Microbix Biosystems Inc.

MBX-T: \$0.49, MBXBF-OTC: US\$0.35

19 February 2025 Bruce Krugel 416-509-5593

Price	\$0.49	Market (`an	\$65,894
			Jap	
Target Price	\$1.00	Debt		\$6,442
Projected Return	104%	Cash		-\$13,048
52 Week Range	0.55/0.29	EV (\$000	s)	\$59,288
Basic Shares (000's)	134,477			
FD Shares (000's)*	173,264			
Insiders	13.0%			
Y/E September	2023	2024	2025E	2026E
Revenues (\$000s)	16,515	25,394	26,576	32,502
EBITDA (\$000s)	1,499	5,518	5,290	6,997
Adj. EBITDA** (\$000s)	-2,530	2,102	5,290	6,997
FDEPS	0.00	0.02	0.02	0.03
EV/EBITDA	39.5x	10.7x	11.2x	8.47x
EV/EBITDA *=Assumes conversion of		10.7x	11.2x	8.47x



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, 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.

FQ1/25 REVIEW: MAINTAINING \$1.00 TARGET. STRONG REVENUE GROWTH AND MARGIN EXPANSION SUPPORTS OUTLOOK.

- Strong revenue growth: Base business revenues grew by 39.9% year-over-year, driven by Antigen revenues which offset a decline in QAPs™. Specifically, Antigen revenues grew by 118.4%, fueled by products driving continued expansion into Asia, principally the uptake of antigens into immunoassays. QAPs™ revenues declined 27.6% in part due to a customer changing its strategy from developing a portfolio of assays in parallel to serial development on a narrower front. QuidelOrtho Corp. continues to position its Savanna platform for launch in late 2025, potentially providing upside to our F26E forecasts.
- **Gross margin improvement**: GMs were a high 62.1% vs 49.4% in FQ1/24, favorably impacted by Antigen product mix, cost reduction strategies and a weaker CAD.
- Operating Expenses: Total operating expenses decreased 23.8% over FQ1/24, partly due to the lack of investment banking fees associated with the Kinlytic™ development asset, and in line with our expectations.
- **EBITDA:** Excluding Kinlytic, the net benefit of higher revenues, higher gross margin and lower expenses resulted in an adjusted EBITDA margin improvement to 23.2% vs -10.7% in FQ1/24.
- Cash Position: MBX generated a moderate increase in cash balances vs FQ4/24 as cash increased to \$13.1m from \$13.0m. Principal contributors to this movement includes: \$793k cash provided by operating activities; offset by \$203k of capex and \$511k repurchase of common shares (1.6m shares).
- Kinlytic Update: As anticipated, no Kinlytic® urokinase licensing revenues were recorded. MBX is set to receive payment of US\$1.0m upon approval of the supplemental Biologics License Application (sBLA), expected in late 2027, with licensing revenues anticipated to commence in F28E.
- Valuation: MBX is executing well, and we maintain our \$1.00 target, which is 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 to \$1.30/share (\$1.07/share net) based on a discounted cash flow analysis, or \$1.00 per share (\$0.77 net) 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. However, Antigen revenue growth continues to outpace QAPs™ revenue growth as Antigens benefit from new products in new geographic markets (China) and as QAPs™ growth is constrained by the delayed ramp-up of QuidelOrtho's (QDEL-Q) Savanna platform (discussed in more detail below).

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

The base business revenues grew 49.9% to \$6.0m from \$4.3m in the prior year (Figure 1). There were no Kinlytic® royalties recognized during the quarter, as expected.

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

	FQ1/25	FQ1/24	% change	Explanation
Antigen products	4,267	1,954	118.4%	Increased global testing for multiple respiratory pathogens and the wider use of certain public health tests in the Asia Pacific region.
QAPs™	1,627	2,248	-27.6%	Transient reduction in QAPs revenue due to a customer shifting from parallel to serial development of assays.
Royalties	150	119	26.1%	
Base business	6,044	4,321	39.9%	
Kinlytic® royalties	-	4,086		Receipt of final royalty payment expected F27E
Total revenues	6,044	8,407	-28.1%	

Source: Company reports; KRC Insights

Antigen products. Antigen revenues experienced 118.4% growth. While the native Antigen product line is mature, this performance was driven by new products driving continued expansion in Asia, principally uptake of antigens into immunoassays in Asian markets through the company's distribution partner, and to a lesser extent, a post-COVID recovery in demand.

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
2017	1,887	2,580	2,705	2,720	9,892
2018	2,803	2,922	3,158	3,309	12,191
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				

Source: Company reports

QAPs™. QAPs™ revenues declined by 27.6%, in part due to a customer changing its strategy from developing a whole portfolio of assays in parallel to serial development of a narrower front of tests. This reduction is expected to be temporary. Bear in mind that MBX's direct customers include four of the five largest diagnostic companies globally, most major proficiency testing and accreditation organizations, and numerous leading clinical laboratories.

The bulk of revenues were derived from fully commercial programs and less than 10% from development programs (e.g QDEL's Savanna program).

Gross Margins

FQ1/25 gross margins were a high 62.1% vs 49.4% in FQ1/24, (Figure 3) favourably impacted by Antigen product mix and the US\$/C\$ exchange rate¹.

From the cost perspective, MBX has also been focusing on building margin by reducing costs through efficiencies, using its quality management system, reducing the testing load to QC, and increasing antigen yields. These strategies appear to be delivering results.

Figure 3: MBX gross margins

	FQ1/25	FQ1/24
Total gross margin	62.1%	74.0%
Base business gross margin*	62.1%	49.4%

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.

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%, with the longer-term goal of approximately 60% as QAPs™ contribute more significantly to the overall product mix.

To recap, several factors influence margins:

¹ Sales are typically in US\$ while the cost base is C\$

- 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. We note the sequential increase in gross margins FQ3/24.
- Manufacturing Volume: MBX has significantly expanded its production capacity for multiple Antigen products. The company believes that the elevated demand levels for these products will persist, further supporting current margin levels. Assisting in this regard is increased sales into Asia, particularly through its distributor in China.
- 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 decreased 23.8% in FQ1/25 over FQ1/24 (Figure 5), in line with our expectations, partly due to the lack of investment banking fees.

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

	FQ1/25	FQ1/24	% change
Selling and business development	367	364	
General and administrative	1,816	2,805	
R&D	600	484	
Total operating expenses	2,783	3,652	-23.8%

Source: Company reports; KRC Insights

EBITDA margin

Referring to the base business, the net benefit of higher revenues, higher gross margin and lower expenses resulted in an adjusted EBITDA margin improvement to 23.2% in FQ1/25 vs -10.7% in FQ1/24. (Figure 6).

50.0%

40.0%

30.0%

10.0%

-10.0%

-20.0%

-30.0%

-40.0%

-40.0%

Figure 6: MBX base business EBITDA margins*

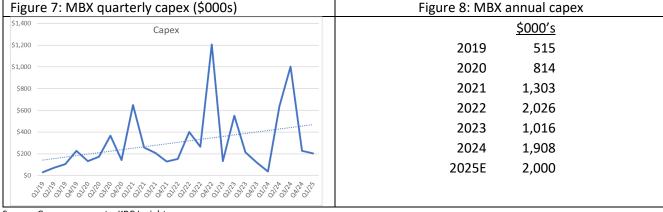
Source: Company reports; KRC Insights *=excludes license payments

Cash Flow and Balance Sheet

In FQ1/25, MBX reported a moderate increase in cash balances vs FQ4/24 as cash increased to \$13.1m from \$13.0m. Principal contributors to this movement include:

- \$793k cash provided by operating activities; offset by
- \$203k of capex (Figure 7); and
- \$511k repurchase of common shares.

MBX has made significant investments in manufacturing capacity expansion (Figure 7). Management expects capex in F25E will be $^{\sim}$ \$2.0m with the focus on additional equipment for the lab, equipment upgrades/replacement and capacity expansion (Figure 8). This suggests that capex will accelerate over the next 3 quarters.



Source: Company reports; KRC Insights

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

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 FQ1/25 (\$000's)

	Current	Non-current	Total Detail
Long term debt	111.1	3,599.3	3,710.5 Low interest govt loans: BDC \$1.6m, Ontario govt \$2.4m,
Lease liability	111.1	549.3	660.4 Covers three facility leases
Convertible Debentures		2,071.6	Debentures mature on 9/28 and 1/29, bear interest at 9%, 2,071.6 and have a face value of \$4.0m. These are in-the-money and most likely will be converted.
Total debt	222.2	6,220.2	6,442.4

Source: Company reports, KRC Insights

The debt is well covered (Figure 10).

Figure 10: MBX FQ1/25 total capital employed (\$000s)

	31/12/24
Share capital	48,221.9
Equity component of CDs	2,272.6
Contributed surplus	10,939.9
Accumulated deficit	-32,534.3
Total equity	28,900.1
Total debt	6,442.4
Total capital employed	35,342.5

Source: Company reports, KRC Insights

During FQ1/25, MBX repurchased and cancelled 1.57m shares through its NCIB at a cost of \$511k. MBX's updated share count is shown in Figure 11:

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

	Shares	Options	Warrants	Convert. Deb	Total
At 31/12/24	134,477	12,514	8,882	17,391	173,264

Source: Company reports, KRC Insights

On 4/2/25, MBX announced that it had received \$2.4m in from the partial exercise of expiring share purchase warrants. In this regard, 8.9m warrants were outstanding of which 6.7m were exercised (75%) at \$0.36.

Estimates

Revenues

Previously, management indicated that for FY2025, total year-over-year (YoY) sales growth is expected to fall within the range of 20%-40%.

The variability in the F25 outlook is largely attributed to the timing of QuidelOrtho Corp.'s (QDEL-Q) launch of its European respiratory panel and the subsequent introduction of its Savanna platform, impacting the QAPs product line. A secondary factor contributing to the variability is the sustainability of Antigen YoY growth rates.

During the FQ1/25 conference call management provided the following updates:

• Antigens:

- The antigen business will maintain comparable levels of revenue as FQ1/25 for the remainder of the year.
- The recombinant antigen program is expected to expand the total addressable markets for the Antigen business.

QAPs:

- o Expanding into new markets, including genetic testing and oncology.
- o The recombinant program is expected to drive sales growth in the QAPs business.
- MBX is targeting higher QAPs sales in F2025. While the majority of QAPs sales in FQ1/25 were driven by fully commercial programs, MBX expects the proportion of development revenues to increase but remain less than a quarter of overall QAPs revenues.

As for QDEL's impact on QAPs revenues, during QDEL's Q4/24 conference call², the company provided the following updates:

- "...we initiated clinical trials for our Savanna Respiratory Panel last month (January 2025), which coincided with the ramp up of this year's respiratory season. We expect to complete our trials over the next few months as the season runs its normal course."
- "...we are not assuming any sales from U.S., Savanna, or respiratory products in 2025."
- "...as we move into 2026 (we expect margin improvements) ...from the Savanna launch..."
- "...moving through a process for an approval (for Savanna) that would put us into the market later this year. So, ... there's really no change in the timing of our expectation for Savanna...". This is consistent with previous comments where management indicated that he majority of the ramp-up will occur in 2026 and 2027.

As a result, the timing of regulatory approval and the commercial rollout of the Savanna platform (in the U.S.) is expected to influence MBX's performance in the latter half of F25, though the more substantial impact will likely be felt in F26. However, QDEL has already received approval for its respiratory panel in Europe, and MBX is expected to support its European launch in the latter half of calendar year 2025.

For F25 and F26 we have maintained our total revenue forecasts, having already accounted for Antigen strength and the anticipated QDEL impact on QAPs (Figure 12).

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² QDEL Q4/24 conference call was hosted on 12/02/25.

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

Sept. year-end	F2025E	F2026E	Description
Antigen products	16,576	18,234	Expected continued recovery in Antigen revenues in F25E based on new product introductions and increased penetration of Asia/China. For F26E, expect growth to return to historical levels.
% growth	20.0%	10.0%	
QAPs™	9,500	13,775	An acceleration of QAPs™ growth in F25E is based on the continued ramp by major international diagnostic customers as they transition from proficiency testing to full product roll out, as evidenced in FQ3/24 and FQ1/25. QDEL provides upside in F26E. Currently, MBX has over 20 QAPs™ clients, all ramping. New areas of expansion include geographic expansion and new products (e.g. <i>H.pylori</i> for stomach ulcers).
% growth	35.4%	45.0%	
Royalties	500	493	
% growth	-1.4%	-1.4%	
Sales of base business	26,576	32,502	
% growth base business	24.7%	22.3%	
Kinlytic [®] urokinase royalties	-	-	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.
Total sales	26,256	32,155	
Total revenue growth	4.7%	22.3%	

Source: KRC Insights

For F25E, we are forecasting a 3.4% YoY total revenue growth, or 23.2% excluding Kinlytic® urokinase licensing fees.

Antigen Outlook: MBX has visibility into future Antigen orders because it does not typically stock much inventory for this product. While we do not have the split in inventories between Antigens and QAPs™, we understand that the bulk of quarter-end inventories are Antigen related. On this basis, despite a 39.9% increase in base business revenues, inventory days have increased from 232.4 days in FQ4/24 vs 256.5 days in FQ1/25.

Antigen revenues have resumed a growth trajectory (Figure 2), but their contribution to overall company revenues is expected to continue to decline over time due to the impact of faster-growing revenues of other product categories, specifically QAPs™. In support of this growth, MBX has:

- transitioning products increasingly to bioreactors; and
- made further additions to capacity.

Accordingly, we believe that MBX has expanded its production capacity to meet increased demand for Antigens, including rubella.

QAPs™ Outlook. Improved point-of-care instruments and the emergence of better clinical, laboratory-based assays are driving the demand for test controls. Apart from QDEL (discussed earlier) currently, certain other QAPS™ products are in limited pre-launch runs, however, as these break out from proficiency testing schemes into full commercial launches with various major international companies, volumes are expected to increase substantially.

We expect some lumpiness in this segment as a significant customer orders in only 3 of 4 quarters.

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

Gross Margins

Gross margins in FQ1/25 were a very strong 62.1%. Apart from the Antigen sales mix (which helped margins) there was a reduction in batch failures which also contributed to this margin increase. Management is expecting gross margins for F2025 in the high 50's with 3-5% variability depending on sales mix.

EBITDA Margins

Factoring in anticipated revenue growth, continued improving gross margins (for base business, excluding impact of Kinlytic® urokinase license fees), and leveraging the increased cost base as the company expands production and selling expenses, we forecast that EBITDA margins will approach +21.9% by F26E (Figure 13).

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

Sept. year-end	2024	F2025E	F2026E
EBITDA	5,518	5,290	6,997
Margin %	21.7	19.9	21.5
Adj. EBITDA*	2,102	5,290	6,997
Margin %	10.1	20.3	21.9

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 outperformed those of the iShares U.S. Medical Devices ETF (IHI-N), generating a 12-month return of 20.7% vs 13.6% of the ETF (Figure 14). IHI is a ~US\$5.1bn 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 18/1/25)

Source: Respective exchanges, KRC Insights

To provide context for the 13.6% increase in the ETF share price over the past 12 months, we provide some granularity (Figure 15) limited to our group of MBX comparable companies, some of which are included in the IHI ETF.

This comparable group of companies has experienced an average -6.3% decline in their share prices over the past year (vs +13.6% for the ETF). This -6.3% decline (Figure 15) is materially influenced by:

- Bio-Rad (BIO-N): company is to cut ~ 5% of its workforce after it reported lower-than-expected Q4/24 sales and lowered guidance slightly.
- Danaher (DHR-N): shares declined after the company projected a "low-single digits" decline in sales in its Q1/25.

This group of comps was historically materially influenced by the negative QuidelOrtho (QDEL-O) share price movement as the delay of its Savanna platform was priced in.

Figure 15: 12-month changes in share prices and NTM EBITDA forecasts (as of 18/2/25)

	Symbol	12-month change in share price %	12-month change in NTM EBITDA %	12-month change in EV/EBITDA multiple %
Microbix Biosystems Inc	МВХ.ТО	20.7%		
Bio Rad Laboratories Inc	BIO.N	-16.8%	-5.0%	-12.0%
Bio-Techne Corp	TECH.O	-8.8%	11.0%	-19.2%
Danaher Corp	DHR.N	-18.2%	-1.8%	-17.1%
DiaSorin SpA	DIAS.MI	11.3%	12.8%	-4.4%
QuidelOrtho Corp	QDEL.O	-0.6%	-11.7%	15.3%
Thermo Fisher Scientific Inc	TMO.N	-4.5%	6.0%	-12.3%
Average		-6.3%	1.9%	-8.3%

Source: KRC Insights

The average EV/NTM EBITDA multiple of this group (Figure 16) has declined from 19.3x to 17.2x over the 12 months (averaging 19.4x for this period). This valuation multiple decline is a function of share price declines exceeding NTM EBITDA forecasts growth.

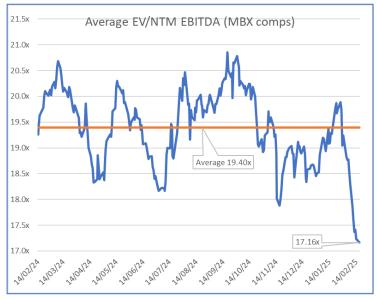


Figure 16: MBX comps trend in NTM EV/EBITDA

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. MBX is currently trading at a discount to its peer group on an EV/2026E EBITDA basis (8.5x vs 15.9x).

Figure 17: MBX and comparable companies' valuations (pricing at 18/2/25)

					EBIT	TDA .	Reve	nues	Rev	EV/EB	ITDA	EV/Rev	renues
	Symbol	Price	Mkt Cap	EV	2024	2026E	2024	2026E	Growth	2024	2026E	2024	2026E
Microbix Biosystems Inc*	мвх.то	0.49	65.9	59.3	2.1	7.0	24.0	32.5	35.2%	28.21x	8.47x	2.47x	1.82x
Bio Rad Laboratories Inc	BIO.N	283.21	8,079.3	7,616.4	472.3	528.8	2,569.2	2,686.0	4.5%	16.12x	14.40x	2.96x	2.84x
Bio-Techne Corp	TECH.O	65.29	10,321.5	10,444.0	427.2	490.3	1,230.3	1,338.3	8.8%	24.45x	21.30x	8.49x	7.80x
Danaher Corp	DHR.N	204.53	147,077.5	161,011.5	7,603.8	8,367.1	24,141.4	25,771.9	6.8%	21.18x	19.24x	6.67x	6.25x
DiaSorin SpA	DIAS.MI	99.58	5,591.1	6,382.4	391.3	435.9	1,191.3	1,287.5	8.1%	16.31x	14.64x	5.36x	4.96x
QuidelOrtho Corp	QDEL.O	41.49	2,790.5	5,175.3	591.5	659.6	2,789.3	2,908.0	4.3%	8.75x	7.85x	1.86x	1.78x
Thermo Fisher Scientific Inc	TMO.N	523.09	200,082.1	225,907.1	11,415.3	12,423.1	43,876.4	46,774.7	6.6%	19.79x	18.18x	5.15x	4.83x
Totals/Average							75,797.9	80,766.5	6.6%	17.77x	15.94x	5.08x	4.74x
*=Forecasts for base busine	ss only as k	(U asset value	d seperately										

Source: KRC Insights

We believe that as MBX executes against our revenue forecasts (Figure 17), this valuation difference will close.

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

We apply a 17.0x EV/2026E EBITDA multiple – a slight premium to the average of MBX's US-listed peers
of 15.9x (Figure 17). All the comps that comprise our average valuation multiples are significantly larger
companies than MBX; our premium multiple is based on MBX's significantly faster revenue growth rate

and in anticipation of the ramp of the QDEL QAPs™ revenues which could materially positively impact F26E.

- 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. We will adjust our valuation of Kinlytic® urokinase further once the sBLA is filed.

We maintain our target to \$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	6,997
Multiple	х	17.0x
Enterprise Value	\$000s	118,947
Add: Cash 2026E	\$000s	16,922
Less: Debt 2026E*	\$000s	4,084
Implied market cap	\$000s	131,786
Kinlytic urokinase	\$000s	40,000
MBX valuation	\$000s	171,786
FD # shares*	000s	173,264
Share price	\$	0.99
Rounded	\$	1.00
*=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

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

Sept. year-end \$000's	2023	2024	Q1/25	Q2/25E	Q3/25E	Q4/25E	2025E	2026E
Antigen products	9,592	13,814	4,267	4,100	4,030	4,179	16,576	18,234
% growth	15.7%	44.0%	118.4%	-0.3%	23.0%	-6.5%	20.0%	10.0%
QAPs™	5,087	7,016	1,627	1,600	2,338	3,936	9,500	13,775
% growth	-5.4%	37.9%	-27.6%	14.3%	40.0%	131.7%	35.4%	45.0%
Royalties & Other	1,835	4,565	150	125	125	100	500	493
% growth	349.0%	148.7%	-96.4%	2.6%	2.0%	-19.7%	-89.0%	-1.4%
Total Sales	16,515	25,394	6,044	5,825	6,493	8,215	26,576	32,502
Total revenue growth	-13.4%	53.8%	-28.1%	3.4%	28.3%	30.5%	4.7%	22.3%
Cost of goods sold	(9,033)	(10,002)	(2,291)	(2,499)	(2,717)	(3,434)	(10,941)	(13,998)
Gross Margin	7,481	15,392	3,753	3,326	3,776	4,781	15,635	18,504
Selling and business development	(1,478)	(1,476)	(367)	(401)	(370)	(475)	(1,613)	(1,918)
General and administrative	(6,693)	(7,886)	(1,816)	(2,004)	(1,944)	(2,438)	(8,202)	(9,101)
Research and development	(2,047)	(2,125)	(600)	(601)	(583)	(667)	(2,451)	(2,600)
Other	3,079							
Total costs	(7,139)	(11,487)	(2,783)	(3,005)	(2,898)	(3,580)	(12,266)	(13,618)
Operating (Loss)/income	342	3,905	970	320	878	1,201	3,369	4,886
Interest paid	(382)	(234)	(113)	(103)	(103)	(92)	(411)	(402)
Net income before taxation	(39)	3,671	857	217	775	1,109	2,958	4,483
Taxation	-	(151)		_			_	
Net income	(39)	3,520	857	217	775	1,109	2,958	4,483
EPS - Basic	(\$ 0.00)	\$ 0.03	\$ 0.01	\$ 0.00	\$ 0.01	\$ 0.01	\$ 0.02	\$ 0.03
EPS - FD	(\$ 0.00)	\$ 0.02	\$ 0.01	\$ 0.00	\$ 0.01	\$ 0.01	\$ 0.02	\$ 0.03
		_						
	2023	2024	Q1/25	Q2/25E	Q3/25E	Q4/25E	2025E	202 6E
Gross profit %	45.3	60.6	62.1	57.1	58.2	58.2	58.8	56.9
Operating margin %	2.1	15.4	16.1	5.5	13.5	14.6	12.7	15.0
EBITDA \$000's	1,499	5,518	1,405	800	1,358	1,727	5,290	6,997
EBITDA margin %	9.1	21.7	23.2	13.7	20.9	21.0	19.9	21.5
Adj. EBITDA* \$000's	(2,530)	2,102	1,405	800	1,358	1,727	5,290	6,997
Adj. EBITDA margin* %	(17.2)	10.1	23.2	13.7	20.9	21.0	20.3	21.9
Effective tax rate %		4.1						
Net margin %	(0.2)	13.9	14.2	3.7	11.9	13.5	11.1	13.8

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 FQ1/24, 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 FQ1/24.
- **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 sBLA³, 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 FQ1/25 conference call, management provided the following updates:
 - MBX has a Contract Development and Manufacturing Organization (CDMO⁴) working on upgrading the drug substance, the purified urokinase protein for regulatory filings, and those

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³ **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.

⁴ 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.
- o Timelines are unchanged from the last time MBX provided an update (Figure 20).
- **19/12/24**: On the MBX FQ1/25 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 Europe⁵and then there's the bigger indication, which are bigger markets for indications related to pulmonary embolism like, [prophylaterial] 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..."

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.

Cash implications. The first US\$2.0m milestone payment comprised cash and was paid at the end of Q3/23 (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 FQ1/25.

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 FQ1/24 and had no cash or tax implications. As a result, the asset is now depreciated at \$75k/quarter.

⁵ Kinlytic urokinase is currently not approved for Europe.

Timelines

In Figure 20 we provide a list of timelines as they pertain to the Sequel agreement.

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 to one of the following approaches, understanding that there is a net impact which reflects the addition of the new methodology and the removal of the old:

- \$1.30 per share on a discounted cash flow (DCF) basis (\$1.07 net)
- \$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

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