

Vitae Pharmaceuticals, Inc. (VTAE)

Overweight

BACE Program Restart and Proforma Cash of \$103 Million; Reiterate Overweight

CONCLUSION

Vitae ended 2014 with \$65 million in cash, and after netting \$37.8 million in a 1Q:15 equity offering, we estimate proforma cash of \$103 million. Partner BI has elected to move the BACE inhibitor program forward with backup compound BI 1147560. Recall that BI 1181181 was placed on a voluntary clinical hold after skin irritations were observed in some patients. BI plans to restart the BACE clinical program with a Phase I trial by YE:15. Partner BI is also conducting Phase II trials of VTP-34072 in diabetes with data in 2Q:15. Vitae plans to file an IND on VTP-43742 in 1H:15 with initial proof-of-concept psoriasis data expected by year-end. Finally, topical LXR-beta agonist VTP-38543 for atopic dermatitis will enter Phase I safety trials by YE:15. We reiterate our Overweight rating and \$23 price target.

- **Strong Balance Sheet.** Including the \$37.8 million Vitae raised in 1Q:15, we estimate the company holds proforma cash of \$103 million, sufficient to last through 2016.
- **BACE Restart.** BI will move forward with backup BACE inhibitor BI 1147560 after determining the skin reactions with BI 1181181 were a continuing "obstacle." The new molecule is structurally distinct from '181, which may yield a better tolerability profile. Vitae commented that '181 was selected initially due to manufacturing difficulties with '560 that BI has resolved. '560 has completed GLP tox studies and BI plans to begin a new Phase I trial by YE:15. Importantly '560 was comparable to '181 in lowering CSF amyloid beta in pre-clinical models. BACE remains an important program for Vitae following the positive Alzheimer's data from Biogen's amyloid beta antibody, aducanumab.
- **Phase II Diabetes Data in 2Q:15.** VTP-34072 is an oral small molecule inhibitor of 11β-HSD1 that reduces cortisol to treat Type II diabetes. BI is conducting a 4-week Phase II trial in 126 diabetics with safety and glucose lowering data expected in 2Q:15.
- **Exciting Autoimmune Program Entering the Clinic.** VTP-43742 is an inhibitor of RORγt, a key regulator in TH17 activation. TH17 cells produce multiple downstream pro-inflammatory cytokines including IL-17 and IL-21, which are implicated in multiple autoimmune diseases. Vitae intends to file an IND on VTP-43742 in 1H:15 with initial proof-of-concept psoriasis data expected by year-end. Vitae then plans to initiate two Phase II trials, one large and one orphan autoimmune disease, in 2016.

RISKS TO ACHIEVEMENT OF PRICE TARGET

Risks include clinical, regulatory and commercial. Vitae's deals with BI may falter or drugs may fail in the clinic. Vitae may be unable to file new INDs. Vitae will likely need to raise additional capital.

COMPANY DESCRIPTION

Vitae is a structure-based small molecule drug discovery company.

YEAR	REVENUE (US\$ m)						EARNINGS PER SHARE (US\$)					
	Mar	Jun	Sep	Dec	FY	FY RM	Mar	Jun	Sep	Dec	FY	FY P/E
2014A	1.2	1.2	6.2	0.2	8.7	28.1x	(8.37)	(8.37)	(1.06)	(0.40)	(3.61)	NM
2015E	0.2	0.2	0.2	0.2	0.8	305.4x	(0.34)	(0.35)	(0.37)	(0.40)	(1.47)	NM
2016E	—	—	—	—	1.0	244.3x	—	—	—	—	(1.87)	NM

1Q:14 and 2Q:14 quarterly results not yet provided, so 6-mos reported results divided in half to arrive at 1Q:14 and 2Q:14 est.
Vitae went public in Sept 2014.

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Vitae Pharmaceuticals, Inc.

PRICE: US\$11.31

TARGET: US\$23.00

Proj. EV of \$469M + YE:15E net cash

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Changes	Previous	Current
Rating	—	Overweight
Price Tgt	—	US\$23.00
FY15E Rev (mil)	—	US\$0.8
FY16E Rev (mil)	—	US\$1.0
FY15E EPS	US\$(1.48)	US\$(1.47)
FY16E EPS	—	US\$(1.87)
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52-Week High / Low	US\$23.35 / US\$5.41	
Shares Out (mil)	21.6	
<i>Incl. recent 3M share offering w/o over allotment</i>		
Market Cap. (mil)	US\$244.3	
Avg Daily Vol (ooo)	170	
Book Value/Share	US\$2.72	
Net Cash Per Share	US\$4.50	
<i>Incl. net proceeds from recent offering</i>		
Debt to Total Capital	0%	
Div (ann)	NA	
Fiscal Year End	Dec	

Price Performance - 1 Year



Source: Bloomberg

Vitae Pharmaceuticals
Quarterly Earnings Estimates
(\$ in thousands except per share)

3/31/15

	<u>2013A</u>	<u>1QA</u> ¹	<u>2QA</u> ¹	<u>3QA</u>	<u>4QA</u>	<u>2014A</u>	<u>1QE</u>	<u>2QE</u>	<u>3QE</u>	<u>4QE</u>	<u>2015E</u>	<u>2016E</u>
Revenues:												
Collaborative Revenue	\$22,513	\$1,164	\$1,164	\$6,178	\$162	\$8,669	\$200	\$200	\$200	\$200	\$800	\$1,000
Product Sales	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenues	\$22,513	\$1,164	\$1,164	\$6,178	\$162	\$8,669	\$200	\$200	\$200	\$200	\$800	\$1,000
Operating Expenses:												
Research and Development	14,917	4,713	4,713	4,799	5,080	19,305	5,500	6,000	6,500	7,000	25,000	35,000
General and Administrative	5,406	1,314	1,314	3,096	2,189	7,914	1,750	2,000	2,000	2,250	8,000	10,000
Total Operating Expenses	\$20,323	\$6,027	\$6,027	\$7,896	\$7,269	\$27,219	\$7,250	\$8,000	\$8,500	\$9,250	\$33,000	\$45,000
Operating Income/(Loss)	\$2,190	(\$4,862)	(\$4,862)	(\$1,718)	(\$7,108)	(\$18,550)	(\$7,050)	(\$7,800)	(\$8,300)	(\$9,050)	(\$32,200)	(\$44,000)
Operating Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interest income, Net	(1,355)	(256)	(256)	(217)	(167)	(897)	0	0	0	0	0	0
Other Income	327	109	109	126	0	343	0	0	0	0	0	0
PreTax Income/(Loss)	\$1,162	(\$5,010)	(\$5,010)	(\$1,809)	(\$7,275)	(\$19,103)	(\$7,050)	(\$7,800)	(\$8,300)	(\$9,050)	(\$32,200)	(\$44,000)
Pretax Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Income Tax Benefit (Expense)	0	0	0	0	0	0	0	0	0	0	0	0
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Income/(Loss)	\$1,162	(\$5,010)	(\$5,010)	(\$1,809)	(\$7,275)	(\$19,103)	(\$7,050)	(\$7,800)	(\$8,300)	(\$9,050)	(\$32,200)	(\$44,000)
Net Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Net Income/(Loss) per Share	\$0.12	(\$8.37)	(\$8.37)	(\$1.06)	(\$0.40)	(\$3.61)	(\$0.34)	(\$0.35)	(\$0.37)	(\$0.40)	(\$1.47)	(\$1.87)
Shares Outstanding	10,099	599	599	1,712	18,114	5,291	20,500	22,000	22,250	22,500	21,812	23,500

Source: Company reports and Piper Jaffray estimates

1. 1Q:14 and 2Q:14 quarterly results not yet reported, so 6-month results divided in half to arrive at 1Q:14 and 2Q:14 quarterly estimates.

Current disclosure information for this company can be found at <http://www.piperjaffray.com/researchdisclosures>.

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 R: Resuming Coverage
 T: Transferring Coverage
 D: Discontinuing Coverage
 S: Suspending Coverage
 OW: Overweight
 N: Neutral
 UW: Underweight
 NA: Not Available
 UR: Under Review

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Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OW]	373	60.16	104	27.88
HOLD [N]	232	37.42	17	7.33
SELL [UW]	15	2.42	0	0.00

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