

Vitae Pharmaceuticals (VTAE)

Q2:15 Financials: Cash Runway Through 2016 and Proof-of-Concept Psoriasis Efficacy Results by Year End; Reiterate OUTPERFORM and \$20 PT

- Q2:15 financials: \$80.3MM cash through 2016.** Vitae reported \$0.2MM in revenues vs. consensus of \$0.1MM and an in-line GAAP EPS (loss) of \$(0.45). Vitae ended Q2 with \$80.3MM in cash & short-term investments, and reaffirmed guidance for cash runway through the end of 2016, not including cost associated with Alzheimer's disease program. BI and Vitae recently announced the cancelation of the partnership for the development of a BACE inhibitor for Alzheimer's disease and as a result, we have removed a \$7MM milestone payment we previously had projected to occur in Q4:15 for initiation of a Phase 1 trial.
- The Alzheimer's program is being transferred to Vitae.** Previously, BI completed all IND enabling experiments in Q2:15 in order to begin a Phase 1 study before the cancellation of the collaboration. While we still believe VTP-36951 warrants continued development, we await Vitae's decision on the future direction of the program after the effective termination of the agreement on October 21st.
- NEXT: We anticipate the release of data from the single ascending Phase 1 study of VTP-43742 in healthy volunteers in H2 and proof-of-concept (POC) efficacy for VTP-43742 in psoriasis patients by the end of the year.** Management guided to the initiation of the Phase 1 POC study of VTP-43742 this quarter. This POC study is a four-week trial designed to enroll ~48 healthy volunteers and ~60 moderate-to-severe psoriasis patients and to assess the safety, tolerability, PK and percent change in Psoriasis Area and Severity Index (PASI) from baseline. Given the trial's short duration, we believe that an improvement in PASI score comparable to current treatments at four weeks could be sufficient to warrant further development. Recall Vitae is planning to develop VTP-43742 for a large market indication (e.g. psoriasis) as well as for a rare disease. Additionally, initiation of clinical testing of VTP-38543, its LXR selective agonist for the treatment of Atopic Dermatitis, in healthy volunteers before the end of the year and have POC data in 2016.
- We reiterate our OUTPERFORM rating and \$20 price target.** Our 12-month PT uses a sum-of-parts with each part calculated using a 30% annual discount from peak sales of each drug/disease to present day and applying a 1-10x multiple, depending on stage of development to reflect risk.

August 5, 2015

Price
\$9.61

Rating
OUTPERFORM

12-Month Price Target
\$20

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Company Information

Shares Outst (M)	20827
Market Cap (M)	\$210
52-Wk Range	\$5.41 - \$23.35
Book Value/sh	\$4.38
Cash/sh	\$4.26
Enterprise Value (M)	\$298
LT Debt/Cap %	0.0
User Input	0.0

Company Description

Vitae is a clinical stage emerging pharmaceutical company discovering and developing small molecule drug candidates to treat large market indications and rare diseases with unmet medical needs.

FYE Dec	2014A	2015E			2016E		
REV (M)	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	\$1.2A	\$0.2A			\$0.2E		\$0.2E
Q2 Jun	1.2A	0.2A		0.1E	0.2E		0.2E
Q3 Sep	6.2A	0.2E		0.1E	0.2E		0.2E
Q4 Dec	0.2A	0.2E	7.2E	2.9E	0.2E		0.2E
Year*	\$8.7A	\$0.6E	\$7.6E	\$3.8E	\$0.6E		\$0.4E
Change	--	--			--		
EPS	2014A	2015E			2016E		
	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	(\$0.47)A	(\$0.47)A			(\$0.51)E	(\$0.53)E	(\$0.44)E
Q2 Jun	(0.48)A	(0.45)A	(0.47)E	(0.45)E	(0.53)E	(0.56)E	(0.47)E
Q3 Sep	(1.06)A	(0.47)E	(0.49)E	(0.47)E	(0.56)E	(0.58)E	(0.48)E
Q4 Dec	(0.40)A	(0.49)E	(0.19)E	(0.36)E	(0.59)E	(0.61)E	(0.51)E
Year*	(\$3.61)A	(\$1.87)E	(\$1.61)E	(\$1.75)E	(\$2.19)E	(\$2.28)E	(\$1.83)E
P/E	--	--			--		
Change	--	--			--		

Consensus estimates are from Thomson First Call.

* Numbers may not add up due to rounding.



Source: Thomson Reuters

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INVESTMENT THESIS Vitae, located in Fort Washington, Pennsylvania, is a clinical-stage emerging pharmaceutical company focused on discovering and developing novel, small molecule drugs for diseases with significant unmet medical needs. The company's proprietary structure-based drug design platform called Contour® has provided multiple, high-quality product candidates which have attracted over \$150 million in collaboration funding from big pharma. Vitae has initiated clinical testing of VTP-43742—one of several wholly-owned product candidates from preclinical development and expects to initiate VTP-38543 clinical testing in atopic dermatitis in 2015, as well. The company anticipates release of proof-of-concept results for VTP-43742 in psoriasis by the end of 2015. Earlier-stage product candidates are currently unpartnered and include VTP-38443 for the treatment of acute coronary syndrome (ACS). Vitae intends to develop and commercialize the proprietary programs and/or to strategically partner them as appropriate. We have projected clinical development and potential regulatory approvals so that the first product could be launched in late 2020. We project the first full year of profitability in 2021 from revenues of about \$88.5 million. As of the end of Q1:15, Vitae has \$88.7MM in cash and cash equivalents, which we expect to provide cash runway covering transforming clinical data releases from multiple product candidates. On February 26 2015, Vitae announced that its partner Boehringer Ingelheim placed on temporary clinical hold its Phase 1 trial of VTP-37948 for the treatment of Alzheimer's disease. BI ultimately decided to discontinue development of VTP-37948 and move forward with a structurally distinct, Phase 1 ready BACE1 inhibitor, BI-1147560/VTP-36951. On July 27, 2015, Vitae announced that BI decided to end the collaboration surrounding the BACE/Alzheimer program and their partnership. It is our understanding that the termination of the partnership was a strategic business decision by BI and not related to the compound. We currently believe the costs associated with running a Phase 1 trial for VTP-36951 (~\$1-5 million) are not prohibitive, therefore we anticipate Vitae is likely to advance the program forward given the significant unmet medical need for Alzheimer's. We also anticipate upside potential from additional partnerships around their currently unpartnered product candidates and that Vitae's future clinical success could result in the company's acquisition.

A replay of the Q2 financials conference call is available by webcast at <http://ir.vitaepharma.com/>

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Figure 1: MODEL UPDATE

Vitae, Inc. (VTAE:NASDAQ)														Wedbush Securities, Inc.			
Historical and Projected Income Statement (In thousands except per share data)														Liana Moussatos, PhD Kalechi Chikere, Ph.D.			
	2014A			2015E			2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	
	FY:14A	Q1A	Q2A	Q3E	Q4E	FY:15E	FY:16E	FY:17E	FY:18E	FY:19E	FY:20E	FY:21E	FY:22E	FY:23E	FY:24E	FY:25E	
Gross Sales:																	
VTP-34072	-	-	-	-	-	-	-	-	-	-	6,218	135,924	662,205	2,165,675	5,086,803	9,455,397	
VTP-36951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
VTP-43742	-	-	-	-	-	-	-	-	-	-	6,218	79,749	258,081	558,439	859,918	1,054,808	
VTP-43742	-	-	-	-	-	-	-	-	-	-	-	13,088	176,096	606,105	1,580,799	3,096,985	
VTP-38443	-	-	-	-	-	-	-	-	-	-	-	1,711	39,989	128,026	288,181	474,199	
VTP-38543	-	-	-	-	-	-	-	-	-	-	-	1,437	8,929	26,210	54,814	89,850	
VTP-x05	-	-	-	-	-	-	-	-	-	-	-	-	14,107	329,473	1,032,816	2,338,477	
Revenues:																	
Product Sales/Royalties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Net Product Revenues	-	-	-	-	-	-	-	-	-	-	6,218	87,984	353,243	1,169,687	2,574,983	4,550,611	
Collaborative Revenues	8,669	150	162	162	162	635	646	646	646	646	646	646	646	646	646	646	
Total Revenues	\$ 8,669	\$ 150	\$ 162	\$ 162	\$ 162	\$ 635	\$ 646	\$ 646	\$ 646	\$ 646	\$ 6,865	\$ 88,630	\$ 353,889	\$ 1,170,334	\$ 2,575,629	\$ 4,551,258	
Total COGS	-	-	-	-	-	-	-	-	-	-	622	8,798	35,324	116,969	257,498	455,061	
Gross Margin	\$ 8,669	\$ 150	\$ 162	\$ 162	\$ 162	\$ 635	\$ 646	\$ 646	\$ 646	\$ 646	\$ 6,243	\$ 79,832	\$ 318,565	\$ 1,053,365	\$ 2,318,131	\$ 4,096,197	
Operating expenses:																	
R&D	19,305	7,506	7,773	8,239	8,734	32,251	40,498	48,171	26,141	28,296	30,628	33,153	35,886	38,844	42,046	45,512	
SG&A	7,915	2,111	2,259	2,262	2,264	8,896	9,400	9,854	14,948	29,774	42,141	43,852	45,633	47,486	49,414	51,420	
Acquired in-process R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Operating Expenses	\$ 27,219	\$ 9,617	\$ 10,032	\$ 10,501	\$ 10,997	\$ 41,147	\$ 49,898	\$ 58,025	\$ 41,089	\$ 58,070	\$ 72,769	\$ 77,005	\$ 81,519	\$ 86,330	\$ 91,460	\$ 96,932	
Operating Income (Loss)	(18,550)	(9,467)	(9,871)	(10,339)	(10,836)	(40,512)	(49,252)	(57,379)	(40,442)	(57,424)	(66,527)	2,826	237,046	967,035	2,226,671	3,999,264	
Other Income / (Expense), net	344	(207)	1	(20)	(56)	(281)	(205)	(196)	(195)	(195)	(195)	(196)	(196)	(196)	(196)	(196)	
Interest Income	64	74	108	46	38	267	81	(54)	(176)	(296)	(461)	(572)	(452)	272	2,399	6,783	
Interest (Expense)	(961)	(108)	-	-	-	(108)	0	0	0	0	0	0	0	0	0	0	
Total other (expenses) income	(553)	(240)	109	26	(18)	(123)	(124)	(250)	(372)	(491)	(656)	(767)	(647)	76	2,204	6,588	
Income Before Income Taxes	\$ (19,103)	\$ (9,707)	\$ (9,761)	\$ (10,313)	\$ (10,854)	\$ (40,635)	\$ (49,376)	\$ (57,628)	\$ (40,814)	\$ (57,915)	\$ (67,183)	\$ 2,059	\$ 236,399	\$ 967,111	\$ 2,228,875	\$ 4,005,852	
Deemed Dividend to preferred stockholders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(Provision)/benefit for Income Taxes	-	-	-	-	-	-	-	-	-	-	-	(731)	(92,196)	(377,173)	(869,261)	(1,562,282)	
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%	2.5%	39.0%	39.0%	39.0%	
Net Income (Loss)	\$ (19,103)	\$ (9,707)	\$ (9,761)	\$ (10,313)	\$ (10,854)	\$ (40,635)	\$ (49,376)	\$ (57,628)	\$ (40,814)	\$ (57,915)	\$ (67,183)	\$ 1,328	\$ 144,203	\$ 589,938	\$ 1,359,614	\$ 2,443,570	
Stock-based compensation	3,354	0	0	961	709	1,669	2,166	2,268	2,285	2,287	2,287	2,287	2,287	2,287	2,287	2,287	
EPS	\$ (4.36)	\$ (0.47)	\$ (0.45)	\$ (0.51)	\$ (0.52)	\$ (1.95)	\$ (2.29)	\$ (2.59)	\$ (1.82)	\$ (2.46)	\$ (2.70)	\$ (0.04)	\$ (0.04)	\$ (0.04)	\$ (0.04)	\$ (0.04)	
GAAP EPS	\$ (3.61)	\$ (0.47)	\$ (0.45)	\$ (0.47)	\$ (0.49)	\$ (1.87)	\$ (2.19)	\$ (2.49)	\$ (1.72)	\$ (2.38)	\$ (2.70)	\$ 0.05	\$ 5.52	\$ 22.08	\$ 49.78	\$ 87.54	
Weighted Average Shares Outstanding	5,291	20,827	21,838	21,988	22,138	21,607	22,513	23,113	23,713	24,313	24,913	25,513	26,113	26,713	27,313	27,913	
Cash	\$65,316	\$8,693	\$80,388	\$66,931	\$56,141	\$56,141	\$6,936	(\$50,495)	(\$91,109)	(\$148,824)	(\$217,510)	(\$224,581)	(\$106,709)	\$411,225	\$1,655,388	\$3,956,315	
Cash Per Share	\$12.35	\$4.26	\$3.68	\$3.04	\$2.54	\$2.59	\$0.31	(\$2.18)	(\$3.84)	(\$6.12)	(\$8.73)	(\$8.80)	(\$4.09)	\$15.39	\$60.61	\$141.74	
Net Cash	\$54,772	\$66,600	\$76,905	\$64,767	\$55,298	\$55,298	\$6,936	(\$50,495)	(\$91,109)	(\$148,824)	(\$217,510)	(\$224,581)	(\$106,709)	\$411,225	\$1,655,387	\$3,956,315	
Net Cash Per Share	\$10.35	\$3.20	\$3.52	\$2.95	\$2.50	\$2.55	\$0.31	(\$2.18)	(\$3.84)	(\$6.12)	(\$8.73)	(\$8.80)	(\$4.09)	\$15.39	\$60.61	\$141.74	
Cash Burn (Generation)	\$3,936	-	-	-	-	\$45,977	\$86,005	\$94,231	\$77,414	\$94,916	\$105,487	\$43,871	(\$81,072)	(\$481,134)	(\$1,207,362)	(\$2,264,127)	

Source: Company data, Wedbush Securities, Inc.

The Alzheimer's program is being transferred to Vitae. Previously, BI completed all IND enabling experiments in Q2:15 in order to begin a Phase 1 study before the cancellation of the collaboration. While we still believe VTP-36951 warrants continued development, we await Vitae's decision on the future direction of the program after the effective termination of the agreement on October 21st.

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NEXT: We anticipate the release of data from the single ascending Phase 1 study of VTP-43742 in healthy volunteers in H2 and proof-of-concept (POC) efficacy for VTP-43742 in psoriasis patients by the end of the year. Management guided to the initiation of the Phase 1 POC study of VTP-43742 this quarter. This POC study is a four-week trial designed to enroll ~48 healthy volunteers and ~60 moderate-to-severe psoriasis patients and to assess the safety, tolerability, PK and percent change in Psoriasis Area and Severity Index (PASI) from baseline. Given the trial's short duration, we believe that an improvement in PASI score comparable to current treatments at four weeks could be sufficient to warrant further development. Recall Vitae is planning to develop VTP-43742 for a large market indication (e.g. psoriasis) as well as for a rare disease. Additionally, initiation of clinical testing of VTP-38543, its LXR selective agonist for the treatment of Atopic Dermatitis, in healthy volunteers before the end of the year and have POC data in 2016.

Figure 2: MILESTONES (*our estimates; **Bloomberg estimates)

Timing	Milestones	Estimated Probability	Estimated Upside/Downside
H2:15	VTP-43742/ AUTOIMMUNE: PHASE 1 DATA RELEASE	50:50	± 0-15%
H2:15	VTP-34072/T2D-META: PHASE 2 DATA RELEASE (MONOTHERAPY ARM)	--	--
H2:15	VTP-38543/ATOPIC DERMATITIS: INITIATE PHASE 1 CLINICAL TRIAL	--	--
YE:15	VTP-43742/ AUTOIMMUNE: PHASE 1 POC DATA RELEASE IN PSORIASIS	50:50	± 5-20%
YE:15/H1:16*	VTP-36951(BACE inhibitor) INITIATE PHASE 1 CLINICAL TRIAL	60:40	±5-15%
H1:16*	VTP-38543/ATOPIC DERMATITIS: PHASE 1 DATA RELEASE	50:50	± 0-15%

Source: Company data, Wedbush Securities, Inc.

Figure 3: VALUATION

Vitae Product Pipeline Valuation		Eligible # Patients	Pricing \$/Patient	Gross Sales (\$000)	Year	Net Revs (\$000)	Peak Penetration	Multiple	Estimated / Actual Launch	Discount Rate	Estimate Fair Value	Fair Value per Share
VTP-36951 (WW)	Alzheimer's Disease	8,730,000	\$5,226	\$3,738,358	2026	\$867,924	10%	3	3/2/2021	30%	\$201,062	\$9.21
VTP-43742 (WW)	Psoriasis	654,500	\$4,978	\$1,175,712	2027	\$783,743	34%	3	11/4/2020	30%	\$174,147	\$7.98
VTP-43742 (WW)	RMS	857,143	\$49,683	\$3,096,985	2025	\$1,362,000	8%	3	11/4/2021	30%	\$96,100	\$4.40
VTP-38443 (WW)	ACS	600,000	\$30,500	\$754,409	2028	\$274,449	4%	1	12/4/2021	30%	\$9,861	\$0.45
VTP-38543 (WW)	Atopic Dermatitis	1,235,000	\$4,978	\$148,850	2028	\$50,055	2%	2	8/4/2021	30%	\$1,904	\$0.09
We use multiples to account for clinical and regulatory risk at various stages of development.									Stock	MktCap (\$000)	Upside	
1: in preclinical testing	6: in Phase 3								12-month Price Target	\$19.76	\$431,349	106%
2: passed preclinical	7: Phase 3 data								Total Pipeline Value	\$24.70	\$539,214	157%
3: IND filing/stable mature product	8: Regulatory review								YE: 15 Cash	\$2.57	\$56,141	
4: Phase 1 data	9: Approved								Current Stockprice	\$9.61	\$209,785	
5: Phase 2 data	10: Launched											

Source: Company data, Wedbush Securities, Inc.

We reiterate our OUTPERFORM rating and \$20 price target. Our 12-month PT uses a sum-of-parts with each part calculated using a 30% annual discount from peak sales of each drug/disease to present day and applying a 1-10x multiple, depending on stage of development to reflect risk.

RISKS TO THE ATTAINMENT OF OUR 12-MONTH PRICE TARGET

Clinical Risks: Despite producing high-quality product candidates and encouraging initial clinical and preclinical data, Vitae has not completed phase-3 testing with any product candidate and, in general, the majority of clinical candidates fail. Vitae uses third parties to conduct preclinical and clinical testing which we view as higher risk as we believe third parties may be less motivated to reduce execution risk. Near-term clinical risks including data release from the autoimmune program is the highest risk to our price target at this time, in our view.

Regulatory Risks: Despite Vitae's management having big pharma experience, Vitae has not achieved regulatory approval for any product candidate.

Manufacturing Risks: On one hand, we view manufacturing risk to be lower for small molecule drug candidates versus biologics and oligonucleotides; however, Vitae relies on third parties for the manufacture of their product candidates for preclinical, clinical, and potential commercial manufacture and we view third parties as less motivated, in general. Also, if Vitae succeeds at obtaining regulatory approval for a product candidate, the current purchase order supply arrangements will need to be augmented with long-term

supply arrangements. Vitae intends to also work with additional manufacturers to provide active pharmaceutical ingredients (APIs) and fill-and-finish services prior to pursuing regulatory approval.

Commercial Risks: For their unpartnered programs, Vitae anticipates retaining US commercial rights in specialty markets and establish regional partnerships to commercialize outside the United States. At this time, Vitae does not have a sales force or marketing capabilities.

Competition Risks: Vitae's product candidates, if approved, will compete with currently marketed treatments and potentially with product candidates currently in development focusing on the same mechanism of action which include: 1) BACE competition from Merck & Co., AstraZeneca PLC and Eisai Co., Ltd. in collaboration with Biogen Idec which are studying BACE inhibitors in clinical trials; 2) RORYt competition from potentially multiple companies which are actively assessing RORYt inhibitors in preclinical studies; and 3) LXR β competition from Bristol-Myers Squibb, which is testing an LXR β inhibitor in cardiovascular clinical trials and Alexar Therapeutics, Inc., which is developing an LXR β inhibitor for dermatologic conditions.

Intellectual Property Risks: Due to the nature of Vitae's business model, we consider intellectual property risks to be low as the company discovers its own product candidates and has composition-of-matter protection to 2030 and beyond.

Financial Risks: Vitae is a development-stage emerging pharmaceutical company and, despite receiving substantial partnership income from Boehringer Ingelheim, they have no product sales or royalty income and are unlikely to before late 2019. Vitae ended Q2:15 with \$80.3MM in cash and cash equivalents. Management guided to runway through 2016 and we project Vitae has cash runway into Q1 2017.

Analyst Biography

Ms. Moussatos is a Managing Director, Equity Research responsible for the coverage of stocks in the Emerging Pharmaceuticals sector. Liana joined Wedbush from Pacific Growth Equities where she was a Senior Research Analyst. Prior to that she came from UBS Global Asset Management where she was Director and Portfolio Manager of the UBS Global Biotech Funds for five years. Previously Liana was with Bristol-Meyers Squibb where she was a manager in University and Government Licensing External Science and Technology and she also worked with Sloan-Kettering Cancer Institute in the Office of Industrial Affairs and the National Cancer Institute in the Office of Technology Development.

Liana received a B.S. in Entomology and a M.S. in Zoology and Biochemistry from Clemson University and a Ph.D. in Plant Pathology from the University of California Davis and completed a postdoctoral research fellowship in Cellular and Molecular Physiology at the Yale School of Medicine.

Liana's Edge: Liana's industry and buy-side experience provide depth in her understanding of what investors need to know along with her 16 years' experience in following healthcare stocks. Her pipeline valuation includes all drug candidates / disease indications in active development and provides investors with a stock value for each program.

Analyst Certification

I, Liana Moussatos, Ph.D., Kelechi Chikere, Ph.D., certify that the views expressed in this report accurately reflect my personal opinion and that I have not and will not, directly or indirectly, receive compensation or other payments in connection with my specific recommendations or views contained in this report.

Disclosure information regarding historical ratings and price targets is available at <http://www.wedbush.com/ResearchDisclosure/DisclosureQ215.pdf>

Investment Rating System:

Outperform: Expect the total return of the stock to outperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

Neutral: Expect the total return of the stock to perform in-line with the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

Underperform: Expect the total return of the stock to underperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

The Investment Ratings are based on the expected performance of a stock (based on anticipated total return to price target) relative to the other stocks in the analyst's coverage universe (or the analyst's team coverage).*

Rating Distribution (as of June 30, 2015)	Investment Banking Relationships (as of June 30, 2015)
Outperform: 54%	Outperform: 18%
Neutral: 43%	Neutral: 5%
Underperform: 2%	Underperform: 0%

The Distribution of Ratings is required by FINRA rules; however, WS' stock ratings of Outperform, Neutral, and Underperform most closely conform to Buy, Hold, and Sell, respectively. Please note, however, the definitions are not the same as WS' stock ratings are on a relative basis.

The analysts responsible for preparing research reports do not receive compensation based on specific investment banking activity. The analysts receive compensation that is based upon various factors including WS' total revenues, a portion of which are generated by WS' investment banking activities.

Wedbush Equity Research Disclosures as of August 5, 2015

Company	Disclosure
Vitae Pharmaceuticals	1,3,4,5

Research Disclosure Legend

1. WS makes a market in the securities of the subject company.
2. WS managed a public offering of securities within the last 12 months.
3. WS co-managed a public offering of securities within the last 12 months.
4. WS has received compensation for investment banking services within the last 12 months.
5. WS provided investment banking services within the last 12 months.
6. WS is acting as financial advisor.
7. WS expects to receive compensation for investment banking services within the next 3 months.
8. WS provided non-investment banking securities-related services within the past 12 months.

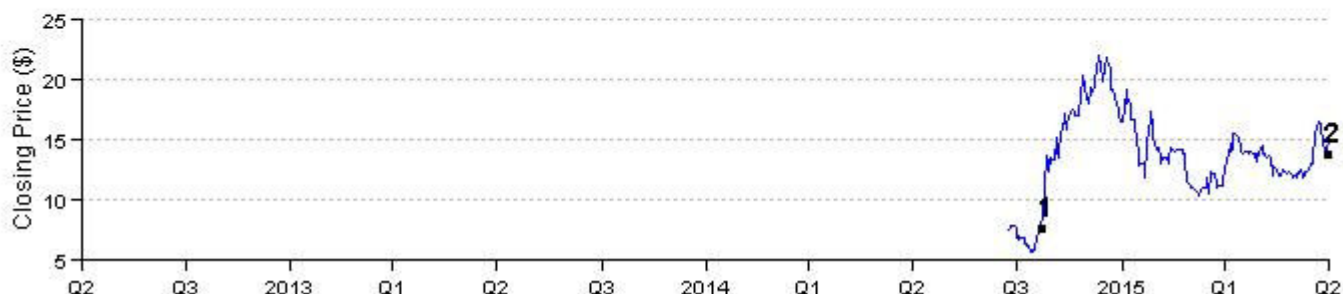
9. WS has received compensation for products and services other than investment banking services within the past 12 months.
10. The research analyst, a member of the research analyst's household, any associate of the research analyst, or any individual directly involved in the preparation of this report has a long position in the common stocks.
11. WS or one of its affiliates beneficially own 1% or more of the common equity securities.
12. The analyst maintains Contingent Value Rights that enables him/her to receive payments of cash upon the company's meeting certain clinical and regulatory milestones.

Price Charts

Wedbush disclosure price charts are updated within the first fifteen days of each new calendar quarter per FINRA regulations. Price charts for companies initiated upon in the current quarter, and rating and target price changes occurring in the current quarter, will not be displayed until the following quarter. Additional information on recommended securities is available on request.

VTAE

1) 10/20/14	2) 06/29/15
OUTPERFORM \$21	OUTPERFORM \$20



* WS changed its rating system from (Strong Buy/Buy/Hold/Sell) to (Outperform/ Neutral/Underperform) on July 14, 2009. Please access the attached hyperlink for WS' Coverage Universe: <http://www.wedbush.com/services/cmg/equities-division/research/equity-research>. Applicable disclosure information is also available upon request by contacting Ellen Kang in the Research Department at (213) 688-4529, by email to ellen.kang@wedbush.com, or the Business Conduct Department at (213) 688-8090. You may also submit a written request to the following: Business Conduct Department, 1000 Wilshire Blvd., Los Angeles, CA 90017.

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