

Vitae Pharmaceuticals, Inc. (VTAE)

Overweight

Early VTP-43742 Data Looks Good, Psoriasis Data By YE:15; Reiterate Overweight

CONCLUSION

Vitae released encouraging results from the single ascending dose portion of its Phase I trial of ROR γ t inhibitor VTP-43742. The drug was safe and well tolerated, with no SAEs or drug related ECG/lab abnormalities. VTP-43742 had a PK/PD profile which indicated once daily dosing is possible. Importantly, VTP-43742 reduced IL-17A production ex vivo in patient blood samples, indicating the drug is on target. Vitae expects proof of concept data by year end in psoriasis patients enrolled in the ongoing multiple ascending dose trial. Topical LXR-beta agonist VTP-38543 for atopic dermatitis will begin Phase I trials this year. While VTAE shares have come under pressure following set-backs in its diabetes and Alzheimer's programs, we remain buyers for the company's wholly-owned pipeline, in particular VTP-43742. Vitae ended 2Q:15 with \$80 million in cash. We reiterate our Overweight rating and \$16 price target.

- **VTP-43742 Appears Safe and Active.** Vitae released the results of the single ascending dose studies of VTP-43742 in 53 healthy volunteers. The drug was well tolerated, with no SAEs or abnormalities in ECG or labs. VTP-43742 is an inhibitor of ROR γ t, a key regulator in TH17 activation, however, ROR γ t has been a difficult to drug target. Vitae demonstrated on target activity by measuring dose dependent reductions in IL-17A production (up to 90%) from subject blood samples over a 24 hour period. the drug's prolonged activity ex vivo and its 30 hour plasma half life make once daily dosing a realistic possibility. Vitae is running a parallel multiple ascending dose trial in healthy volunteers. We expect up to 60 moderate-to-severe psoriasis patients will be enrolled with top-line 4-week PASI efficacy data this year. Vitae has observed strong preclinical activity of VTP-43742 in a mouse multiple sclerosis model and plans to initiate two Phase II trials in 2016.
- **Atopic Dermatitis a Second Focus.** VTP-38543 is a topical LXR-beta agonist ready to begin Phase I trials this year with PoC data in 2016. In a mouse model of atopic dermatitis, VTP-38543 improved both breakdown of the dermal barrier and inflammatory disease processes on par with steroids. According to the NIH, atopic dermatitis affects up to 30% of Americans and more effective treatments are needed.

RISKS TO ACHIEVEMENT OF PRICE TARGET

Risks include clinical, regulatory and commercial. Vitae may be unable to sign new partnerships and its 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\$7.93

Price as of the close Sept. 8, 2015

TARGET: US\$16.00

Proj. EV of \$331M + mid-FY:16E net cash

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Changes	Previous	Current
Rating	—	Overweight
Price Tgt	—	US\$16.00
FY15E Rev (mil)	—	US\$0.7
FY16E Rev (mil)	—	US\$1.0
FY15E EPS	—	US\$(1.84)
FY16E EPS	—	US\$(1.95)
52-Week High / Low	US\$23.35 / US\$5.41	
Shares Out (mil)	21.8	
Market Cap. (mil)	US\$172.9	
Total Assets (\$mil)	NA	
Avg Daily Vol (000)	157	
Book Value/Share	US\$3.50	
Net Cash Per Share	US\$3.68	
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	19.9x	(8.24)	(8.57)	(1.06)	(0.40)	(3.61)	NM
2015E	0.2A	0.2A	0.2	0.2	0.7	247.0x	(0.47)A	(0.45)A	(0.45)	(0.48)	(1.84)	NM
2016E	0.3	0.3	0.3	0.3	1.0	172.9x	(0.46)	(0.49)	(0.48)	(0.51)	(1.95)	NM

Vitae went public in Sept 2014.

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

8/4/15

	<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>1QE</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	\$162	\$200	\$200	\$712	\$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	\$162	\$200	\$200	\$712	\$250	\$250	\$250	\$250	\$1,000
Operating Expenses:															
Research and Development	4,548	4,877	4,799	5,080	19,305	7,506	7,773	8,000	8,500	31,779	8,500	9,000	9,000	9,500	36,000
General and Administrative	1,260	1,368	3,096	2,189	7,914	2,111	2,259	2,250	2,500	9,120	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	\$10,032	\$10,250	\$11,000	\$40,899	\$10,750	\$11,500	\$11,500	\$12,250	\$46,000
Operating Income/(Loss)	(\$4,634)	(\$5,090)	(\$1,718)	(\$7,108)	(\$18,550)	(\$9,467)	(\$9,871)	(\$10,050)	(\$10,800)	(\$40,187)	(\$10,500)	(\$11,250)	(\$11,250)	(\$12,000)	(\$45,000)
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)	108	0	0	74	0	0	0	0	0
Other Income	13	204	126	0	343	(207)	1	0	0	(205)	0	0	0	0	0
PreTax Income/(Loss)	(\$4,889)	(\$5,130)	(\$1,809)	(\$7,275)	(\$19,103)	(\$9,707)	(\$9,761)	(\$10,050)	(\$10,800)	(\$40,318)	(\$10,500)	(\$11,250)	(\$11,250)	(\$12,000)	(\$45,000)
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)	(\$9,761)	(\$10,050)	(\$10,800)	(\$40,318)	(\$10,500)	(\$11,250)	(\$11,250)	(\$12,000)	(\$45,000)
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)	(\$0.45)	(\$0.45)	(\$0.48)	(\$1.84)	(\$0.46)	(\$0.49)	(\$0.48)	(\$0.51)	(\$1.95)
Shares Outstanding	593	599	1,712	18,114	5,291	20,827	21,838	22,250	22,500	21,854	22,750	23,000	23,250	23,500	23,125

Source: Company reports and Piper Jaffray estimates

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Legend:

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

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Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OW]	433	60.81	106	24.48
HOLD [N]	263	36.94	11	4.18
SELL [UW]	16	2.25	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.

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