

# Vitae Pharmaceuticals

(VTAE-NASDAQ)

**Stock Rating:** Outperform  
**Industry Rating:** Outperform

April 1, 2015

**Jim Birchenough, M.D.** 415-591-2129

BMO Capital Markets Corp  
 jim.birchenough@bmo.com

Chuck Whitesell / Nick Abbott, PhD / Yanan Zhu, PhD  
 BMO Capital Markets Corp.  
 212-885-4120 / 206-542-2492 / 415-591-2141  
 charles.whitesell@bmo.com / nicholas.abbott@bmo.com /  
 yanan.zhu@bmo.com

## Strong Progress Provides Momentum Into Proof-of-Concept in Psoriasis, Diabetes, and Alzheimer's

### Event

VTAE reported 4Q14 operating results yesterday. Net loss per share in 4Q14 was \$0.40, and VTAE ended 2014 with \$65.3 million in cash, with an additional \$37.8 million raised in a follow-on offering in 1Q15. Updates from the call included decision by partner Boehringer Ingelheim (BI) to move forward with BI1147560, a BACE inhibitor that is structurally distinct from BI1181181, after concluding that the skin reactions seen with -181 were an obstacle for further development. VTAE believes the skin reactions are compound-specific and unrelated to the BACE inhibition mechanism of action. Phase 1 initiation for -560 is expected by YE15. Additional 2015 milestones included initiation of a phase 1 single-dose healthy volunteer study of VTP-43742 in 2Q15 (completion in mid-2015), initiation and completion of a multiple-dose phase 1 study of -742 in psoriasis in 2H15, top-line phase 2 results for VTP-34072 (partnered with BI) in type 2 diabetes in 2Q15, and phase 1 initiation for VTP-38543 in 2H15.

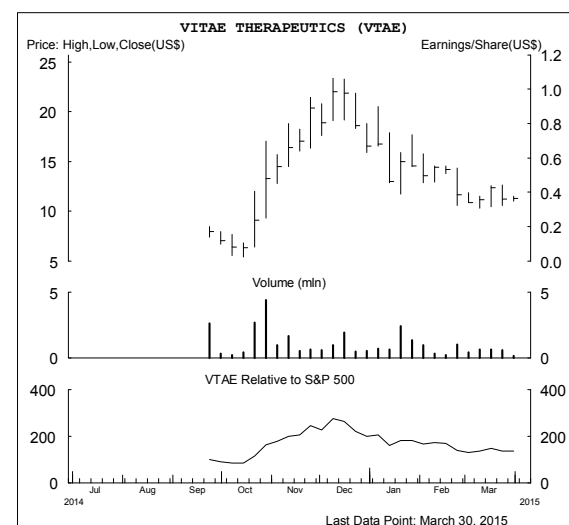
### Impact & Analysis

We reiterate our Outperform rating on shares of VTAE following review of 4Q14 results and ahead of significant milestones. With primary focus on -742, we expect proof-of-concept (POC) to be established in patients with psoriasis within the next 6-12 months and would reflect on strong pre-clinical data suggesting superior effect to potent IL17 mAbs. Additional POC data for -072 in diabetes in 2Q15 could represent a nearer-term catalyst and help validate VTAE's unique structure based drug design. Finally, following the prior clinical hold on -181, we are encouraged by the speed and decisiveness of moving forward with a back-up compound, highlighting partner BI's commitment to development in Alzheimer's. Overall, VTAE remains under-valued relative to its broad opportunity base, and we would recommend buying at current levels.

### Valuation & Recommendation

We arrive at our \$27 price target by applying a 25x multiple to our 2023E EPS estimate of \$5.06 and discounting at 25%. We maintain our Outperform rating.

**Price (31-Mar)** \$11.71 **52-Week High** \$23.35  
**Target Price** \$27.00 **52-Week Low** \$5.41



(FY-Dec.)	2013A	2014A	2015E	2016E
EPS	\$0.09	-\$3.61	-\$1.67↑	-\$1.42
P/E			na	na
CFPS	na	na	na	na
P/CFPS			na	na
Rev. (\$mm)	\$23	\$9	\$0	\$0
EV (\$mm)	na	\$93	\$93	\$93
EBITDA (\$mm)	\$2	-\$19	-\$26	-\$27
EV/EBITDA	na	na	na	na
Quarterly EPS	Q1	Q2	Q3	Q4
2013A	na	na	na	na
2014A	-\$0.36	-\$0.36	-\$1.06	-\$0.40
2015E	-\$0.37	-\$0.41	-\$0.45	-\$0.45
Dividend	\$0.00			
Book Value	\$0.52			
Shares O/S (mm)	18.1			
Float O/S (mm)	6.4			
Wkly Vol (000s)	1,080			
Net Debt (\$mm)	-\$16			
Yield				0.0%
Price/Book				22.5x
Mkt. Cap (mm)				\$212
Float Cap (mm)				\$75
Wkly \$ Vol (mm)				\$14.9
Next Rep. Date				na

Notes: All values in US\$

First Call Mean Estimates: VITAE PHARMACEUTICALS INC (US\$)  
 2014E: -\$2.40; 2015E: -\$1.75; 2016E: -\$1.67

#### Changes

#### Annual EPS

2015E -\$1.72 to -\$1.67  
 2016E na to -\$1.42

#### Quarterly EPS

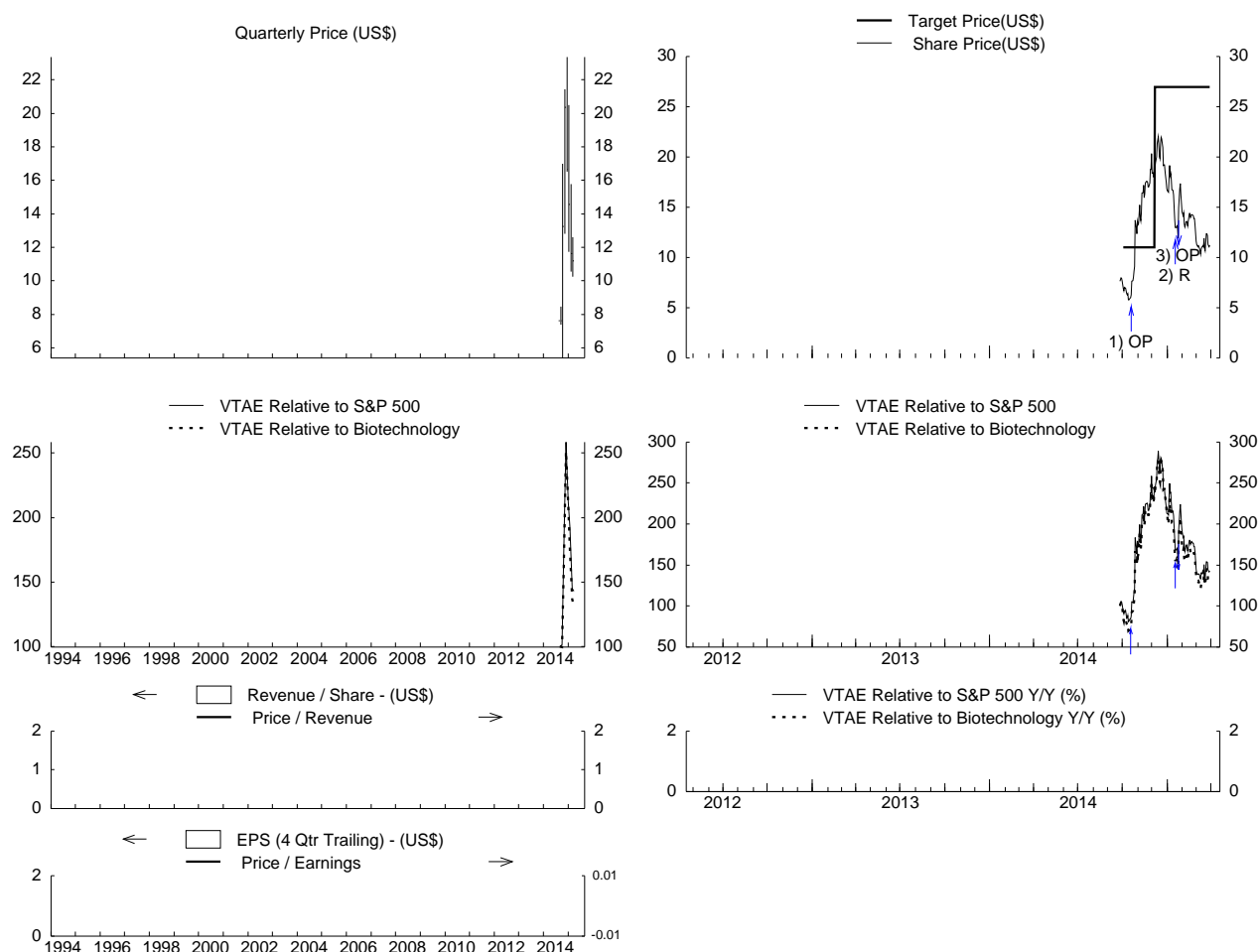
Q1/15E na to -\$0.37  
 Q2/15E na to -\$0.41  
 Q3/15E na to -\$0.45  
 Q4/15E na to -\$0.45

## Exhibit 1: VTAE Income Statement 2014A-2023E

INCOME STATEMENT (\$M)	2014A	1Q15E	2Q15E	3Q15E	4Q15E	2015E	2016E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
<b>REVENUES</b>															
Product Revenue	\$ 8.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37.7	\$ 96.8	\$ 189.9	\$ 327.6
Collaboration Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sponsored Research and Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL REVENUES</b>	<b>\$ 8.7</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 37.7</b>	<b>\$ 96.8</b>	<b>\$ 189.9</b>	<b>\$ 327.6</b>
<b>EXPENSES (GAAP)</b>															
Cost of Goods Sold (COGS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.6	\$ 9.2	\$ 17.1	\$ 27.8
R&D Expense	\$ 19.3	\$ 5.0	\$ 5.0	\$ 5.0	\$ 5.0	\$ 5.0	\$ 20.0	\$ 21.0	\$ 21.5	\$ 24.0	\$ 26.0	\$ 28.0	\$ 32.0	\$ 34.0	\$ 37.0
SG&A Expense	\$ 7.9	\$ 1.5	\$ 1.5	\$ 1.5	\$ 1.5	\$ 1.5	\$ 6.0	\$ 6.0	\$ 6.0	\$ 8.0	\$ 10.0	\$ 12.0	\$ 14.0	\$ 16.0	\$ 18.0
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL EXPENSES</b>	<b>\$ 27.2</b>	<b>\$ 6.5</b>	<b>\$ 6.5</b>	<b>\$ 6.5</b>	<b>\$ 6.5</b>	<b>\$ 6.5</b>	<b>\$ 26.0</b>	<b>\$ 27.0</b>	<b>\$ 27.5</b>	<b>\$ 32.0</b>	<b>\$ 36.0</b>	<b>\$ 43.6</b>	<b>\$ 55.2</b>	<b>\$ 67.1</b>	<b>\$ 82.8</b>
<b>Operating Income</b>	<b>\$ (18.5)</b>	<b>\$ (6.5)</b>	<b>\$ (6.5)</b>	<b>\$ (6.5)</b>	<b>\$ (6.5)</b>	<b>\$ (6.5)</b>	<b>\$ (26.0)</b>	<b>\$ (27.0)</b>	<b>\$ (27.5)</b>	<b>\$ (32.0)</b>	<b>\$ (36.0)</b>	<b>\$ (5.9)</b>	<b>\$ 41.6</b>	<b>\$ 122.8</b>	<b>\$ 244.8</b>
Depreciation and amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EBIT	\$ (18.5)	\$ (6.5)	\$ (6.5)	\$ (6.5)	\$ (6.5)	\$ (6.5)	\$ (26.0)	\$ (27.0)	\$ (27.5)	\$ (32.0)	\$ (36.0)	\$ (5.9)	\$ 41.6	\$ 122.8	\$ 244.8
Interest and other income	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest and other expense	\$ (1.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Income (Expense)	\$ 0.3	\$ (2.0)	\$ (3.0)	\$ (4.0)	\$ (4.0)	\$ (4.0)	\$ (12.9)	\$ (12.1)	\$ (7.2)	\$ 12.0	\$ (7.5)	\$ -	\$ -	\$ -	\$ -
Interest and Other Income (Expense)	\$ (0.6)	\$ (2.0)	\$ (3.0)	\$ (4.0)	\$ (4.0)	\$ (4.0)	\$ (12.9)	\$ (12.1)	\$ (7.2)	\$ 12.0	\$ (7.5)	\$ -	\$ -	\$ -	\$ -
Pretax Income	\$ (19.1)	\$ (8.5)	\$ (9.5)	\$ (10.5)	\$ (10.5)	\$ (10.5)	\$ (38.9)	\$ (39.1)	\$ (34.7)	\$ (20.0)	\$ (43.5)	\$ (5.9)	\$ 41.6	\$ 122.8	\$ 244.8
Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Net Income (GAAP)</b>	<b>\$ (19.1)</b>	<b>\$ (8.5)</b>	<b>\$ (9.5)</b>	<b>\$ (10.5)</b>	<b>\$ (10.5)</b>	<b>\$ (10.5)</b>	<b>\$ (38.9)</b>	<b>\$ (39.1)</b>	<b>\$ (34.7)</b>	<b>\$ (20.0)</b>	<b>\$ (43.5)</b>	<b>\$ (5.9)</b>	<b>\$ 41.6</b>	<b>\$ 122.8</b>	<b>\$ 244.8</b>
EPS (GAAP) (basic)	\$ (3.61)	\$ (0.37)	\$ (0.41)	\$ (0.45)	\$ (0.45)	\$ (0.45)	\$ (1.67)	\$ (1.42)	\$ (1.16)	\$ (0.66)	\$ (1.13)	\$ (0.14)	\$ 0.94	\$ 2.64	\$ 5.05
EPS (GAAP) (diluted)	\$ (3.61)	\$ (0.37)	\$ (0.41)	\$ (0.45)	\$ (0.45)	\$ (0.45)	\$ (1.67)	\$ (1.42)	\$ (1.16)	\$ (0.66)	\$ (1.13)	\$ (0.14)	\$ 0.94	\$ 2.64	\$ 5.05
Total of Reconciliation Items	\$ 112.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income (Non-GAAP)	\$ 93.0	\$ (8.5)	\$ (9.5)	\$ (10.5)	\$ (10.5)	\$ (10.5)	\$ (38.9)	\$ (39.1)	\$ (34.7)	\$ (20.0)	\$ (43.5)	\$ (5.9)	\$ 41.6	\$ 122.8	\$ 244.8
Impact of Adjustments to EPS	\$ 8.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (39.1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EPS (Non-GAAP) (basic)	\$ 5.95	\$ (0.37)	\$ (0.41)	\$ (0.45)	\$ (0.45)	\$ (0.45)	\$ (1.67)	\$ (1.42)	\$ (1.16)	\$ (0.66)	\$ (1.13)	\$ (0.14)	\$ 0.94	\$ 2.64	\$ 5.05
EPS (Non-GAAP) (diluted)	\$ 5.95	\$ (0.37)	\$ (0.41)	\$ (0.45)	\$ (0.45)	\$ (0.45)	\$ (1.67)	\$ (1.42)	\$ (1.16)	\$ (0.66)	\$ (1.13)	\$ (0.14)	\$ 0.94	\$ 2.64	\$ 5.05
Weighted average shares outstanding (basic)	5.3	23.1	23.1	23.3	23.6	23.3	23.3	27.7	29.9	30.3	38.7	42.6	44.3	46.5	48.4
Weighted average shares outstanding (diluted)	5.3	23.1	23.1	23.3	23.6	23.3	23.3	27.7	29.9	30.3	38.6	42.6	44.3	46.4	48.4

Source: Company reports and BMO Capital Markets

## VITAE THERAPEUTICS (VTAE)



FYE (Dec.)	EPS US\$	P/E Hi - Lo	DPS US\$	Yield% Hi - Lo	Payout %	BV US\$	P/B Hi - Lo	ROE %
Range*:		na na		NC			>15 >15	
Current*	ND	na	0.00	0.0	na	0.5	22.3	na

VTAE - Rating as of 23-Sep-14 = NR

Date	Rating Change	Share Price
1 17-Oct-14	NR to OP	\$6.30
2 16-Jan-15	OP to R	\$12.95
3 23-Jan-15	R to OP	\$14.94

\* Current EPS is the 4 Quarter Trailing to Q3/2014.  
 \* Valuation metrics are based on high and low for the fiscal year.  
 \* Range indicates the valuation range for the period presented above.

Last Price ( March 27, 2015): \$11.21  
 Sources: IHS Global Insight, Thomson Reuters, BMO Capital Markets.

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**Methodology:** We arrive at our price target by applying a 25x multiple to our 2023E EPS of \$5.06 discounted 25%.

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Buy	Outperform	43.4%	16.2%	60.6%	42.6%	51.7%	55.6%
Hold	Market Perform	52.6%	8.1%	36.6%	53.0%	45.8%	39.5%
Sell	Underperform	3.9%	8.3%	2.8%	4.5%	2.5%	4.9%

\* Reflects rating distribution of all companies covered by BMO Capital Markets Corp. equity research analysts.

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NR = No rating at this time;

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