

Mast Therapeutics (MSTX - \$ 0.61)

2Q14: EPIC Study On-track and More Details of Other Pipeline Developments

This morning, MSTX reported 2Q14 financial results with a net loss of (\$7.2MM), or a (\$0.06) net loss per share. With cash of ~\$46.4MM by the end of 2Q14, we believe the company has sufficient capital for operations entering 2016.

- EPIC study patient enrollment on-track.** Management indicated that patient enrollment for the MST-188 in SCD Phase III (EPIC) study remains on track with completion potentially in 4Q15. Given that the GMI-1070 Phase III study (by GlycoMimetics and Pfizer) could start to recruit patients in late 3Q14, some competition might occur. We remain optimistic on MSTX's suggested timeline as the company has already built up substantial relationships with various institutions. Several recent additional MST-188 in SCD activities include: 1) data from an *ex vivo* study demonstrated that MST-188 reduced mean erythrocyte sedimentation rate by 50% vs. blood from SCD individuals. Erythrocyte sedimentation rate is a measure of inflammation and the outcome could suggest MST-188 might shorten the VOC duration; and 2) initiated a sub-study within EPIC to quantify MST-188's effect on tissue oxygenation or potential in reducing end-organ failure. Together, we view these efforts could potentially enrich the MST-188 clinical package for future FDA review.
- More details on pipeline developments.** MSTX provided an update on its additional pipeline developments. The company is conducting a pre-clinical study of MST-188 in embolic stroke and is scheduled to report outcomes in 2Q15. The stroke treatment market is very large with substantial unmet need. If MST-188 demonstrates positive results from its ongoing Phase II trial in acute limb ischemia and pre-clinical stroke study, the drug could have the potential to be used in combination with t-PA to improve the therapeutic index of the latter. An MST-188 in heart failure Phase II study could start in 1H15 with interim results potentially available in 2H15. AIR001 in PAH Phase II study (n=29) results could be available in 3Q14; while an investigator sponsored Phase II study in WHO Group 2 PH associated with HFpEF patients is scheduled to start in 2H15.
- Action.** We are reiterating our Buy rating and our \$2.50 target price to reflect the continued execution of corporate developments, including completion of the EPIC Phase III study and expansion of additional pipeline developments.

Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
FY-14E	-0.06A	-0.06A	-0.06	-0.06	-0.25	N.A.
FY-13A	-0.12	-0.09	-0.05	-0.06	-0.28	N.A.
FY-12A	-0.09	NA	-0.07	-0.08	-0.33	N.A.
FY-11A	NA	NA	NA	NA	-0.47	N.A.

Source: Laidlaw & Company estimates

Healthcare/Biotechnology

Ticker:	MSTX
Rating:	Buy
Price Target:	\$ 2.50

Trading Data:

Last Price (08/11/2014)	\$ 0.61
52-Week High (1/22/2014)	\$ 1.10
52-Week Low (8/30/2013)	\$ 0.40
Market Cap. (MM)	\$ 70
Shares Out. (MM)	114

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Anticipated milestones in 2014 and beyond

Product	Indication	Event	Timing	Importance
MST-188	Vaso-occlusive crisis (VOC) in sickle cell disease (SCD)	Periodical updates on Phase III trial progress	2014/2015	***
		Completion of Phase III (EPIC) study	4Q15	***
		Report of Phase III study top-line results	Late 2015	****
		Potential NDA filing	1H16	***
		Potential approval	2017	****
	Acute limb ischemia	Report of Phase II study top-line results	Late 2015	***
	Embolic stroke	Report pre-clinical data	2Q15	***
	Heart failure	Potentially complete discussion with the FDA for trial design	4Q14	***
		Report pre-clinical data	1Q15	***
		Start Phase II study	1H15	***
Potentially report Phase II interim results		2H15	***	
AIR001	Pulmonary arterial hypertension	Report clinical data of > 20 patients	3Q14	**
	PH associated with heart failure with preserved ejection fraction (HFpEF),	Potentially start Phase II study	2H15	***

**** / ***** Major catalyst event that could impact share price very significantly while *** event is more informative

Source: Laidlaw & Company and company presentation

Figure 1: Income Statement

Mast Therapeutics – Income Statement														
(\$'000)	2011	2012	2013	1Q14	2Q14	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenue														
MST-188 revenue	0	0	0					0	0	0	28,253	86,796	167,886	252,822
Net sales	0	0	0	-	-	-	-	0	0	0	0	0	0	0
Licensing revenue	0	0	0	-	-	-	-	0	0	0	0	0	0	0
Grant revenue	0	0	0	-	-	-	-	0	0	0	0	0	0	0
Total revenue	0	0	0	-	-	-	-	0	0	0	28,253	86,796	167,886	252,822
Costs of goods	0	0		-							2,543	7,812	15,110	22,754
Research and development	5,758	8,088	12,902	4,281	4,820	4,868	5,014	18,983	21,641	23,156	19,682	18,698	19,259	19,837
Selling, general and administrative	7,190	7,519	8,518	2,266	2,370	2,441	2,539	9,616	10,289	10,598	11,552	12,591	13,725	14,823
Marketing and sales											20,000	23,000	24,380	25,599
Transaction-related expenses	411	(70)	80	280	(11)	10	18	297			0	0	0	0
Depreciation and amortization	38	90	40	11	23	23	23	80	80	80	80	80	80	80
Total Operating Expenses	13,397	15,628	21,539	6,839	7,202	7,342	7,594	28,977	32,011	33,834	53,857	62,182	72,554	83,093
Operating Incomes (losses)	(13,397)	(15,628)	(21,539)	(6,839)	(7,202)	(7,342)	(7,594)	(28,977)	(32,011)	(33,834)	(25,604)	24,614	95,332	169,729
Reduction of fair value of warrants	0	0	0	-	0	0	-	0	0	0	0	0	0	0
Investment income	66	74	60	15	15	15	15	61	68	74	82	90	99	109
Interest expense	0	0	0	-	0	0	-	0	0	0	0	0	0	0
Other income/(expense), net	71	(5)	(1)	453	35	1	0	489	2	2	(20)	24	(27)	(27)
Loss before cumulative effect of change in accounting principle	(13,260)	(15,559)	(21,480)	(6,371)	(7,152)	(7,326)	(7,578)	(28,427)	(31,941)	(33,758)	(25,542)	24,728	95,404	169,811
Cumulative effect of change in accounting principle	0	0	0	-	0	0	-	0	0	0	0	0	0	0
Income before tax	(13,260)	(15,559)	(21,480)	(6,371)	(7,152)	(7,326)	(7,578)	(28,427)	(31,941)	(33,758)	(25,542)	24,728	95,404	169,811
Tax Rate								37%	37%	37%	37%	37%	37%	37%
Tax	0.0	0	0	-	0	0	-	0	0	0	0	(9,149)	(35,299)	(62,830)
Net Income (Loss)	(13,260)	(15,559)	(21,480)	(6,371)	(7,152)	(7,326)	(7,578)	(28,427)	(31,941)	(33,758)	(25,542)	15,579	60,104	106,981
Net Income (Loss) Applicable to Common Shareholders	(13,260)	(15,559)	(21,480)	(6,371)	(7,152)	(7,326)	(7,578)	(28,427)	(31,941)	(33,758)	(25,542)	15,579	60,104	106,981
Net Earnings (Losses) Per Share—Basic and Diluted	(\$0.47)	(\$0.33)	(\$0.28)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.25)	(\$0.26)	(\$0.26)	(\$0.20)	\$0.12	\$0.45	\$0.80
Shares outstanding—basic	28,175	47,641	76,586	105,054	115,587	115,987	117,987	113,654	122,987	129,987	130,987	131,987	132,987	133,987
Shares outstanding—diluted	28,175	47,641	76,586	105,054	115,587	115,987	117,987	113,654	122,987	129,987	130,987	131,987	132,987	133,987
Margin Analysis (% of Sales/Revenue)														
Costs of goods										9%	9%	9%	9%	9%
R&D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70%	22%	11%	8%
MG&A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	112%	41%	23%	16%
Operating Income (loss)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-91%	28%	57%	67%
Pretax	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-90%	28%	57%	67%
Tax Rate											37%	37%	37%	37%
Net Income	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-90%	18%	36%	42%
Financial Indicator Growth Analysis (YoY%)														
Licensing revenue									0%	0%	0%	0%	0%	0%
Grant revenue									0%	0%	0%	0%	0%	0%
Total Revenue		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	207%	93%	51%
R&D		40%	60%	24%	70%	57%	42%	47%	14%	7%	-15%	-5%	3%	3%
SG&A		5%	13%	7%	13%	13%	18%	13%	7%	3%	9%	9%	9%	8%
Marketing and sales												15%	6%	5%
Operating Income (Losses)		17%	38%	22%	45%	39%	33%	35%	10%	6%	-24%	-196%	287%	78%
Pretax Income			38%	14%	45%	39%	33%	32%	12%	6%	-24%	-197%	286%	78%
Net Income		17%	38%	14%	45%	39%	33%	32%	12%	6%	-24%	-161%	286%	78%
EPS		-31%	-14%	-50%	-33%	23%	17%	-11%	4%	0%	-25%	-161%	283%	77%

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Source: Bloomberg LP; Company reports; Laidlaw & Company estimates

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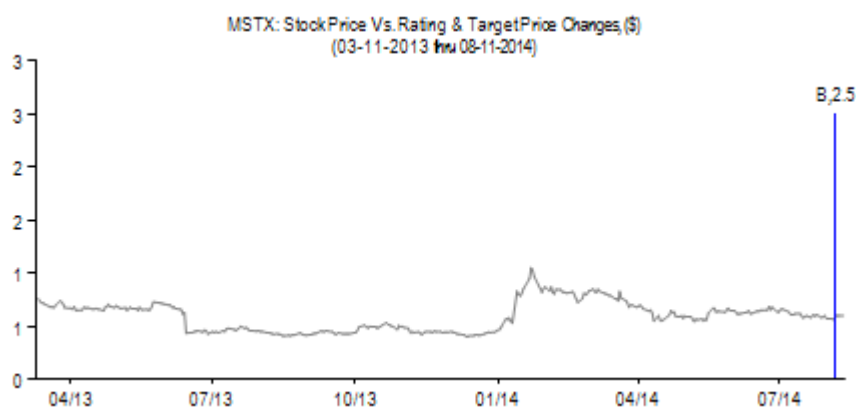
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3 Year Rating Change History

Date	Rating	Closing Price (\$)
08/06/2014	Buy (B)	0.60

3 Year Price Change History

Date	Target Price (\$)	Closing Price, (\$)
08/06/2014	2.50	0.60

Source: Laidlaw & Company

Created by: Blue-Compass.net

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			Investment Banking	Brokerage
Strong Buy (SB)	Expected to significantly outperform the sector over 12 months.	0.00%	0.00%	0.00%
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Sell (S)	Returns expected to significantly underperform the sector average over 12 months.	0.00%	0.00%	0.00%

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