

Merrimack Pharmaceuticals

Updating Model Post 4Q

Merrimack reported a 4Q12 GAAP loss per share of \$0.26 in line with our estimate and the Street (JPMe/cons: -\$0.26). On the call, Merrimack reviewed the pipeline with a focus on late stage assets (MM-398 and MM-121) and highlighted multiple milestones in 2013. Indeed, 2013 is shaping up to be an eventful year for Merrimack with phase 3 data for MM-398 in second line pancreatic cancer and multiple phase 2 trials for MM-121 in breast, ovarian and lung cancer. Merrimack also noted existing cash and Sanofi reimbursements are expected to support operation into 2014. Consistent with prior commentary, Merrimack remains active on the business development front (7 unpartnered assets) with the goal of maintaining rights in the US and EU. Given the continued pipeline progress and multiple meaningful catalysts in 2013, we reiterate our Overweight rating on MACK shares.

- Pipeline.** Data from the phase 3 NAPOLI-1 trial of MM-398 in second line pancreatic cancer is expected in 2H13 (previously mid-13). Data from multiple phase 2 trials of MM-121 in breast, NSCLC and ovarian cancer are expected throughout the year. Specifically, data in 2nd-line mEGFR NSCLC in combination with erlotinib is expected in 1H13 (focus is on biomarkers). In 2H13, data is expected from 2nd-line ER/PR+ breast cancer in combination with exemestane (previously 1H13), neoadjuvant ER/PR+ breast cancer in combination with paclitaxel, 2nd-line ovarian cancer in combination with paclitaxel (previously 2014) and wt/EGFR 2nd-line NSCLC in combination with erlotinib (previously 2014). Additionally, a phase 2 trial of MM-111 in second line gastric cancer and multiple phase 1 combination and translational studies are expected to begin in 2013.
- Adjusting estimates.** We are updating our model to reflect 4Q12 and recent trends. Specifically, we have raised operating expense, particularly R&D to reflect a broadly advancing pipeline. Our 2013-2015 GAAP EPS estimates decrease to (\$1.24), (\$0.50) and \$0.55 from (\$1.21), (\$0.48) and \$0.60, respectively.
- Reiterate Overweight rating.**

Overweight

MACK, MACK US

Price: \$6.34

Price Target: \$11.00

US Biotechnology

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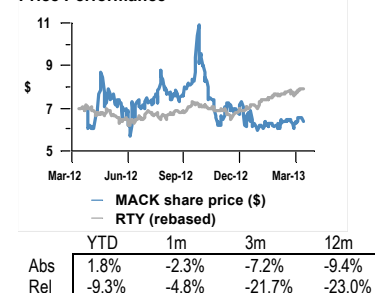
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Price Performance



Merrimack Pharmaceuticals (MACK;MACK US)

FYE Dec	2012A	2013E	2013E	2014E	2014E	2015E	2015E
		(Prev)	(Curr)	(Prev)	(Curr)	(Prev)	(Curr)
EPS Reported (\$)							
Q1 (Mar)	(2.14)	-	(0.29)	-	-	-	-
Q2 (Jun)	(0.22)	-	(0.30)	-	-	-	-
Q3 (Sep)	(0.25)	-	(0.31)	-	-	-	-
Q4 (Dec)	(0.26)	-	(0.34)	-	-	-	-
FY	(2.87)	(1.21)	(1.24)	(0.48)	(0.50)	0.60	0.55
Bloomberg EPS FY (\$)	(1.48)	-	(0.98)	-	(0.77)	-	(0.58)

Source: Company data, Bloomberg, J.P. Morgan estimates.

Company Data

Price (\$)	6.34
Date Of Price	13 Mar 13
52-week Range (\$)	11.11 - 5.66
Mkt Cap (\$ mn)	616.27
Fiscal Year End	Dec
Shares O/S (mn)	97
Price Target (\$)	11.00
Price Target End Date	31 Dec 13

See page 5 for analyst certification and important disclosures.

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Changes to Our Model

Adjusting estimates. We are updating our model to reflect 4Q12 and recent trends. Specifically, we have raised operating expense, particularly R&D to reflect a broadly advancing pipeline. Our 2013-2015 GAAP EPS estimates decrease to (\$1.24), (\$0.50) and \$0.55 from (\$1.21), (\$0.48) and \$0.60, respectively.

Table 1: Changes to Our Model

	2013E OLD	2013E NEW	2014E OLD	2014E NEW	2015E OLD	2015E OLD
Total Revenue	50.0	50.0	164.9	164.9	344.8	344.8
R&D	151.4	153.6	181.7	184.3	218.0	221.1
SG&A	18.5	18.1	23.1	23.5	31.1	32.9
Total Op Ex	169.8	171.6	215.7	218.7	284.0	288.9
Net income	(119.7)	(121.0)	(49.3)	(52.3)	63.0	58.2
EPS	(1.21)	(1.24)	(0.48)	(0.50)	0.60	0.55
<i>fully diluted shares</i>	<i>98.7</i>	<i>97.2</i>	<i>103.7</i>	<i>103.7</i>	<i>105.2</i>	<i>105.2</i>

Source: J.P. Morgan estimates.

Investment Thesis

Merrimack's proprietary Network Biology Platform has the potential to significantly improve the productivity of drug discovery/development in oncology. Indeed, the company has a robust pipeline with 8 assets targeting multiple opportunities across a variety of cancers. Lead asset MM-398 is the key driver, currently in phase 3 development for pancreatic cancer with data in mid-2013 (\$900M peak opportunity). Additionally, MM-121, partnered with Sanofi, is currently in Phase 2 trials for NSCLC, breast and ovarian cancer (data 2013-2014) with peak sales potential of \$1.3B in the US alone (driving royalties of ~\$320M). Importantly, we believe Merrimack's Network Biology Platform has been validated by phase 1 data for MM-121 and MM-111 and to some extent the Sanofi partnership. We see multiple value creation opportunities with de-risking clinical events over the course of 2013-14.

Valuation

Our \$11 December 2013 price target for MACK shares is based on our sum-of-the-parts analysis, which includes US sales of MM-398, MM-121, and MM-111. In our analysis, we use a discount rate of 15% (consistent with other biotech companies at similar stages of development) and assume no terminal value. For MM-398 we project US sales in pancreatic cancer to 2027 (consistent with patent expiration) with modest contributions from other indications (CRC, SCLC and GBM) and apply a 60% probability of success. This implies a value of \$7/share. For MM-121, we apply a 40% probability of success to royalties on US sales in NSCLC to 2028 with modest contribution from other indications (BC and OC). This implies a value of \$3/share. For MM-111, we apply a 25% probability of success to US sales in HER2+ breast cancer to 2029 with modest contribution in other cancers (gastric and bladder); this analysis implies \$0.5/share. We assume net cash of \$1/share. Taken together, our sum-of-the-parts analysis supports our Dec 2013 target of \$11/share.

Risks to Rating and Price Target

We see three primary risks to our Overweight rating on MACK shares. These risks include: (1) failure of MM-398 to demonstrate a meaningful benefit in phase 3 in pancreatic cancer or other pipeline assets such as MM-111 or MM-121 to show clinical differentiation; (2) inability to gain regulatory approval for MM-398 and other pipeline assets; and (3) inability to defend existing patent estate.

Merrimack Pharmaceuticals: Summary of Financials

Income Statement - Annual	FY12A	FY13E	FY14E	FY15E	Income Statement - Quarterly	1Q13E	2Q13E	3Q13E	4Q13E
Revenues	49	50	165	345	Revenues	13	13	13	13
Cost of products sold	126	154	184	221	Cost of products sold	36	37	39	41
Gross profit	(77)	(104)	(19)	124	Gross profit	(24)	(25)	(26)	(29)
SG&A	16	18	23	33	SG&A	4	5	5	5
R&D	154	184	221	-	R&D	39	41	154	-
Operating Income	(93)	(122)	(54)	56	Operating income	(28)	(29)	(31)	(34)
Note: EBITDA	(87)	(116)	(48)	62	Note: EBITDA	(28)	(29)	(31)	(34)
Net interest income / (expense)	0	(0)	1	2	Net interest income / (expense)	(0)	(0)	(0)	(0)
Other income / (expense)	-	-	-	-	Other income / (expense)	-	-	-	-
Pretax income	(92)	(121)	(52)	58	Pretax income	(28)	(29)	(31)	(33)
Income taxes	(0)	0	0	0	Income taxes	0	0	0	0
Net income - GAAP	-	-	-	-	Net income - GAAP	-	-	-	-
Net income - recurring	-	-	-	-	Net income - recurring	-	-	-	-
Diluted shares outstanding	73	97	104	105	Diluted shares outstanding	96	97	98	99
EPS - excluding non-recurring	(2.87)	(1.24)	(0.50)	0.55	EPS - excluding non-recurring	(0.29)	(0.30)	(0.31)	(0.34)
EPS - recurring	0.00	0.00	0.00	0.00	EPS - recurring	0.00	0.00	0.00	0.00
Balance Sheet and Cash Flow Data	FY12A	FY13E	FY14E	FY15E	Ratio Analysis	FY12A	FY13E	FY14E	FY15E
Cash and cash equivalents	70	45	52	114	Sales growth	43.0%	2.2%	229.7%	109.1%
Accounts receivable	9	11	13	15	EBIT growth	14.7%	31.1%	(55.7%)	(203.8%)
Inventories	-	-	-	-	EPS growth	0.0%	0.0%	0.0%	0.0%
Other current assets	0	0	0	0	Gross margin	(157.3%)	(207.1%)	(11.8%)	35.9%
Current assets	88	67	78	145	EBIT margin	(189.6%)	(243.2%)	(32.7%)	16.2%
PP&E	7	8	10	12	EBITDA margin	-	-	-	-
Total assets	108	88	101	171	Tax rate	0.1%	0.0%	0.0%	0.0%
Total debt	-	-	-	-	Net margin	0.0%	0.0%	0.0%	0.0%
Total liabilities	26	26	26	26	Debt / EBITDA	-	-	-	-
Shareholders' equity	1	(19)	(6)	64	Debt / Capital (book)	0.0%	0.0%	0.0%	0.0%
Net income (including charges)	(91)	(121)	(52)	58	Return on assets (ROA)	0.0%	0.0%	0.0%	0.0%
D&A	6	6	6	6	Return on equity (ROE)	0.0%	0.0%	0.0%	0.0%
Change in working capital	(3)	(4)	(4)	(5)	Return on invested capital (ROIC)	-	-	-	-
Other	-	-	-	-	Enterprise value / sales	15.3	14.4	4.4	2.3
Cash flow from operations	(82)	(111)	(41)	71	Enterprise value / EBITDA	-	-	-	-
Capex	(6)	(7)	(8)	(9)	Free cash flow yield	(13.0%)	(17.4%)	(7.2%)	9.1%
Free cash flow	(88)	(118)	(49)	62					
Cash flow from investing activities	(6)	(7)	(8)	(9)					
Cash flow from financing activities	107	93	56	0					
Dividends	-	-	-	-					
Dividend yield	-	-	-	-					

Source: Company reports and J.P. Morgan estimates.

Note: \$ in millions (except per-share data). Fiscal year ends Dec

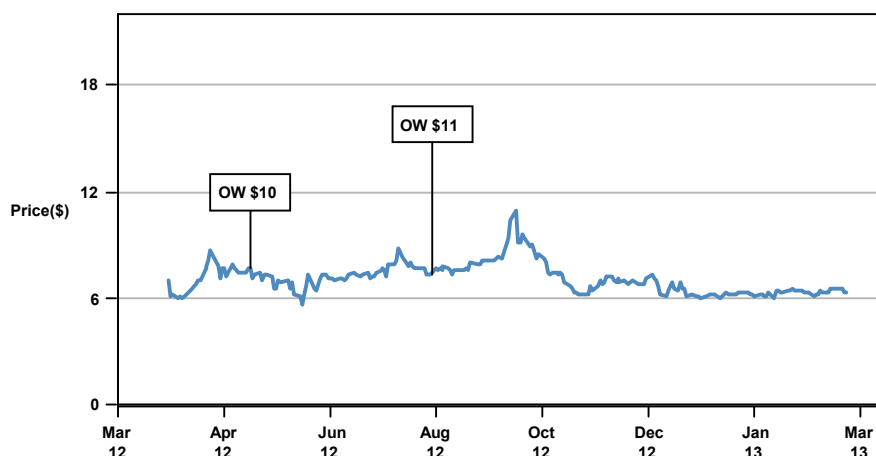
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Merrimack Pharmaceuticals (MACK, MACK US) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
08-May-12	OW	7.62	10.00
10-Aug-12	OW	7.37	11.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage May 08, 2012.

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