Microbix Biosystems Inc.

29 May 2024

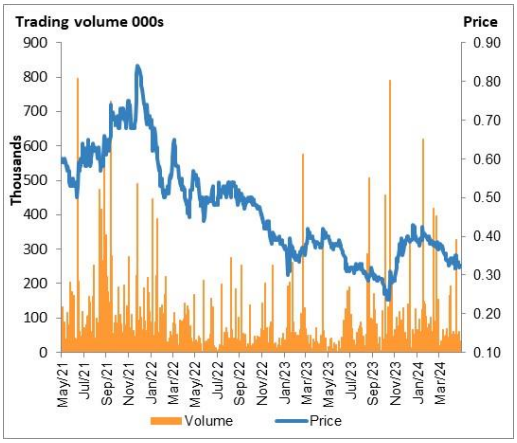
MBX-T: $0.33, MBXBF-OTC: US$0.24

Bruce Krugel 416-509-5593

Price	$0.33	Market Cap		$44,661
Target Price	$0.75	Debt		$6,715
Projected Return	131%	Cash		-$12,873
52 Week Range	0.45/0.23	EV ($000s)		$38,503
Basic Shares (000's)	137,417			
FD Shares (000's)*	176,804			
Insiders	13.0%			
Y/E September	**2022**	**2023**	**2024E**	**2025E**
Revenues ($000s)	19,076	16,515	25,468	29,870
EBITDA ($000s)	3,647	1,499	5,617	6,075
Adj. EBITDA** ($000s)	3,647	-2,530	2,201	6,075
FDEPS	0.01	0.00	0.02	0.02
EV/EBITDA	10.6x	25.7x	6.9x	6.3x

*=Assumes conversion of CD; excl out-ot-the-money warrants/options

**= Adj EBITDA excludes impact of Sequel 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, 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 approximately three years.

Disclosure

Please refer to the important disclosures on page 12.

FQ2/24: STRONG GROWTH IN ANTIGEN REVENUES OVERSHADOWED BY DELAY IN PRODUCT LAUNCH BY MAJOR QAPS CUSTOMER. CUSTOMER REMAINS COMMITTED TO PRODUCT LAUNCH - MAINTAINING $0.75 TARGET WITH KINLYTIC UROKINASE PROVIDING UPSIDE POTENTIAL.

- **Revenues.** Total revenues grew +33.5% YoY driven by a particularly strong 36.8% growth (vs our -16.8%) in Antigen revenues, recording an all-time high for this segment, and +27.0% growth (vs our 130.0%) for QAPs™. Antigen growth was driven by a general recovery aided by strong orders from its Asian distributor and Europe. QAPS™ was lower than expected as QuidelOrtho Corp, delayed the launch of its Savanna platform.
- **Kinlytic.** As expected, there were no Kinlytic® urokinase license revenues. To recap, MBX has received US$4.0m of US$5.0m in pre-commercialization milestone payments from Sequel. The final US$1.0m is due upon approval of the sBLA. We expect filing of the sBLA to occur in early 2027 with receipt of meaningful licensing revenues to commence in 2028.
- **Margins.** Gross margins were 52.7%, down from the 59.9% reported in FQ2/23, which was an unusually strong quarter. These are in-line with management's short-term target of +50%, ultimately targeting 60% as QAPS™ ramps.
- **Total expenses**. Total operating expenses increased 4.5% YoY due to ongoing costs of IT systems implementation, and amortization relating to the write-up of the Kinlytic® urokinase intangible asset which commenced at the end of fiscal 2023.
- **EBITDA.** The benefit of higher sales offset the impact of lower gross margins and slight increase in operating expenses management resulting in an adjusted EBITDA margin for the base business of 15.3% vs 10.1% in FQ2/23.
- **Cash balances.** MBX reported a $90k sequential increase in cash, finishing FQ2/24 with a healthy $12.9m.
- **Valuation.** MBX continues transforming from a manufacturer of less-regulated test ingredients (Antigens), into the producer of higher-margin regulated medical devices (QAPs™) relating to infectious-disease diagnostic tests. Using a sum of parts, we derive a target of $0.75 for MBX by valuing the base business using an EV/EBITDA approach and then adding $20.0m for the Kinlytic® urokinase development asset. We will adjust our valuation of Kinlytic® urokinase once the sBLA is filed using one of the following approaches: $1.30/share on a DCF basis, or $1.00/share based on a 2033E after-tax earnings contribution of $0.11/share discounted at 10% p.a.

FQ2/24 Revenues

Microbix's strategy is to transform from being a manufacturer of less-regulated test ingredients (Antigens), into the producer of a catalog of clinically important and fully regulated medical devices (QAPs™) relating to infectious-disease diagnostic tests.

In Q2/24, Antigen revenues achieved a record revenue run rate, while QAPs™ declined sequentially due to the delay in the ramp of one of the company's growth customers. With this in mind, total revenues grew 33.5% YoY driven by 36.8% Antigen revenue growth (Figure 1).

Figure 1: MBX FQ2/24 revenues ($000's)

	FQ2/24	FQ2/23	% change	Explanation
Antigen products	4,111	3,005	36.8%	Driven by Asian distributor and recovery in European sales
QAPs™	1,400	1,102	27.0%	Growth lower than expected as a growth customer delayed introduction of one of its products
Royalties	122	112	8.9%	
Total	**5,633**	**4,218**	**33.5%**	

Source: Company reports; KRC Insights

Antigen products. The antigen business was historically a $12.0m p.a. business (2018 and 2019). However, due to COVID, this declined to $8.3m-$9.1m p.a. (F2020-F2022). The recovery in revenues which commenced in F2023, has continued into F2024 with FQ2/24 antigen revenues up 36.8% YoY (Figure 2) as the product line continues to benefit from a post-pandemic recovery in demand across multiple SKUs. There has been a resumption of broad-based testing for infectious diseases in Western nations, combined with a recovery of newer Asian demand. On the FQ2/24 conference call, management stated "we're expecting some strong performance from that (Asian) distributor in the second half of this year as well."

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			

Source: Company reports

Previously, management stated that "Sales of Antigens for fiscal 2024 are…expected to exceed MBX's pre-pandemic record of $12.0 million in a 12-month period."[1] It appears that MBX is on track to meet/beat this record.

[1] FQ2/24 MD&A p1

QAPs™. QAPs™ revenues in F23 were a roughly $1.0m/quarter, hence, the $1.4m recorded in FQ2/24 (+27.0%) still represents growth but short of our $2.5m forecast (+130.0%) principally due to QuidelOrtho withdrawing its 510(K) submission for the Savanna virus respiratory test.

Specifically, impacting FQ2/24:

- MBX's largest client for direct purchases of QAPs™, QuidelOrtho Corporation (QDEL-Q), withdrew its FDA 510(K) on April 2, 2024, for its Savanna RVP4 Test in the United States after recent data did not meet expectations. "Data generated over a 9-month period for the four viruses targeted by the assay initially showed great promise, which led to the FDA submission in July 2023. However, the final dataset, submitted in February 2024, did not meet our expectations. In addition, during the pendency of the submission, the Company has continued to develop the next-generation RVP4+ assay."[2]

On the FQ2/24 conference call, MBX management confirmed this trend by stated that "our 2024 budget is really about supporting QuidelOrtho with the development of novel multiplex controls for the Savanna and the validation. Of course, we don't have anything in our budget for 2024 in relation to commercial launches. That will start to shake into our 2025 numbers".

Nevertheless, MBX continues to introduce more products in the QAPs™ category[3] in anticipation of launch over the coming quarters with major international diagnostics companies. MBX currently has over 20 customers in this category.

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

VTM. Here we include a comment from our FQ1/24 report: The current semi-automated process can produce over 2.0m units p.a. of viral transport medium (VTM). Management stated on the FQ1/24 conference call that efforts to fully automate the VTM line in Ontario continue with site delivery and site acceptance expected to occur over the "next weeks". So, while sales of VTM to the Ontario government came to an end in FQ3/22, MBX sees "material and emerging interest" from private customers, and "we'll be building that business line going forward."

FQ2/24 Gross Margins

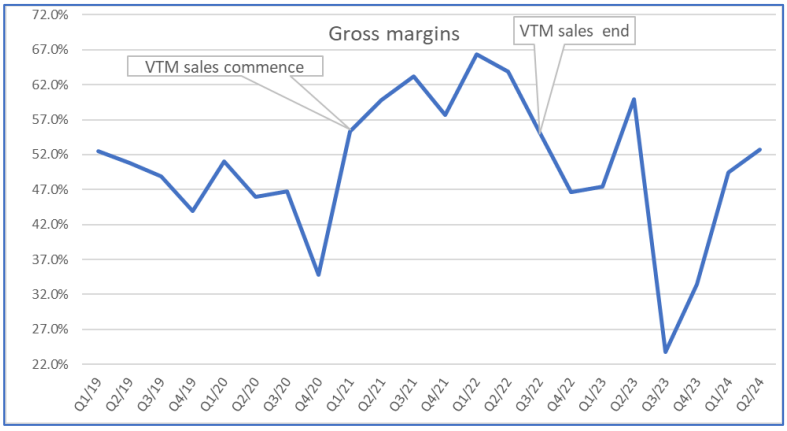
Gross margins were 52.7%, down from the 59.9% reported in FQ2/23 (Figure 3), which was an unusually strong quarter.

Margins achieved management's short-term focus of +50%, with the ultimate target of +60%. A contributor to the lower margins were:

- **Capacity expansion**. Continued capacity expansion in anticipation of a ramp in revenue and also implementation of the concomitant management systems to manage this forecast growth.
- **Sales mix**. Margins are impacted by product mix given the heavier weighting of Antigen sales, but this quarter, all the more significant products contributed positively this quarter.

[2] QuidelOrtho Corporation (Nasdaq: QDEL) press release dated April 2, 2024
[3] Refer to 6 Feb 2024 press release where MBX announced its QAP™ supporting the clinical use and accuracy of molecular ("MDx") tests for infection with Helicobacter pylori (bacterial cause of stomach ulcers)

Figure 3: MBX base business gross margins*



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

Several factors influence margins:

- **Sales mix**. Gross margins are positively impacted by the contribution from higher margin QAPS™ sales.
- **Manufacturing process**. Continued transition from roller bottles to bioreactors. While a an increasing portion of the Antigen business is now bioreactor-based, Mycoplasma is an example of one of the remaining products undergoing transition to bioreactors.
- **Manufacturing volume**. Through its distributor, MBX is expecting to add new clients to its Antigen business in Asia/China through its distributor in Asia.
- **Capacity expansion**. MBX has not only expanded its manufacturing capacity substantially, but it has also made material investments to modernize its manufacturing process (Figure 6). This includes the implementation of Enterprise Resource Planning (ERP) software and the move to a paperless Quality Management System (eQMS). Both are essential to benefit the company in the long term as volumes grow but will cause a drag on margins over the medium term.

FQ2/24 Operating Expenses

Total operating expenses increased 4.5% YoY (Figure 4) due to ongoing costs of IT systems implementation relating to capacity expansion, and amortization relating to the write-up of the Kinlytic® urokinase intangible asset which commenced at the end of fiscal 2023.

Figure 4: MBX FQ2/F24 expenses ($000's)

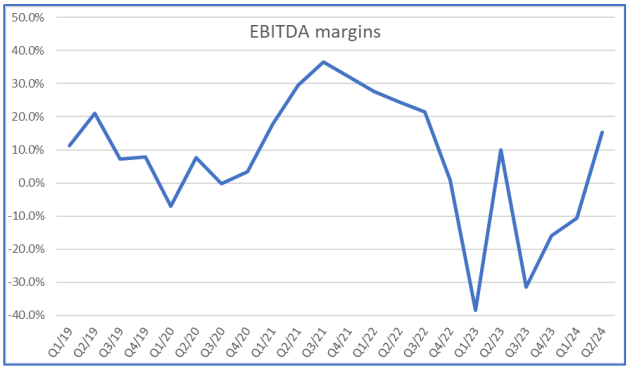
	FQ2/24	FQ2/23	Comment
Selling and business development	(373)	(376)	
General and administrative	(1,643)	(1,502)	
R&D	(496)	(526)	
Total expenses	2,512	2,404	+4.5%

Source: Company reports; KRC Insights

FQ2/24 EBITDA margin

The benefit of higher sales offset the impact of lower gross margins and slight increase in operating expenses management resulting in an adjusted EBITDA margin for the base business of 15.3% vs 10.1% in FQ2/23. (Figure 5).

Figure 5: MBX base business EBITDA margins*



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

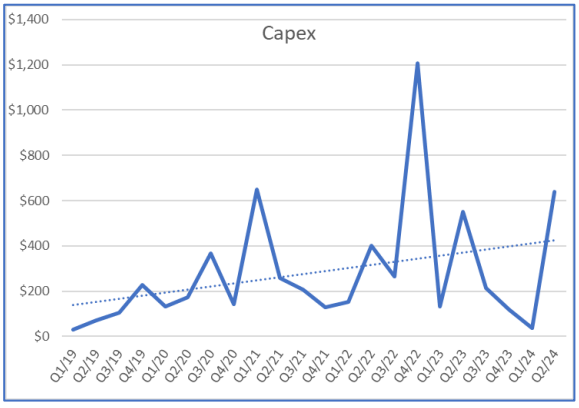
Cash Flow and Balance Sheet

In FQ2/24, MBX reported a $90k sequential increase in cash, with cash balances at a healthy $12.9m. Principal contributors to this increase include:

- Benefit from $839k cash generated from operations.
- offset to some extent by capex of $638k (Figure 6).
- Share repurchases of $395k funded by the proceeds from exercise of warrants and options of $357k.

MBX has made significant investments in manufacturing capacity expansion (Figure 6). We expect more significant outlays through the balance of F24 on facilities and equipment.

Figure 6: MBX capex ($000s)



Source: Company reports; KRC Insights

Management estimates that when these expansions are completed, along with the IT systems and ERP upgrades, they will support greater than a $50m revenue run rate.

MBX has made effective use of government funding for its capex as shown by long-term debt (Figure 7).

Figure 7: MBX total debt at FQ2/24 ($000's)

	Current	Non-current	Total	Detail
Long term debt	111.1	3,936.5	4,047.6	Low interest govt loans: BDC $1.6m, Ontario govt $2.4m,
Lease liability	156.6	620.9	777.6	Covers three facility leases
Convertible Debentures		1,889.8	1,889.8	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.
Total debt	267.8	6,447.3	6,715.0	

Source: Company reports, KRC Insights

The debt is well covered (Figure 8).

Figure 8: MBX FQ2/24 total capital employed ($000s)

	31/3/24
Share capital	48,993.8
Equity component of CDs	2,272.6
Contributed surplus	10,415.2
Accumulated deficit	-34,456.0
Total equity	27,225.6
Total debt	6,715.0
Total capital employed	33,940.6

Source: Company reports, KRC Insights

And MBX's updated share count, effectively consistent with FQ1/24, is shown in Figure 9:

Figure 9: MBX fully diluted share count (000s)

	Shares	Options	Warrants	Convert. Deb	Total
At 31/3/24	137,417	13,114	14,632	17,391	182,554
Out of the money			-5,750		-5,750
	137,417	13,114	8,882	17,391	176,804

Source: Company reports, KRC Insights

Estimates

Revenues

On its Q1/24 conference call, QDEL stated that: "Savanna revenue will be immaterial in 2024 with no expected U.S. respiratory revenue contribution from Savanna in the '24, '25 respiratory season."

Consequently, given the withdrawal of QDEL's 510(k) for its Savanna RVP4 Test and the uncertainty regarding the timing of the reintroduction of this platform, we have lowered our F24E QAPs™ revenue forecasts to account for this customer. We have raised our Antigen forecasts while maintaining our F25E revenues (Figure 10):

Figure 10: MBX Revenue Forecasts ($000's)

Sept. year-end	2024E	2025E	Description
Antigen products	13,065	14,372	Expected continued recovery in antigen sales in F2024 based on new product introductions and increased penetration of Asia/China. Management expects antigen revenues to exceed the pre-pandemic record of $12.0m. We expect this recovery to extend into F2025.
% growth	36.2%	10.0%	
QAPs™	7,848	15,043	We forecast a slower ramp, of QAPs in F24E but a pick up in F25E based on the continued ramp by major international diagnostic customers which commenced in FQ1/24. Currently, MBX has over 20 QAPs™ clients, all ramping. New areas of expansion include geographic expansion and new products (H.pylori for stomach ulcers).
% growth	54.3%	91.7%	
Royalties	469	456	
% growth			
Sales of base business	21,382	29,870	39.7% YoY growth
Kinlytic® urokinase Royalties	4,086		
Total Sales	**25,468**	**29,870**	
Total revenue growth	54.2%	17.3%	

Source: KRC Insights

For F24, we are forecasting a 54.2% YoY revenue growth or 39.7% excluding Kinlytic® urokinase licensing fees. Principal drivers include a recovery in Antigen revenues to historical levels and a continued ramp of QAPS™ sales evidenced by the commencement of several multi-million-dollar QAPs™ contracts. In addition to the plant expansion discussed above, MBX expects to convert VTM product lines to QAPs™ product lines as well.

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 +18.7% by F25E (Figure 11).

Figure 11: MBX EBITDA forecasts ($000s)

Sept. year-end	2023A	2024E	2025E
EBITDA	1,499	5,617	6,075
Margin %	9.1	22.1	20.3
Adj. EBITDA*	(2,530)	2,201	6,075
Margin %	(17.2)	10.5	20.3

Source: KRC Insights Adj EBITDA excludes the impact of Sequel license payments i.e. represents the base business

Valuation

As an overview of the MBX share price, over the past 12 months, we compare the MBX shares performance against a Medical Devices ETF.

MBX shares have underperformed vs the iShares U.S. Medical Devices ETF (IHI-N), generating a 12-month return of -18.7% vs 4.9% of the ETF (Figure 12). IHI is a ~US$5.2bn 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 November 2023 can in part be attributed to the 16/11/23 announcement that Sequel Pharma, LLC was to return Kinlytic® urokinase to market. A further US$2.0m in license fees was received by MBX in this regard.

Figure 12: MBX share price vs iShares U.S. Medical Devices ETF (pricing at 16/2/24)

Source: Respective exchanges, KRC Insights

To provide context for the 4.9% increase in the ETF share price over the past 12 months, we provide some granularity (Figure 13) regarding our group of MBX comparable companies, some of which are included in the IHI ETF.

This comparable group of companies has experienced an average -7.1% decline in their share prices over the past year (vs +4.5% for the ETF). Our group of comparable companies' 7.1% decline is materially influenced by QuidelOrtho (QDEL-O) whose share price declined 48.5%. Refer to our comments above which provide a partial explanation for in this decline.

A contributor to the average share price decline would be the 16.1% decline in NTM EBITDA forecasts (today vs. 12 months ago) as the COVID-19 benefit continues to work its way out of the group. The net effect of the greater decline in NTM EBITDA forecasts vs. share prices is reflected in the average 8.1% EV/EBITDA multiple expansion. This is reflected graphically in Figure 14.

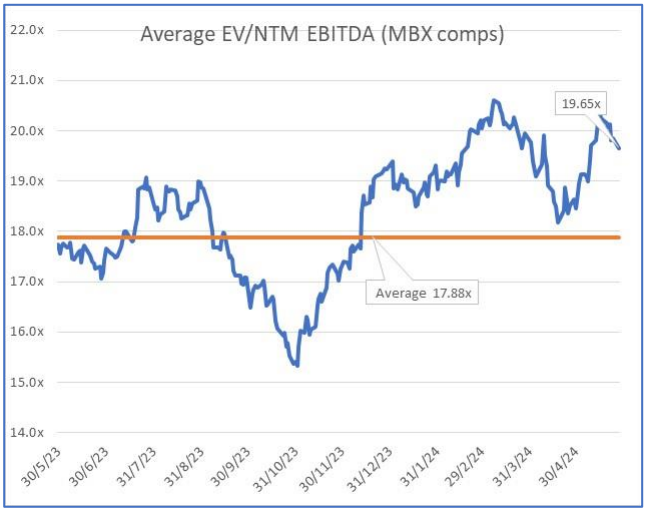
Figure 13: 12-month changes in share prices and NTM EBITDA forecasts (as of 16/2/24)

	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	-18.7		
Bio Rad Laboratories Inc	BIO.N	-24.5	-27.3%	-2.0%
Bio-Techne Corp	TECH.O	-4.9	-11.1%	7.4%
Danaher Corp	DHR.N	25.7	-18.3%	33.3%
DiaSorin SpA	DIAS.MI	-0.2	-2.7%	0.2%
QuidelOrtho Corp	QDEL.O	-48.5	-28.5%	-7.1%
Thermo Fisher Scientific Inc	TMO.N	9.7	-8.9%	16.9%
Average		-7.1	-16.1%	8.1%

Source: KRC Insights

This appreciation in valuation multiples is reflected graphically in Figure 14. The average EV/NTM EBITDA multiple has expanded from 17.7x to 19.6x over the 12 months (averaging 17.9x for this period).

Figure 14: MBX comps trend in NTM EV/EBITDA



Source: KRC Insights

The comparable company valuation table is shown in Figure 15. 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/2025E EBITDA basis (6.3x vs 18.3x).

Figure 15: MBX and comparable companies' valuations (pricing at 1/12/23)

					EBITDA		Revenues		Rev	EV/EBITDA		EV/Revenues	
	Symbol	Price	Mkt Cap	EV	2023A	2025E	2023A	2025E	Growth	2023A	2025E	2023A	2025E
Microbix Biosystems Inc*	**MBX.TO**	**0.33**	**44.7**	**38.5**	**(2.5)**	**6.1**	**15.2**	**29.4**	**93.9%**	**nmf**	**6.34x**	**2.54x**	**1.31x**
Bio Rad Laboratories Inc	BIO.N	286.09	8,129.3	7,683.5	535.9	520.2	2,671.3	2,773.7	3.8%	14.34x	14.77x	2.88x	2.77x
Bio-Techne Corp	TECH.O	79.39	12,510.6	12,754.3	443.1	455.2	1,136.7	1,249.8	10.0%	28.79x	28.02x	11.22x	10.20x
Danaher Corp	DHR.N	258.71	191,623.0	202,760.0	7,530.0	8,597.8	23,890.0	25,872.0	8.3%	26.93x	23.58x	8.49x	7.84x
DiaSorin SpA	DIAS.MI	98.62	5,519.1	6,306.2	375.0	429.1	1,148.0	1,277.8	11.3%	16.82x	14.70x	5.49x	4.94x
QuidelOrtho Corp	QDEL.O	44.05	2,950.1	5,273.7	723.2	670.1	2,997.8	2,817.1	-6.0%	7.29x	7.87x	1.76x	1.87x
Thermo Fisher Scientific Inc	TMO.N	572.57	218,559.3	247,024.3	10,878.0	11,885.2	42,857.0	46,073.8	7.5%	22.71x	20.78x	5.76x	5.36x
Totals/**Average**							74,700.8	80,064.2	**7.2%**	**19.48x**	**18.29x**	**5.93x**	**5.50x**
*=Forecasts for base business only as KU asset valued seperately													

Source: KRC Insights

We believe that as MBX achieves our forecast doubling in revenues of its base business (Figure 15) over the forecast period, this valuation difference will close.

Our updated valuation for MBX (Figure 16) is based on the following metrics:

- Used F25 EBITDA of the base business. There is no benefit in F25 from the Kinlytic® urokinase asset until the US$1.0m due upon filing of the sBLA.
- We apply a 17.0x EV/2025E EBITDA multiple – a discount to the average of MBX's US-listed peers of 18.3x (Figure 15),
- Using the fully diluted number of shares, which includes the conversion of the convertible debenture, but excludes out-of-the-money options and warrants (Figure 9),
- We ascribe a notional value for the Kinlytic® urokinase asset to $20m to provide recognition in the progress to re-commercialization and believe that the Sequel agreement validates this approach. Historically, we had applied a notional $10m to our MBX valuation. We will adjust our valuation of Kinlytic® urokinase further once the sBLA is filed.

We derive a target of $0.75 for MBX using a sum-of-parts approach: 1). Valuing the base business by applying an EV/EBITDA multiple to the base EBITDA, and then 2) adding $20.0m for the Kinlytic® urokinase development asset.

Figure 16: MBX valuation ($000s)

		New
F2025E Adj. EBITDA**	$000s	6,075
Multiple	x	17.0x
Enterprise Value	$000s	103,275
Add: Cash 2025E	$000s	15,857
Less: Debt 2025E*	$000s	3,896
Implied market cap	$000s	115,236
Kinlytic urokinase	$000s	20,000
MBX valuation	$000s	135,236
FD # shares**	000s	176,804
Target price	$	0.76
Rounded	**$**	0.75
***=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

Figure 17: MBX historical and forecast income statement ($000s)

Sept. year-end	$000's	2021	2022	2023	Q1/24	Q2/24E	Q3/24E	Q4/24E	2024E	2025E
Antigen products		9,082	8,288	9,592	1,954	4,111	3,500	3,500	13,065	14,372
% growth		4.5%	-8.7%	15.7%	94.6%	36.8%	34.2%	17.6%	36.2%	10.0%
QAPs™		4,705	5,375	5,087	2,248	1,400	1,700	2,500	7,848	15,043
% growth		207.9%	14.3%	-5.4%	68.6%	27.0%	16.7%	109.2%	54.3%	91.7%
VTM		4,507	5,004					0		
% growth			11.0%	0.0%					0.0%	0.0%
Royalties & Other		299	409	1,835	4,205	122	114	114	4,555	456
% growth		-3.0%	36.5%	349.0%	2452.3%	8.9%	-92.2%	21.5%	148.2%	-90.0%
Total Sales		18,593	19,076	16,515	8,407	5,633	5,314	6,114	25,468	29,870
Total revenue growth		76.7%	2.6%	-13.4%	236.0%	33.5%	-3.9%	43.4%	54.2%	17.3%
Cost of goods sold		(7,549)	(7,951)	(9,033)	(2,186)	(2,662)	(2,232)	(2,917)	(9,997)	(13,562)
Gross Margin		11,044	11,125	7,481	6,222	2,971	3,082	3,197	15,471	16,308
Selling and business development		(858)	(1,554)	(1,478)	(364)	(373)	(372)	(419)	(1,528)	(1,732)
General and administrative		(4,316)	(5,162)	(6,693)	(2,805)	(1,643)	(1,796)	(1,804)	(8,048)	(7,527)
Research and development		(1,033)	(1,799)	(2,047)	(484)	(496)	(550)	(550)	(2,080)	(2,600)
Total costs		(6,207)	(8,515)	(7,139)	(3,652)	(2,512)	(2,718)	(2,774)	(11,656)	(11,860)
Operating (Loss)/income		4,837	2,610	342	2,569	459	364	423	3,815	4,448
Interest paid		(1,603)	(744)	(382)	(114)	(81)	(89)	(71)	(355)	(338)
Net income before taxation		3,233	1,866	(39)	2,455	378	275	352	3,460	4,109
Taxation			(77)					0		
Net income		3,233	1,789	(39)	2,455	378	275	352	3,460	4,109
EPS - Basic		$ 0.03	$ 0.01	($ 0.00)	$ 0.02	$ 0.00	$ 0.00	$ 0.00	$ 0.03	$ 0.03
EPS - FD		$ 0.02	$ 0.01	($ 0.00)	$ 0.02	$ 0.00	$ 0.00	$ 0.00	$ 0.02	$ 0.02
		2021	2022	2023	Q1/24	Q2/24E	Q3/24E	Q4/24E	2024E	2025E
Gross profit	%	59.4	58.3	45.3	74.0	52.7	58.0	52.3	60.7	54.6
Operating margin	%	26.0	13.7	2.1	30.6	8.1	6.8	6.9	15.0	14.9
EBITDA	$000's	5,659	3,647	1,499	2,952	863	814	988	5,617	6,075
EBITDA margin	%	30.4	19.1	9.1	35.1	15.3	15.3	16.2	22.1	20.3
Adj. EBITDA*	$000's	5,659	3,647	(2,530)	(464)	863	814	988	2,201	6,075
Adj. EBITDA margin*	%	30.9	19.5	(17.2)	(10.7)	15.3	15.3	16.2	10.5	20.7
Effective tax rate	%	--	4.1	--	--	--	--	--	--	--
Net margin	%	17.4	9.4	(0.2)	29.2	6.7	5.2	5.8	13.6	13.8

Source: Company reports, KRC Insights

*=excludes the impact of KU progress payments

Appendix I: Kinlytic® urokinase

Given this asset's substantial potential beneficial impact on investors, here we summarize the progress made to date on the Kinlytic® urokinase commercialization.

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 sales-based progress payments and a double-digit royalty on net sales. 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[4], expected sometime in 2027.
- **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.

While Sequel is a private entity, management is currently expecting to provide two to three event-driven updates about Kinlytic® urokinase each year.

[4] **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.

Cash implications. The first US$2.0m milestone payment was recorded in cash 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) was recorded in cash 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 had been written off resulting in a $3.1m impairment charge in that year. 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 being depreciated at $75k/quarter.

Timelines

In Figure 18 we provide a list of timelines as they pertain to the Sequel agreement.

Figure 18: 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. KRC Insight estimate assuming 3 years to approval of sBLA
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 to be terminated, ownership will remain with MBX.

Kinlytic® urokinase Asset Valuation

We view the receipt of the second milestone payment as validation of our current approach to value the Kinlytic® urokinase asset at a notional $20m. We will adjust our valuation of Kinlytic® urokinase once the sBLA is filed using one of the following approaches:

- $1.30/share on a DCF basis, or
- $1.00/share based on a 2033E after-tax earnings contribution of $0.11/share discounted at 10% p.a.

Appendix II: QAPs™ Products

MBX's QAPs™ product segments can be 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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