

Vitae Pharmaceuticals, Inc. (VTAE)

Overweight

Cash of \$87 million to Advance and Expand Pipeline; Reiterate Overweight

CONCLUSION

Vitae ended 1Q:15 with \$87 million in cash having netted \$38 million in an equity offering and paid off its existing venture debt. Partner Boehringer Ingelheim has completed Phase II dosing of diabetics with VTP-34072 + metformin data this quarter and monotherapy data in 2H:15. BI also expects to begin Phase I studies of backup BACE inhibitor BI-1147560 into the clinic by year-end, which could trigger another \$7 million milestone to Vitae that is not in our model. Importantly, Vitae plans to file an IND on VTP-43742 in 2Q:15 with initial proof-of-concept psoriasis data expected by year-end. Finally, topical LXR-beta agonist VTP-38543 for atopic dermatitis will begin Phase I safety trials by YE:15. We reiterate our Overweight rating and \$23 price target.

- **Strengthened Balance Sheet.** Vitae ended 1Q:15 with \$87 million in cash having netted \$38 million in an equity offering and paid off \$4.3 million in venture debt.
- **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 has completed dosing in a 4-week Phase II trial in 126 diabetics with VTP-34072 + metformin data this quarter and monotherapy data in 2H: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. Vitae intends to file an IND on VTP-43742 in 2Q:15 with Phase I safety by mid-'15 and initial proof-of-concept psoriasis data by year-end. Vitae then plans to initiate two Phase II trials in 2016: one large and one orphan autoimmune disease.
- **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 better tolerability. 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, which could trigger a \$7 million milestone not in our model. Importantly '560 was comparable to '181 in lowering CSF amyloid beta in preclinical models.

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.

PRICE: US\$13.38

Price as of close May 12, 2015

TARGET: US\$23.00

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

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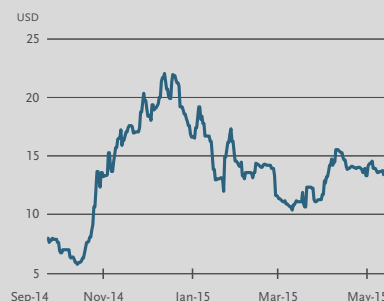
Changes	Previous	Current
Rating	—	Overweight
Price Tgt	—	US\$23.00
FY15E Rev (mil)	—	US\$0.8
FY16E Rev (mil)	—	US\$1.0
FY15E EPS	US\$(1.47)	US\$(1.75)
FY16E EPS	US\$(1.87)	US\$(1.90)

52-Week High / Low US\$23.35 / US\$5.41
Shares Out (mil) 21.8

Form 10Q dated May 8th

Market Cap. (mil)	US\$291.7
Total Assets (\$mil)	91.2
Avg Daily Vol (ooo)	146
Book Value/Share	US\$3.92
Net Cash Per Share	US\$4.06
Debt to Total Capital	0.0%
Div (ann)	NA
Fiscal Year End	Dec

Price Performance - 1 Year



Source: Bloomberg

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	33.5x	(8.24)	(8.57)	(1.06)	(0.40)	(3.61)	NM
2015E	0.2A	0.2	0.2	0.2	0.8	364.6x	(0.47)A	(0.42)	(0.42)	(0.45)	(1.75)	NM
2016E	0.3	0.3	0.3	0.3	1.0	291.7x	(0.44)	(0.47)	(0.48)	(0.51)	(1.90)	NM

Vitae went public in Sept 2014.

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

5/12/15

	<u>1QA</u>	<u>2QA</u>	<u>3QA</u>	<u>4QA</u>	<u>2014A</u>	<u>1QA</u>	<u>2QE</u>	<u>3QE</u>	<u>4QE</u>	<u>2015E</u>	<u>1QA</u>	<u>2QE</u>	<u>3QE</u>	<u>4QE</u>	<u>2016E</u>
Revenues:															
Collaborative Revenue	\$1,173	\$1,155	\$6,178	\$162	\$8,669	\$150	\$200	\$200	\$200	\$750	\$250	\$250	\$250	\$250	\$1,000
Product Sales	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenues	\$1,173	\$1,155	\$6,178	\$162	\$8,669	\$150	\$200	\$200	\$200	\$750	\$250	\$250	\$250	\$250	\$1,000
Operating Expenses:															
Research and Development	4,548	4,877	4,799	5,080	19,305	7,506	7,500	7,500	8,000	30,506	8,000	8,500	9,000	9,500	35,000
General and Administrative	1,260	1,368	3,096	2,189	7,914	2,111	2,000	2,000	2,250	8,361	2,250	2,500	2,500	2,750	10,000
Total Operating Expenses	\$5,808	\$6,246	\$7,896	\$7,269	\$27,219	\$9,617	\$9,500	\$9,500	\$10,250	\$38,867	\$10,250	\$11,000	\$11,500	\$12,250	\$45,000
Operating Income/(Loss)	(\$4,634)	(\$5,090)	(\$1,718)	(\$7,108)	(\$18,550)	(\$9,467)	(\$9,300)	(\$9,300)	(\$10,050)	(\$38,117)	(\$10,000)	(\$10,750)	(\$11,250)	(\$12,000)	(\$44,000)
Operating Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interest income, Net	(268)	(244)	(217)	(167)	(897)	(34)	0	0	0	(34)	0	0	0	0	0
Other Income	13	204	126	0	343	(207)	0	0	0	(207)	0	0	0	0	0
PreTax Income/(Loss)	(\$4,889)	(\$5,130)	(\$1,809)	(\$7,275)	(\$19,103)	(\$9,707)	(\$9,300)	(\$9,300)	(\$10,050)	(\$38,357)	(\$10,000)	(\$10,750)	(\$11,250)	(\$12,000)	(\$44,000)
PreTex Margin	NM	NM	NM	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	0	0	0
<i>Tax Rate</i>	0.0%	0.0%	0.0%	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)	(\$4,889)	(\$5,130)	(\$1,809)	(\$7,275)	(\$19,103)	(\$9,707)	(\$9,300)	(\$9,300)	(\$10,050)	(\$38,357)	(\$10,000)	(\$10,750)	(\$11,250)	(\$12,000)	(\$44,000)
Net Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Net Income/(Loss) per Share	(\$8.24)	(\$8.57)	(\$1.06)	(\$0.40)	(\$3.61)	(\$0.47)	(\$0.42)	(\$0.42)	(\$0.45)	(\$1.75)	(\$0.44)	(\$0.47)	(\$0.48)	(\$0.51)	(\$1.90)
Shares Outstanding	593	599	1,712	18,114	5,291	20,827	22,000	22,250	22,500	21,894	22,750	23,000	23,250	23,500	23,125

Source: Company reports and Piper Jaffray estimates

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

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

Distribution of Ratings/IB Services Piper Jaffray				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OW]	380	61.59	102	26.84
HOLD [N]	222	35.98	14	6.31
SELL [UW]	15	2.43	0	0.00

Note: Distribution of Ratings/IB Services shows the number of companies currently in each rating category from which Piper Jaffray and its affiliates received compensation for investment banking services within the past 12 months. FINRA rules require disclosure of which ratings most closely correspond with "buy," "hold," and "sell" recommendations. Piper Jaffray ratings are not the equivalent of buy, hold or sell, but instead represent recommended relative weightings. Nevertheless, Overweight corresponds most closely with buy, Neutral with hold and Underweight with sell. See Stock Rating definitions below.

Analyst Certification — Edward A. Tenthoff, Sr Research Analyst — Benjamin J. Adler, Ph.D., Research Analyst

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