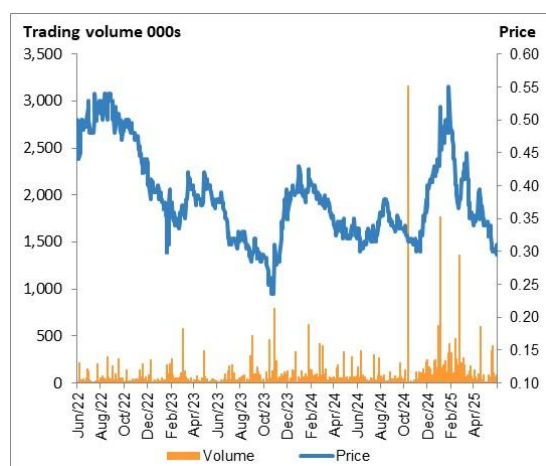
## Microbix Biosystems Inc.

20 June 2025

MBX-T: \$0.30, MBXBF-OTC: US\$0.23

Bruce Krugel 416-509-5593

Price	\$0.30	Market Cap	\$41,604
Target Price	\$0.50	Debt	\$5,351
Projected Return	69%	Cash	-\$14,539
52 Week Range	0.55/0.29	EV (\$000s)	\$32,416
Basic Shares ('000's)	141,032		
FD Shares ('000's)*	172,092		
Insiders	16.0%		
Y/E September	2023	2024	2025E 2026E
Revenues (\$000s)	16,515	25,394	19,226 22,424
EBITDA (\$000s)	1,499	5,518	949 1,883
Adj. EBITDA** (\$000s)	-2,530	2,102	949 1,883
FDEPS	0.00	0.02	-0.01 0.00
EV/EBITDA	21.6x	5.9x	34.2x 17.22x
*Assumes conversion of CD			
**= Adj EBITDA excludes impact of Kinlytic progress payments			



## Profile

Microbix Biosystems Inc. (MBX-T) is a Canada-based life science company and manufacturer of viral and bacterial antigens and cell, culture-based biological products, and technologies. MBX's catalogue of antigens covers +30 bacterial and viral pathogens implicated in maternal, pediatric, childhood, respiratory, sexually transmitted, and insect-borne diseases. MBX is now focusing on a higher growth opportunity: its QAPs™ product line (~300 SKUs), targeting quality controls within accreditation organizations, IVD equipment manufacturers, and clinical laboratories. Microbix also has a fully funded biologic thrombolytic drug program, Kinlytic® urokinase, which is targeted to return to the U.S. market by way of an sBLA filing in 2027.

## Disclosure

Please refer to the important disclosures on page 18.

### FQ2/25 REVIEW: REVENUE OUTLOOK TEMPERED BY LOSS OF CHINA AND LOWERED QAPS RAMP DUE TO CLIENT PRODUCT TERMINATION. LOWERING TARGET TO \$0.50 (FROM \$1.00).

- **Soft revenues:** FQ2/25 total revenues declined 5.5% to \$5.3m. By product line, **Antigen** sales grew +5.0% as new products drove continued expansion into Asia. This was offset by softer-than-expected **QAPs™** sales (-38.2%) which were driven by customer seasonality.
- **Outlook reduced:** MBX guided to a challenging second half of 2025, particularly a slowdown in antigen sales to China due to reduced respiratory infections during the Chinese New Year. This market was the primary growth driver for Antigens. However, QAPs™ sales are expected to rebound in the latter half of the year after a soft FQ2/25 with seasonality abating and new customer onboarding driving longer-term growth.
- **Strong gross margins:** Gross margins of 59.5% vs 54.3% in FQ2/24, were favourably impacted by fixed cost recoveries, improved yields, reduced scrap rates, and process improvements in the antigens business. MBX also benefited from digitization, automation, and enhanced manufacturing efficiencies.
- **Operating Expenses:** Total operating expenses were +19.0% over FQ2/24, in line with our expectations. MBX continues to invest in research and development, and sales and marketing, to support future growth.
- **EBITDA:** With regards to the base business, the net effect of lower revenues, higher gross margin and higher expenses resulted in an adjusted EBITDA margin of 11.4% vs 15.3% in FQ2/24.
- **Cash Position:** Cash increased sequentially by \$1.5m to \$14.5m. Principal contributors to this movement include: \$967k cash provided by operating activities and \$2.7m proceeds from the exercise of warrants; offset by \$245k of capex, \$1.2m repayment of long-term debt; and \$744k repurchase of common shares.
- **Kinlytic Update:** We continue to expect sBLA approval in late calendar 2027 along with the final development milestone royalty of US\$1.0m at that time. Once the product is sold commercially, sales milestones and ongoing royalties will apply.
- **Valuation:** MBX guided to a challenging back half of F25. We have lowered both our Antigen and QAPs™ forecasts resulting in a lowered target price of \$0.50 (formerly \$1.00), derived from a sum-of-the-parts approach: an EV/EBITDA multiple for the base business, supplemented by a \$40.0m valuation for the Kinlytic® urokinase development asset. We will reassess the valuation of Kinlytic® urokinase following the sBLA filing, which could lead to an adjustment of the target price of up to a net \$0.77 based on an estimated 2033 after-tax earnings contribution of \$0.11 per share, discounted at 10% per annum.

## Revenues

MBX's strategic focus is to transition from manufacturing less-regulated test ingredients (Antigens) to producing a portfolio of clinically significant and fully regulated medical devices (QAPs™) for infectious-disease diagnostic testing.

While the current quarter showed the continued trend of Antigen revenue growth outpacing that of QAPs™ revenue growth, this is going to change over the coming quarters due to the impact of two variables, discussed in more detail in the following section, Customer Change.:

- **Antigens.** The (potential temporary) loss of MBX's largest Antigen client with multiple end users in China.
- **QAPs™.** The termination by QuidelOrtho's (QDEL-Q) of its Savanna platform.

Throughout this report we refer to the "base business" as being the business excluding any Kinlytic® royalties.

The base business revenues declined -5.5% to \$5.3m from \$5.6m in the prior year (Figure 1) due to the decline in QAPs™ sales. There were no Kinlytic® royalties recognized during the quarter, as expected.

Figure 1: MBX revenues (\$'000's)

	FQ2/25	FQ2/24	% change	Explanation
Antigen products	4,318	4,111	5.0%	Increased global testing for multiple respiratory pathogens and the wider use of certain public health tests in the Asia Pacific region.
QAPs™	864	1,400	-38.2%	Transient reduction in QAPs revenue due to seasonality and a customer shifting from parallel to serial development of assays.
Royalties	143	122	17.4%	
Base business	5,325	5,633	39.9%	
Kinlytic® royalties	-	-		Receipt of final royalty payment expected F27E.
Total revenues	5,325	5,633	-5.5%	

Source: Company reports; KRC Insights

**Antigen products.** Antigen revenues grew 5.0% YoY as new products drove continued expansion into Asia, principally due to the uptake of respiratory-oriented antigens into immunoassays in Asian markets through the company's distribution partner.

The Antigen business exhibits some variability (Figure 2), as it is dependent on the purchasing patterns of a small number of larger customers, including the increasingly important Asian distributor. The ramp-up of the Asian distributor was the primary driver of revenue growth over the past 4 quarters.

Figure 2: MBX Antigen revenues (\$'000s)

Fiscal year	FQ1	FQ2	FQ3	FQ4	Full year
2019	2,341	3,736	2,792	3,112	11,981
2020	1,946	2,358	2,246	2,138	8,688
2021	2,138	2,524	2,399	2,021	9,082
2022	1,766	1,608	2,284	2,630	8,288
2023	1,004	3,005	2,609	2,975	9,592
2024	1,954	4,111	3,276	4,472	13,814
2025	4,267	4,318			

Source: Company reports

**QAPs™.** QAPs™ revenues declined by -38.2% YoY, due to two key factors: (1) a major customer shifted from parallel to serial assay development, delaying revenue, and (2) timing issues with a particular client's proficiency testing shipments, which reduced QAPs™ revenue for the quarter.

## Customer changes

MBX has experienced two significant customer changes over the recent past:

- **Antigens.** On April 8, 2025, MBX press released that sales into China had abruptly halted due to an unusually light burden of respiratory infectious diseases over the 2025 Chinese New Year holidays. China had been the largest contributor to Antigen growth over the past two years. China accounted for over 40% of antigen sales in F2024 and was of similar size in the first half of F2025. From our perspective, it is unclear whether the Chinese distributor's decision was political, given the current tariff disputes<sup>1</sup>, or related to market demand.
- **QAPs™.** On June 3, 2025, QuidelOrtho Corporation (QDEL-Q) announced that it planned to discontinue Savanna® platform development and instead acquire LEX Diagnostics, a company in which it had invested in December 2023 with the option to acquire it upon 5510(k) clearance. Termination of Savanna RVP4X was driven by several factors including its recent poor Savanna clinical trial results. QDEL was a significant contributor to our F2025 and F2026 QAPs™ revenue growth forecasts as MBX was to supply QAPs kits for Savanna panels following regulatory approval. We understand that LEX currently uses ZeptoMetrix controls, and consequently, we believe that MBX will not supply QAPs™ for the LEX platform without further successful business development efforts.

## Gross Margins

FQ2/25 gross margins were 59.5% vs 54.3% in FQ2/24, (Figure 3) and were favourably impacted by operational upgrades, including better yields, reduced scrap rates, and process improvements in the antigens business. The company also benefited from digitization, automation, and enhanced manufacturing efficiencies.

Figure 3: MBX gross margins

	FQ2/25	FQ2/24
Total gross margin	59.5%	54.3%
Base business gross margin*	59.5%	54.3%

Source: Company reports; KRC Insights      \* = excludes impact of royalty payments and license fees

The quarterly trend in gross margins for the base business is shown in Figure 4.

<sup>1</sup> MBX's Chinese distributor is US-based.

Figure 4: MBX base business gross margins\*



Source: Company reports, KRC Insights \*excludes license payments

The margin results exceeded management's short-term target of over 50%, approaching the longer-term goal of approximately 60%.

To recap, several factors influence margins:

- **Sales Mix:** There is inherent variability within the Antigen portfolio, both on a product-by-product and lot-by-lot basis. Gross margins are expected to benefit from the contribution of higher-margin QAPs™ revenues, which positively impact the overall margin profile.
- **Manufacturing Process:** MBX continues its transition from roller bottles to bioreactors. In FQ3/24, a second bioreactor line was brought online, and while an increasing portion of the Antigen business is now bioreactor-based, certain products, such as Mycoplasma, are still undergoing the transition.
- **Manufacturing Volume:** MBX has significantly expanded its production capacity for multiple Antigen products. Consequently, the increase in fixed costs relies on higher sales volumes for recovery.
- **Capacity Expansion:** In addition to increasing production capacity, MBX has made substantial investments to modernize its manufacturing operations (Figure 7). Key initiatives include the implementation of an Enterprise Resource Planning (ERP) system and the transition to a paperless Quality Management System (eQMS). While these investments are crucial for long-term growth and operational efficiency, they may exert a short- to medium-term pressure on margins.

## Operating Expenses

Total operating expenses increased 19.0% in FQ2/25 over FQ2/24 (Figure 5), in line with our expectations, as MBX makes investments in research and development, as well as in sales and marketing, to support future growth.

Figure 5: MBX expenses (\$000's)

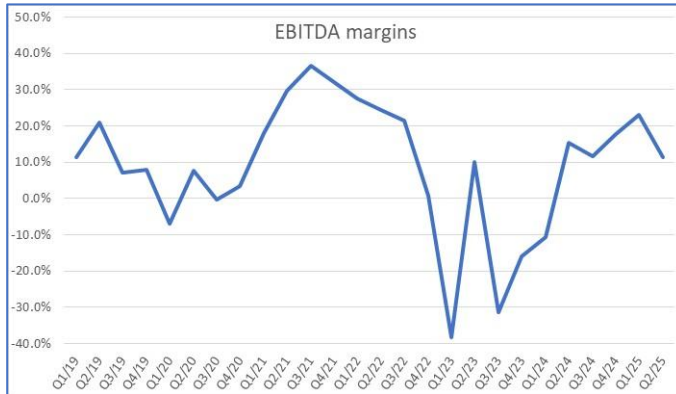
	FQ2/25	FQ2/24	% change
Selling and business development	455	373	
General and administrative	2,025	1,643	
R&D	510	496	
<b>Total operating expenses</b>	<b>2,990</b>	<b>2,512</b>	<b>19.0%</b>

Source: Company reports; KRC Insights

## EBITDA margin

With regards to the base business, the net effect of lower revenues, higher gross margin and higher expenses resulted in an adjusted EBITDA margin of 11.4% in FQ2/25 vs 15.3% in FQ2/24. (Figure 6).

Figure 6: MBX base business EBITDA margins\*



Source: Company reports; KRC Insights \*excludes license payments; The low point in Q1/23 was due to \$1.0m VTM write down.

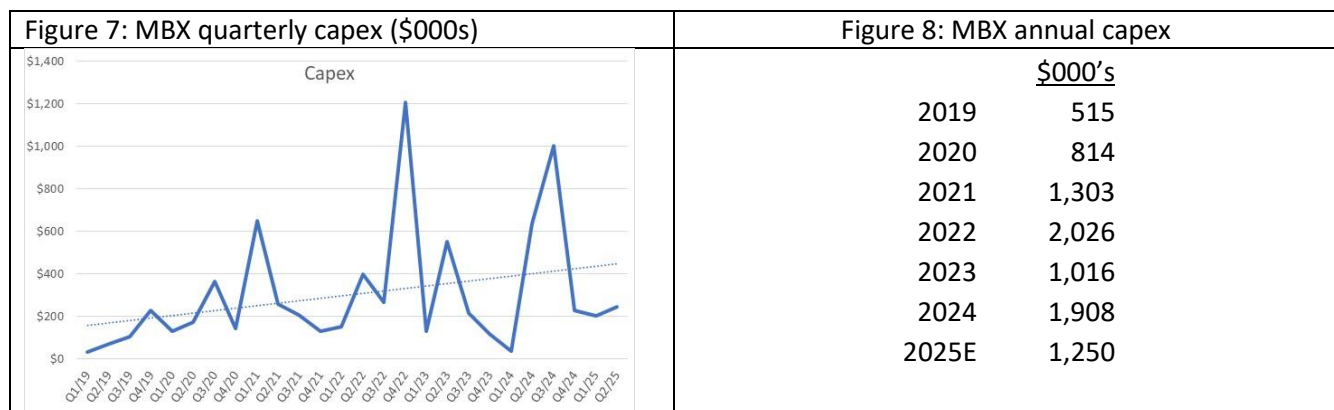
## Cash Flow and Balance Sheet

In FQ2/25, MBX reported a sequential increase in cash balances of \$1.5m vs FQ1/25 to \$14.5m from \$12.9m.

Principal contributors to this movement include:

- \$967k cash provided by operating activities; and
- \$2.7m proceeds from the exercise of warrants; offset by
- \$245k of capex (Figure 7);
- \$1.2m repayment of long-term debt; and
- \$744k repurchase of common shares.

**Capex.** MBX has made significant investments in manufacturing capacity expansion (Figure 7). Management expects capex in F25E will be ~\$1.25m (formerly \$2.0m) with the focus on additional equipment for the lab, equipment upgrades/ replacement and capacity expansion (Figure 8). This suggests that capex will average roughly \$400k/quarter over the remaining 2 quarters of F2025.



Source: Company reports; KRC Insights

As we have stated prior, management estimates that these expansions will support a >\$50m revenue run rate.

**Mortgage.** At FQ1/25, MBX had a mortgage of \$ 1.2m. On 26/3/25, MBX announced that it had repaid this mortgage resulting in annual interest and principal repayments savings of \$180k.

MBX has made effective use of government funding for its capex as shown by long-term debt (Figure 9).

Figure 9: MBX total debt at FQ2/25 (\$000's)

	Current	Non-current	Total	Detail
Long term debt	5.1	2,576.0	2,581.1	Low interest govt loans: Ontario govt \$2.4m,
Lease liability	92.7	535.0	627.7	Covers three facility leases
Convertible Debentures		2,141.7	2,141.7	Debentures mature on 9/28 and 1/29, bear interest at 9%, and have a face value of \$4.0m. These are in-the-money and most likely will be converted.
<b>Total debt</b>	<b>97.8</b>	<b>5,252.7</b>	<b>5,350.5</b>	

Source: Company reports, KRC Insights

The debt is well covered (Figure 10).

Figure 10: MBX FQ2/25 total capital employed (\$000s)

	31/3/25
Share capital	50,990.0
Equity component of CDs	2,272.6
Contributed surplus	10,316.0
Accumulated deficit	-32,513.6
<b>Total equity</b>	<b>31,065.0</b>
<b>Total debt</b>	<b>5,350.5</b>
<b>Total capital employed</b>	<b>36,415.5</b>

Source: Company reports, KRC Insights

**Warrants/Options/NCIB.** During FQ2/25, MBX benefitted from the exercise of 6.7m warrants (\$2.4m in proceeds<sup>2</sup>); and the exercise of 1.5m options (\$0.4m in proceeds). It also repurchased and cancelled 3.2m shares through its normal course issuer bid (NCIB) at a cost of \$744k. MBX's updated share count is shown in Figure 11:

Figure 11: MBX fully diluted share count (000s)

	Shares	Options	Warrants	Convert. Deb	Total
<b>At 31/3/25</b>	<b>141,032</b>	<b>13,669</b>		<b>17,391</b>	<b>172,092</b>

Source: Company reports, KRC Insights

<sup>2</sup> PR dated 4 Feb, 2025

## Estimates

### Revenues

The outlook for the second half of the year is expected to be challenging for MBX. Firstly, there is the slowdown in antigen sales to China, secondly, compounded by the termination of QDEL's Savanna platform impacting QAPs™ revenues. This is offset to some extent by seasonal rebound from existing QAPs™ customers.

During the FQ2/25 conference call management provided the following updates:

- **Antigens:** Microbix experienced a reduction in sales of certain respiratory-oriented antigen products into China. This is due to a lower incidence of bacterial pneumonias in China over the 2024-2025 Chinese New Year period, which typically sees a high volume of travel and spread of respiratory infections. Consequently, the MBX distributor and its clients are pausing their purchase of ingredients until the existing inventory is sold through or expires. Hence, test sell-through was limited suggesting that China has sufficient Antigen inventories for the short- to medium-term.
- **QAPs:** Despite the temporary slowdown in FQ2/25 sales, MBX has been acquiring and onboarding new clients, including some of the largest companies in the field with significant instrument installed bases. This process involves multiple stages, starting with product development and pilot lots, and eventually leading to commercial reorders. Although this process takes multiple quarters, the company is confident that the pipeline will continue to grow and result in significant revenue expansion. Consequently, over the short term, we expect a rebound to \$2.0m/quarter commencing in FQ3/25.

QDEL's termination of its Savanna platform previously represented a key growth initiative for QAPs™ revenues. However, QDEL hosted a June 3, 2025 conference call dealing with this termination, and the acquisition of LEX Diagnostics in its stead, and provided the following updates:

- **Decision to Discontinue Savanna:** QDEL discontinued the Savanna platform development due to the recent clinical trial results for the respiratory panel not meeting required standards of performance. The decision was made after considering the incremental time, cost, and risk associated with further development.
- **Technology.** The LEX technology is based on a PCR molecular thermo-cycling engine<sup>3</sup>, making it unique and enabling very fast assay speeds.
- **Timing.** LEX is expected to file a dual 510(k) and CLIA-waiver submission to the FDA soon with clearance expected in late 2025 or early 2026, depending on FDA review timings.
- **Evaluation Process:** The decision to end Savanna was made after an extensive evaluation of both the Savanna and LEX platforms. The evaluation focused on critical factors such as clinical performance, incremental investment, and market potential. The LEX platform was found to offer important performance advantages and a clearer path to growth.
- **Strategic Fit and Future Focus:** The LEX platform was identified as a better strategic fit within QuidelOrtho's Point of Care portfolio. QDEL sees near-term opportunities to expand the LEX platform's menu beyond flu and COVID, moving further into the respiratory space, women's health, and other assays.
- **Financial Impact:** The discontinuation of the Savanna platform will result in a one-time non-cash write-off of approximately US\$130m-US\$150m in assets, primarily related to manufacturing equipment and

<sup>3</sup> MBX supports PCR (polymerase chain reaction) assays by providing quality assessment products (QAPs™) used in diagnostic workflows.



inventory. However, this is not expected to negatively impact the company's adjusted EBITDA or adjusted EPS 2025 guidance.

For F25 and F26 we have lowered our total revenue forecasts, accounting for the loss of China and the anticipated QDEL impact on QAPs (Figure 12).

Figure 12: KRC Insights' MBX Revenue Forecasts (\$'000's)

Sept. year-end	F2025E	F2026E	Description
<b>Antigen products</b>	12,184	12,794	Expecting moderate recovery in F26 after loss of Chinese business in back half of F25.
% growth	-11.8%	5.0%	
<b>QAPs™</b>	6,491	9,088	After accounting for the loss of QDEL's anticipated Savanna business, we still expect growth in screening for human papillomavirus (HPV) and emerging pathogens like the H5N1 virus. Additionally, MBX is expanding its QAPs™ business into new addressable markets, including genetics testing and oncology.
% growth	-7.5%	40.0%	
<b>Royalties</b>	550	542	
% growth	-88.0%	-1.4%	
<b>Sales of base business</b>	19,226	22,424	
% growth base business	-24.3%	16.6%	
<b>Kinlytic® urokinase royalties</b>	-	-	No royalties forecast until F27E, when US\$1.0m is due upon FDA acceptance of the sBLA to be followed by potential sales milestone payments.
<b>Total sales</b>	19,226	22,424	
<b>Total revenue growth</b>	-24.3%	16.6%	

Source: KRC Insights

Consequently, for the base business we are forecasting a decline of -24.3%. YoY, for F25E and a 16.6% recovery in F26 driven primarily by QAPs™.

An overview of the QAPs™ product line is shown in Appendix II.

### Gross Margins

Gross margins in FQ2/25 were a strong 59.5%. However, due to the capacity expansion covered above and the forecast lower sales, fixed costs will be recovered over a lower sales base resulting in margins in the low 50%-range for the balance of F25, expanding in F26 off the higher revenue base.

### EBITDA Margins

Factoring in declining revenues, lower margins and a static cost base, we forecast that EBITDA margins will decline to 5.1% in F25E recovering to 8.6% in F26E (Figure 13).



Figure 13: MBX EBITDA forecasts (\$'000s)

Sept. year-end	2024	F2025E	F2026E
EBITDA	5,518	949	1,883
Margin %	21.7	4.9	8.4
Adj. EBITDA*	2,102	949	1,883
Margin %	10.1	5.1	8.6

Source: KRC Insights

Adj EBITDA excludes the impact of Sequel license payments i.e. represents the base business only

## Valuation

From macro perspective, we compare the MBX share price performance against a Medical Devices ETF over the past 12 months.

MBX shares have underperformed those of the iShares U.S. Medical Devices ETF (IHI-N), generating a 12-month return of -3.1% vs 7.3% of the ETF (Figure 14). IHI is a ~US\$4.6bn ETF and its holdings comprise, amongst others, several MBX customers. It offers exposure to U.S. companies that manufacture and distribute medical devices and is used to express a sector view.

The recovery in the MBX shares from the lows of December 2024 can be ascribed to the recovery in the base business as evidenced by the FQ4/24 and FQ1/25 results and the anticipation of the continuation of growth into F2025 and F2026.

Figure 14: MBX share price vs iShares U.S. Medical Devices ETF (pricing at 19/6/25)



Source: Respective exchanges, KRC Insights

To provide context for the 7.3% increase in the ETF share price over the past 12 months, we provide some granularity (Figure 15) limited to our subset of MBX comparable companies, some of which are included in the IHI ETF.

This comparable group of companies has experienced an average -22.2% decline in their share prices over the past year vs +7.3% for the ETF (Figure 15). This -22.2% decline (Figure 15) is materially influenced by:

- Bio-Techne Corp (TECH-Q): Bio-Techne's stock has declined due to flat revenue growth, margin pressure, China weakness, cost & tariff headwinds, and lower-than-expected earnings. Despite its Diagnostics segment seeing strong growth, the broader execution and macro trends have resulted in a valuation de-rating.
- Thermo Fisher Scientific (TMO-N): Sector wide spending cuts as large pharma and biotech firms have reduced budgets, cutting purchases of high-cost lab equipment and services and NIH funding uncertainty stemming from grant caps, funding delays, and policy shifts which is dampening research capital expenditures.

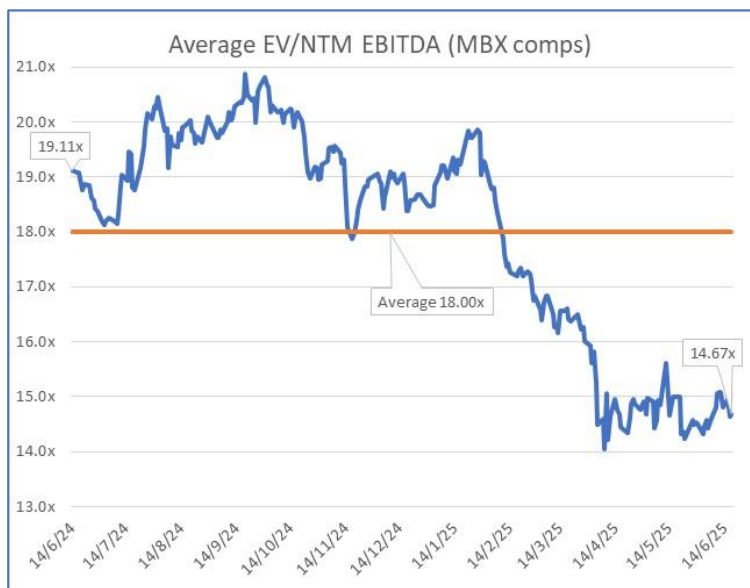
Figure 15: 12-month changes in share prices and NTM EBITDA forecasts (as of 19/6/25)

	Symbol	12-month change in share price %	12-month change in NTM EBITDA %	12-month change in EV/EBITDA multiple %
Microbix Biosystems Inc	MBX.TO	-3.1%		
Bio Rad Laboratories Inc	BIO.N	-19.7%	-12.7%	-12.2%
Bio-Techne Corp	TECH.O	-32.7%	-0.1%	-33.1%
Danaher Corp	DHR.N	-24.5%	-1.9%	-22.4%
DiaSorin SpA	DIAS.MI	-4.9%	10.9%	-16.3%
QuidelOrtho Corp	QDEL.O	-20.4%	1.6%	-10.7%
Thermo Fisher Scientific Inc	TMO.N	-31.0%	0.1%	-28.7%
Average		-22.2%	-0.3%	-20.6%

Source: KRC Insights

The average EV/NTM EBITDA multiple of this group (Figure 16) has declined from 19.1x to 14.7x over the 12 months (averaging 18.0x for this period). This valuation multiple decline is a function of share price declines exceeding NTM EBITDA forecasts growth reflecting cautious investor sentiment.

Figure 16: MBX comps trend in NTM EV/EBITDA



Source: KRC Insights

The comparable company valuation table is shown in Figure 17. We compare MBX's valuation of its base business (Antigens and QAPs™), excluding the Kinlytic® urokinase asset as it is valued separately.

Based on its base business, MBX is currently trading at a premium to its peer group on an EV/2026E EBITDA basis (17.2x vs 13.8x). This is the first time that MBX is trading at relative valuation premium to its peers since we initiated coverage in November 2020.

Figure 17: MBX and comparable companies' valuations (pricing at 19/6/25)

					EBITDA		Revenues		Rev	EV/EBITDA		EV/Revenues	
	Symbol	Price	Mkt Cap	EV	2024	2026E	2024	2026E	Growth (p.a.)	2024	2026E	2024	2026E
Microbix Biosystems Inc*	MBX.TO	0.30	41.6	32.4	2.1	1.9	24.0	22.4	-3.4%	15.42x	17.22x	1.35x	1.45x
Bio Rad Laboratories Inc	BIO.N	232.00	6,405.0	5,946.5	468.2	457.4	2,578.3	2,609.7	0.6%	12.70x	13.00x	2.31x	2.28x
Bio-Techne Corp	TECH.O	50.13	7,858.7	8,048.1	402.0	454.6	1,159.3	1,285.5	5.3%	20.02x	17.70x	6.94x	6.26x
Danaher Corp	DHR.N	194.44	139,154.8	153,646.8	7,567.9	8,277.9	23,779.1	26,058.2	4.7%	20.30x	18.56x	6.46x	5.90x
DiaSorin SpA**	DIAS.MI	93.04	5,205.4	5,838.7	391.2	477.1	1,191.3	1,355.0	6.6%	14.93x	12.24x	4.90x	4.31x
QuidelOrtho Corp	QDELO	28.33	1,915.8	4,288.4	545.1	658.3	2,774.2	2,830.1	1.0%	7.87x	6.51x	1.55x	1.52x
Thermo Fisher Scientific Inc	TMO.N	392.56	148,189.0	176,526.0	10,797.7	11,898.9	42,779.3	46,359.6	4.1%	16.35x	14.84x	4.13x	3.81x
Totals/Average							74,261.6	80,498.0	4.1%	15.36x	13.81x	4.38x	4.01x
*Forecasts for base business only as KU asset valued separately													
**=Euros													

Source: KRC Insights

Our valuation for MBX (Figure 18) is based on the following metrics:

- We apply a 17.0x EV/2026E EBITDA multiple – a premium to the average of MBX's US-listed peers of 13.8x (Figure 17) based on 1) our anticipation of a recovery of the China Antigen market; and 2) forecast QAPs™ revenue growth rate despite the loss of the forecast QDEL QAPs™ revenues.
- Our fully diluted number of shares anticipates the conversion of the convertible debenture (Figure 11).
- We ascribe a notional value for the Kinlytic® urokinase asset of \$40m (\$0.23cps) to provide recognition in the progress to re-commercialization and believe that the Sequel agreement validates this approach. There is no benefit in F25E or F26E from the Kinlytic® urokinase asset until the US\$1.0m due upon filing of the sBLA in 2027. We will adjust our valuation of Kinlytic® urokinase further once the sBLA is filed.

**We lower our target to \$0.50 (formerly \$1.00) derived from a sum-of-parts approach: 1) Valuing the base business by applying an EV/EBITDA multiple to the base business EBITDA, and then 2) adding \$40.0m (\$0.23cps) for the Kinlytic® urokinase development asset.**

Figure 18: MBX valuation (\$000s)

		F2026E
Adj. EBITDA (2026E)	\$000s	1,883
Multiple	x	17.0x
Enterprise Value	\$000s	32,005
Add: Cash 2026E	\$000s	13,640
Less: Debt 2026E*	\$000s	2,990
Implied market cap	\$000s	42,655
Kinlytic urokinase	\$000s	40,000
MBX valuation	\$000s	82,655
FD # shares*	000s	172,092
Share price	\$	0.48
Rounded	\$	0.50
*=assumes conversion of the CDs.		

Source: KRC Insights

\*\*= Adj EBITDA excludes the impact of Sequel progress payments and agents' commission i.e. represents the base business only

To provide context for our notional valuation of the KU asset, we estimate that MBX could earn \$.011/share from Kinlytic urokinase sales royalties in F2033. This represents the US market and catheter clearance only. Applying a 16.0x multiple and discounting at 10% p.a., we derive a potential valuation of \$1.00/share on this revenue stream. Our current valuation of \$40m equates to \$0.23/share implying a net increase of \$0.77 to our target price when we transition to this valuation approach post receipt of the sBLA.

Figure 19: MBX historical and forecast income statement (\$'000s)

Sept. year-end	\$'000's	2023	2024	Q1/25	Q2/25	Q3/25E	Q4/25E	2025E	2026E
Antigen products		9,592	13,814	4,267	4,318	1,800	1,800	12,184	12,794
% growth		15.7%	44.0%	118.4%	5.0%	-45.1%	-59.7%	-11.8%	5.0%
QAPs™		5,087	7,016	1,627	864	2,000	2,000	6,491	9,088
% growth		-5.4%	37.9%	-27.6%	-38.2%	19.8%	17.8%	-7.5%	40.0%
Royalties & Other		1,835	4,565	150	143	138	119	550	542
% growth		349.0%	148.7%	-96.4%	17.4%	2.0%	-4.1%	-88.0%	-1.4%
Total Sales		16,515	25,394	6,044	5,325	3,938	3,919	19,226	22,424
Total revenue growth		-13.4%	53.8%	-28.1%	-5.5%	-22.2%	-37.7%	-24.3%	16.6%
Cost of goods sold		(9,033)	(10,002)	(2,291)	(2,156)	(1,890)	(2,051)	(8,389)	(10,654)
Gross Margin		7,481	15,392	3,753	3,168	2,048	1,868	10,837	11,769
Selling and business development		(1,478)	(1,476)	(367)	(455)	(448)	(450)	(1,720)	(1,679)
General and administrative		(6,693)	(7,886)	(1,816)	(2,025)	(1,903)	(2,000)	(7,744)	(7,800)
Research and development		(2,047)	(2,125)	(600)	(510)	(600)	(600)	(2,309)	(2,400)
Other		3,079							
Total costs		(7,139)	(11,487)	(2,783)	(2,990)	(2,951)	(3,050)	(11,774)	(11,879)
Operating (Loss)/income		342	3,905	970	179	(904)	(1,182)	(937)	(110)
Interest paid		(382)	(234)	(113)	(158)	(124)	(100)	(495)	(331)
Net income before taxation		(39)	3,671	857	21	(1,027)	(1,282)	(1,432)	(441)
Taxation		-	(151)						
Net income		(39)	3,520	857	21	(1,027)	(1,282)	(1,432)	(441)
EPS - Basic		(\$ 0.00)	\$ 0.03	\$ 0.01	\$ 0.00	(\$ 0.01)	(\$ 0.01)	(\$ 0.01)	\$ 0.00
EPS - FD		(\$ 0.00)	\$ 0.02	\$ 0.01	\$ 0.00	(\$ 0.01)	(\$ 0.01)	(\$ 0.01)	\$ 0.00
		2023	2024	Q1/25	Q2/25	Q3/25E	Q4/25E	2025E	2026E
Gross profit	%	45.3	60.6	62.1	59.5	52.0	47.7	56.4	52.5
Operating margin	%	2.1	15.4	16.1	3.4	(23.0)	(30.2)	(4.9)	(0.5)
EBITDA	\$'000's	1,499	5,518	1,405	607	(432)	(631)	949	1,883
EBITDA margin	%	9.1	21.7	23.2	11.4	(11.0)	(16.1)	4.9	8.4
Adj. EBITDA*	\$'000's	(2,530)	2,102	1,405	607	(432)	(631)	949	1,883
Adj. EBITDA margin*	%	(17.2)	10.1	23.2	11.4	(11.0)	(16.1)	5.1	8.6
Effective tax rate	%	--	4.1	--	--	--	--	--	--
Net margin	%	(0.2)	13.9	14.2	0.4	(26.1)	(32.7)	(7.4)	(2.0)

Source: Company reports, KRC Insights

\*excludes the impact of KU progress payments

## Appendix I: Kinlytic® urokinase

Given the potential impact on MBX's valuation of the Kinlytic® urokinase commercialization, this section provides context for investors and is only updated with the progress made since our last report.

### Background

On 16 May 2023, MBX announced a commercialization agreement with Sequel Pharma LLC (Sequel). It represents the culmination of MBX's previously stated intention to re-commercialize Kinlytic® urokinase. Kinlytic® urokinase, formerly Abbokinase®, is owned 100% by MBX and approved for multiple indications. While originally targeting massive pulmonary embolism, it became the market leader for catheter clearance (CC).

MBX has signed a fully funded redevelopment deal for Kinlytic® urokinase. As part of the deal, MBX was to receive US\$5.0m in pre-commercialization payments (detailed below) centered around closing and regulatory approval, then US\$30m in revenues-based progress payments and a double-digit royalty on net revenues. Sequel will fund all development costs.

### Progress to date

Of the US\$5.0m of pre-commercialization progress payments, US\$4.0m have been received:

- **First US\$2.0m.** In FQ3/23, MBX received its initial \$2.0m progress payment. Of this, US\$1.0m was recorded as revenues, and US\$1.0m was recorded as deferred revenue.
- **Second US\$2.0m.** On 16 November 2023, MBX announced reconfirmation of its agreement with Sequel to return Kinlytic® urokinase to market. Following a satisfactory consultation with the U.S. Food and Drug Administration (FDA) that reconfirmed and built upon prior regulatory guidance, MBX received its second milestone payment of a further US\$2.0m.
- **Accounting:** All the second US\$2.0m was recorded as revenue and the US\$1.0m deferred revenue was also recognized as revenue (being a reversal from deferred revenue) resulting in US\$3.0m of progress payments recorded in FQ2/24.
- **Final US\$1.0m.** Hence, MBX has now received US\$4.0m of US\$5.0m in pre-commercialization milestone payments. The final US\$1.0m is due upon approval of the sBLA<sup>4</sup>, expected sometime in 2027. There are additional revenue-based royalties due upon commercialization.
- **14/3/24:** Sequel Pharma, LLC executed, with support from Microbix, signed an agreement with a leading international contract development and manufacturing organization (CDMO) for production of Kinlytic® urokinase.
- **14/8/24:** On the FQ3/24 conference call, management provided the following updates:
  - MBX has a Contract Development and Manufacturing Organization (CDMO<sup>5</sup>) working on upgrading the drug substance, the purified urokinase protein for regulatory filings, and those

<sup>4</sup> **sBLA:** A Biologics License Application (BLA) is a request for permission to introduce, or deliver for introduction, a biologic product into US interstate commerce. A BLA includes Applicant information, Product/Manufacturing information, Pre-clinical studies, Clinical studies and Labeling. The supplemental BLA (sBLA) means the equivalent successor filing with the FDA, and any supplements or amendments to the original filing.

<sup>5</sup> A contract development and manufacturing organization, or **CDMO**, provides end-to-end, fully integrated drug development and manufacturing solutions and services to biotechnology and pharmaceutical companies.

studies are going exceptionally well. Kinlytic™ urokinase will be provided in a vial which will be used on patients. These negotiations are going very well.

- MBX and Sequel are in the process of engaging with a second contract drug manufacturing organization (CDMO). This CDMO will provide services for production of formulated drug product.
- Timelines are unchanged from the last time MBX provided an update (Figure 20).
- **19/12/24:** On the MBX FQ4/24 conference call, management stated that:
  - **Ken Hughes:** “Kinlytic is also going extremely well.....I was in a great meeting with them (CDMO) this morning and all I can say is the stated timeline for 2027 is unchanged and if anything, it's derisked, moving forward at a pace and everything is going extremely well...(there is) no desire to stop after Kinlytic clearance in the North American market...(there is) Kinlytic clearance in Europe<sup>6</sup> ....and then there's the bigger indication, which are bigger markets for indications related to pulmonary embolism like, [prophylateral] occlusive disease, stroke, even cancer indications associated with this product and there's every intention to pursue all of these opportunities going forward.”
  - **Cameron Groome:** “Kinlytic will kick in, we believe, quite dramatically towards the end of calendar 2027.”
- **13/2/25:** On the MBX FQ1/25 conference call, management stated that:
  - **Camron Groome:** “our Kinlytic, biologic therapeutics program is progressing extremely well”.
  - **Ken Hughes:** “...the relationship with Sequel is fine, everything is on schedule, there's no change to the timeline. We're moving forward nicely with the international CDM, which is working on the drug substance, which is the purified product. Sequel has just, in collaboration with Microbix identified the CDMO, the contract manufacturer, who will fill the finished product and package it...we're already talking about the next indications, the next jurisdictions, looking at stroke, looking at heart attacks, and things of that nature. Pulmonary embolism and deep vein thrombosis, the bigger indications to drive this franchise to multibillion dollar opportunities...”
- **5/5/25:** MBX issued a PR stating that:
  - Sequel, its funding and commercialization partner, had executed an agreement with a leading international contract development and manufacturing organization (CDMO) for production of the formulated and packaged drug of Kinlytic® urokinase (“Kinlytic”), for dissolving blood clots.
- **15/5/25:** On the MBX FQ2/25 conference call, management stated that:
  - **Cameron Groome:** “Kinlytic is moving forward as well... encourage everybody to review our news release from May 5th, which describes the latest progress and that's the second biggest contract in spend associated with the return of Kinlytic to market”.
  - **Ken Hughes:** “...the relationship with both CDMOs continues to be very constructive, and on pace and on track.” As an FYI, Mr. Hughes also detailed the competitive advantage between high molecular weight and the MBX product, Urokinase, which is low molecular weight.

While Sequel is a private entity, and hence under no obligation to provide updates, management provides updates on the quarterly conference call but also expects to provide two to three event-driven updates about Kinlytic® urokinase each year.

<sup>6</sup> Kinlytic urokinase is currently not approved for Europe.



**Cash implications.** The first US\$2.0m milestone payment comprised cash and was paid at the end of FQ3/23 (albeit the accounting was split equally between revenues and deferred revenue). The second US\$2.0m payment (~\$2.7m) comprised cash and was paid in FQ2/24.

**Write-back of the Kinlytic® urokinase intangible asset.** In F2020, due to the lack of progress in finding a buyer/interested party in commercializing Kinlytic® urokinase, the Kinlytic® urokinase intangible asset was written off resulting in a \$3.1m impairment charge in that year. However, owing to the receipt of the first milestone payment, the former asset was now deemed to have value and was written back in FQ4/23 and had no cash or tax implications. As a result, the asset is now depreciated at \$75k/quarter.

## Timelines

In Figure 20 we provide a list of timelines as they pertain to the Sequel agreement (no changes).

Figure 20: MBX/Sequel (anticipated) timelines.

Milestone	Timing	Comment/Financial impact
Entered into Sequel agreement	16/5/23*	Per press release
First milestone payment	June 2023	US\$2.0m split: US\$1.0m recognized as revenue and US\$1.0m recorded as deferred revenue
FDA consultation	October '23	
Second milestone payment	16/11/23*	US\$2.0m milestone payment received week of 16/11/23
Receipt of sBLA/third milestone payment	2027E	US\$1.0m. Management has reiterated that it expects sBLA approval in late calendar 2027.
First revenues	2028E	Initial seeding of the market to commence '27E with ramp '28E
Ongoing revenue-based sales royalties	2028E+	We estimate a 10% of net sales royalty
\$30m sales-driven milestone payments	2029+	To be received based on pre-determined revenue targets

Source: Company reports; KRC Insights

\*=refers to MBX press release

Kinlytic® urokinase asset ownership will transition to Sequel upon approval of the sBLA, hence the Kinlytic® urokinase asset and the sBLA will become the property of Sequel at that time. However, if at any time prior to the issue of the sBLA development of the Kinlytic® urokinase asset is terminated, ownership will remain with MBX.

## Kinlytic® urokinase Asset Valuation

We currently apply a notional valuation of \$40 million for the Kinlytic® urokinase asset. The receipt of the second milestone payment and the progress made in its commercialization serve as validation of our existing approach to valuing the asset.

Upon the filing of the supplemental Biologics License Application (sBLA), we will transition from our current valuation methodology on the understanding that there is a net impact which reflects the addition of the new methodology and the removal of the old:

- **\$1.00 per share**, based on a 2033E after-tax earnings contribution of \$0.11 per share, discounted at 10% per annum (\$0.77 net).

## Appendix II: QAPs™ Products

---

MBX's QAPs™ product segments are summarized as follows:

- PTDx™: sold directly to lab accreditation organizations (usually white label).
- PROCEEDx™: sold directly to OEMs for qualifying new instruments and training technicians. Included with their test kit consumables, particularly research use only (RUO) products for use in test systems IQ/OQ/PQ, Verification/Validation, and Training.
- ONBOARDx™: Verification/Validation kit for instrument, kit, or assay qualification and use in internal processes and technician training.
- REDx® controls: to support the formal QC and QA programs of clinical laboratories. These are FDA-listed, and CE-marked products designed for use as Quality Control Samples in a clinical setting.

---

Disclosure

---

- 2622632 Ontario Inc. is doing business as KRC Insights.
- KRC Insights/2622632 Ontario Inc. undertakes paid research and was paid by Microbix Biosystems Inc. (MBX-T) for this report.
- 2622632 Ontario Inc. and/or its directors/family members have no ownership positions in MBX. They may buy, sell, or offer to purchase or sell such securities from time to time.
- 2622632 Ontario Inc. and its directors will use all reasonable efforts to avoid engaging in activities that would lead to conflicts of interest and 2622632 Ontario Inc. will use all reasonable efforts to comply with conflicts of interest disclosures and regulations to minimize the conflict.
- The opinion expressed in the report was formed at the date of the report and KRC Insights/2622632 Ontario Inc. undertakes no obligation to update its view.
- The analysis by and opinion of KRC Insights/2622632 Ontario Inc. does not and will not constitute an offer to buy or sell securities in MBX.
- KRC Insights/2622632 Ontario Inc. is not registered with any financial or securities regulatory authority in Ontario, Canada, or the United States, and does not provide nor claim to provide investment advice or recommendations.
- Research reports written by KRC Insights/2622632 Ontario Inc. are for informational purposes only. The opinions of KRC Insights analyst(s) is/are not intended to be investment, tax, banking, accounting, legal, financial, or other professional or expert advice. Consequently, such information should not be relied upon for such advice. Also, this research report was prepared without reference to any particular user's investment risk profile, investment requirements, or financial situation. Hence, readers of the report must seek professional advice before acting or omitting to act on any information contained in the report.
- Where reference is made to estimate of value or relative value of a specific company, there is no guarantee that these estimates are reliable or will materialize. Hence, readers of this report are advised to conduct their own due diligence before making any investment decisions.
- This report may include forward-looking statements about objectives, strategies, and expected financial results of the companies featured. Such forward-looking statements are inherently subject to uncertainties beyond the control of such companies. Readers of this report are cautioned that the company's actual performance could differ materially from such forward-looking statements.
- Although the content of this report has been obtained from sources believed to be reliable, KRC Insights/2622632 Ontario Inc. reports could include technical or other inaccuracies or typographical errors, and it is provided to you on an "as is" basis without warranties or representations of any kind.
- KRC Insights/2622632 Ontario Inc. makes no representation and disclaims all express and implied warranties and conditions of any kind, including without limitation, representations, warranties or conditions regarding accuracy, timeliness, completeness, non-infringement, satisfactory quality, merchantability, merchantable quality or fitness for any particular purpose or those arising by law, statute, usage of trade, or course of dealing. KRC Insights/2622632 Ontario Inc. assumes no responsibility to you or any third party for the consequences of any errors or omissions.
- KRC Insights/2622632 Ontario Inc. assumes no liability for any inaccurate, delayed, or incomplete information, nor any actions taken in reliance thereon.