Vital Therapies

Biotechnology

US Equity Research
20 March 2015

BUY
unchanged

PRICE TARGET	US$35.00
unchanged	
Price (19-Mar)	US$27.37
Ticker	VTL-NASDAQ

52-Week Range (US$):	10.66 - 35.20
Avg Daily Vol (M) :	71.5
Shares Out. (M) :	21.8
Market Cap (US$M):	596

FYE Dec	2013A	2014A	2015E
Revenue (US$M)	0.0	0.0	0.0
EPS Adj&Dil (US$)	(1.85)	(3.56)↑	(2.56)↑
Previous	*(1.85)*	*(3.61)*	*(2.62)*

Quarterly Revenue	Q1	Q2	Q3	Q4
2013A	0.0	0.0	0.0	0.0
2014A	0.0	0.0	0.0	0.0
2015E	0.0	0.0	0.0	0.0

Quarterly EPS Adj&Dil	Q1	Q2	Q3	Q4
2013A	(0.49)	(0.34)	(0.43)	(0.59)
2014A	(24.49)	(0.91)	(0.59)	(0.59)
2015E	(0.73)	(0.77)	(0.81)	(0.85)

Source: FactSet

Vital Therapies is a biotherapeutic company focused on its ELAD system for treatment of acute liver disease and failure.

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Estimates Revised

VTI-208 data readout pushed back to Q3/15 due to conservative database lock, manageable

VTI-208 data pushed back to 3Q15 based on conservative database lock, manageable

Top-line data results for VTI-208 will be released in 3Q15 vs. an earlier expected 2Q15, mainly due to guidance from the FDA where analysis will begin after database lock. We do not view this negatively as the company is taking a conservative approach to gather all the patient data, including comorbidities, concurrent medications, etc. prior to data analysis, since these patients are very complicated. Additionally, the company states they are not pushing results back for the reason of allowing further separation of the survival curves. We continue to expect positive data for the ELAD technology in demonstrating 91-day survival benefit, especially since the study is positioned for success due to a refined inclusion criteria that only targets patients who have regenerable liver and are not expected to die imminently.

Baseline characteristics for VTI-208 to be presented in EASL by April, significant

Baseline characteristics of the patients from the VTI-208 study will be presented at the European Association for the Study of the Liver (EASL) in April 22 - 26th, which will provide color on the characteristics of these patients prior to therapy. We believe this data is significant as it will show how these patients may compare to the general population, their baseline condition, and other factors that may have significant read-through to the final results.

VTI-210 expands inclusion criteria for severe acute alcoholic hepatitis, allows for faster recruitment

The phase 3 VTI-210 trial in acute alcoholic hepatitis (AAH) will now eliminate the previous requirement of 7 day steroid failure, mainly based on the recent STOPAH trial that did not show survival benefit with steroids in these patients. We believe this will allow VTL to include a wider range of patients that have AAH but cannot receive steroids (infection risk, diabetes, glucose intolerance), significantly increasing the enrollment speed. Since the VTI-208 trial has completed, we expect rapid enrollment of VTI-210, although we don't expect toppling data until early 2017 given the database lockup analysis.

VTI-212 moves forward in fulminant liver failure

VTI-212 began enrolling patients in their phase 2, single arm, survival trial in fulminant liver failure, a driver for the stock if results remain positive. The study has enrolled 4 patients already in 10 sites. We expect enrollment to continue to accelerate given the completion of VTI-208, with top-line data by 2016.

Maintain BUY, $35 PT

We maintain our BUY position and $35 PT. We await top-line data for VTI-208 by end of 3Q15, with significant upswings to the share if data remains positive.

Figure 1: Vital Income statement

($000's) [FY-DEC]																
Revenues	2013A	Mar-14A	Jun-14A	Sep-14A	Dec-14A	2014A	1Q15E	2Q15E	3Q15E	4Q15E	2015E	2016E	2017E	2018E	2019E	2020E
AILD												-	79,591	286,980	447,563	493,626
SILF												-	10,612	38,264	47,740	55,691
FHF												-	26,015	93,803	117,033	136,524
Total												-	116,218	419,047	612,335	685,841
Income Statement	**2013A**	**Mar-14A**	**Jun-14A**	**Sep-14A**	**Dec-14A**	**2014A**	**1Q15E**	**2Q15E**	**3Q15E**	**4Q15E**	**2015E**	**2016E**	**2017E**	**2018E**	**2019E**	**2020E**
Revenue																
Total Revenue	-	-	-	-	-	-	-	-	-	-	-	-	**116,218**	**419,047**	**612,335**	**685,841**
Cost of Revenue	-	-	-	-	-	-	-	-	-	-	-	-	17,433	62,857	91,850	102,876
Gross Profit	-	-	-	-	-	-	-	-	-	-	-	-	**98,785**	**356,190**	**520,485**	**582,965**
Operating Expenses																
Stock-based Compensation in SGA	537	202	247		273	722	286	301	316	332	1,235	1,482	3,225	3,566	4,078	4,821
Stock-based Compensation in R&D	411	154	247		273	675	286	301	316	332	1,235	1,482	1,743	1,928	2,204	2,606
Research & Development	21,376	9,219	9,125	10,244	10,891	39,479	9,751	10,078	10,582	11,111	41,521	37,045	43,582	40,480	38,577	37,790
General & Administrative	9,078	2,657	2,513	2,566	3,127	10,863	4,011	4,362	4,580	4,809	17,762	34,082	38,352	50,118	65,030	84,701
Total Operating Expense	**31,402**	**11,876**	**11,638**	**12,810**	**14,018**	**50,342**	**14,335**	**15,041**	**15,793**	**16,583**	**59,283**	**71,127**	**81,934**	**90,598**	**103,607**	**122,491**
EBITDA																
Operating Income		**(11,876)**	**(11,638)**	**(12,810)**	**(14,018)**	**(50,342)**	**(14,335)**	**(15,041)**	**(15,793)**	**(16,583)**	**(59,283)**	**(71,127)**	**16,852**	**265,592**	**416,878**	**460,474**
Interest Income	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expenses	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (expense) income, net	(15)	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revaluation of preferred stock warrant liabilities	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revaluation of future purchase rights liabilities	(1,306)	1,128	1,471	12	64	-	-	-	-	-	-	-	-	-	-	-
Pretax income	**(32,718)**	**(10,748)**	**(10,167)**	**(12,798)**	**(13,954)**	**(50,342)**	**(14,335)**	**(15,041)**	**(15,793)**	**(16,583)**	**(59,283)**	**(71,127)**	**16,852**	**265,592**	**416,878**	**460,474**
Provision for Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-	6,235	98,269	154,245	170,375
Tax Rate	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%
Net Income	**(32,718)**	**(10,748)**	**(10,167)**	**(12,798)**	**(13,954)**	**(50,342)**	**(14,335)**	**(15,041)**	**(15,793)**	**(16,583)**	**(59,283)**	**(71,127)**	**10,617**	**167,323**	**262,633**	**290,099**
Amortization of deemed dividend		(22)														
Accretion to redemption value of convert preferred		(3,048)	(6,084)													
Net Income (Non-GAAP)	**(39,085)**	**(13,818)**	**(16,251)**	**(12,798)**	**(13,954)**	**(56,821)**	**(14,335)**	**(15,041)**	**(15,793)**	**(16,583)**	**(59,283)**	**(71,127)**	**10,617**	**167,323**	**262,633**	**290,099**
GAAP EPS (Diluted)	**$ (1.55)**	**$ (24.49)**	**$ (0.91)**	**$ (0.59)**	**$ (0.59)**	**$ (3.56)**	**$ (0.73)**	**$ (0.77)**	**$ (0.81)**	**$ (0.85)**	**$ (2.56)**	**$ (2.56)**	**$ 0.38**	**$ 6.03**	**$ 9.46**	**$ 10.45**
Non-GAAP EPS (Diluted)	**$ (1.85)**	**$ (24.49)**	**$ (0.91)**	**$ (0.59)**	**$ (0.59)**	**$ (3.56)**	**$ (0.73)**	**$ (0.77)**	**$ (0.81)**	**$ (0.85)**	**$ (2.56)**	**$ (2.56)**	**$ 0.38**	**$ 6.03**	**$ 9.46**	**$ 10.45**
Diluted Weighted Average Shares		564	17,889	21,759	23,690	15,975	19,547	19,547	19,547	19,547	23,118	27,761	27,761	27,761	27,761	27,761

Source: Company Reports, Canaccord Genuity estimates

Figure 2: Vital Valuation

	Peak Sales	Year	Current Value	Probability	Value Per Share
US					
AILD	$564	2021	$867	60%	$25
SILF	$158	2021	$266	25%	$3
FHF	$64	2021	$109	25%	$1
EU - Royalty					
AILD	$90	2021	$215	45%	$5
SILF	$23	2021	$55	25%	$1
FHF	$9	2021	$21	25%	$0
Total			**$1,532**		**$35**

Risk Free Rate	2%
Beta	1.45
Risk Premium	6%
Discount Rate	11%

Shares (M)	21

Source: Company Reports, Canaccord Genuity estimates

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Vital Therapies - VTL

Our price target is based on a probability-adjusted NPV valuation.

Risks to achieving Target Price / Valuation:

Vital Therapies - VTL

Risks to our outlook and price target include the following: Vital Therapies' clinical studies may fail, requiring additional clinical trials and further capital; clinical trials may be terminated altogether, decreasing the overall value of the company's pipeline; competitors may attain the technology surrounding the ELAD system, increasing the likelihood of a competitive/generic product. Even if the ELAD system is approved, resulting revenues may be below investor expectations due to lack of efficacy, competition, complexity, or all three. Safety issues may also emerge after FDA approval that could limit the usage of the ELAD system, also reducing sales. Competitors could gain access to the ELAD systems technology and potentially create a competitor product. Vital Therapies' keeps much of its IP as trade secrets, creating the opportunity for competitors to poach employees for intelligence. In addition, competitors may be able to gather ELAD's technology through reverse engineering the ELAD system after appropriating it from a hospital. Congress has recently questioned high pricing for biotech drugs, which could become a trend, creating broad downward pressure across the biotech sector. Although we believe oncology drugs will receive less pricing pressure due to the seriousness of the disease, lawmakers may eventually make public calls for lower pricing.

Distribution of Ratings:

Global Stock Ratings (as of 03/20/15)

Rating	Coverage Universe		IB Clients
	#	%	%
Buy	571	57.91%	33.45%
Hold	326	33.06%	17.48%
Sell	40	4.06%	0%
Speculative Buy	49	4.97%	57.14%
	986*	100.0%	

*Total includes stocks that are Under Review

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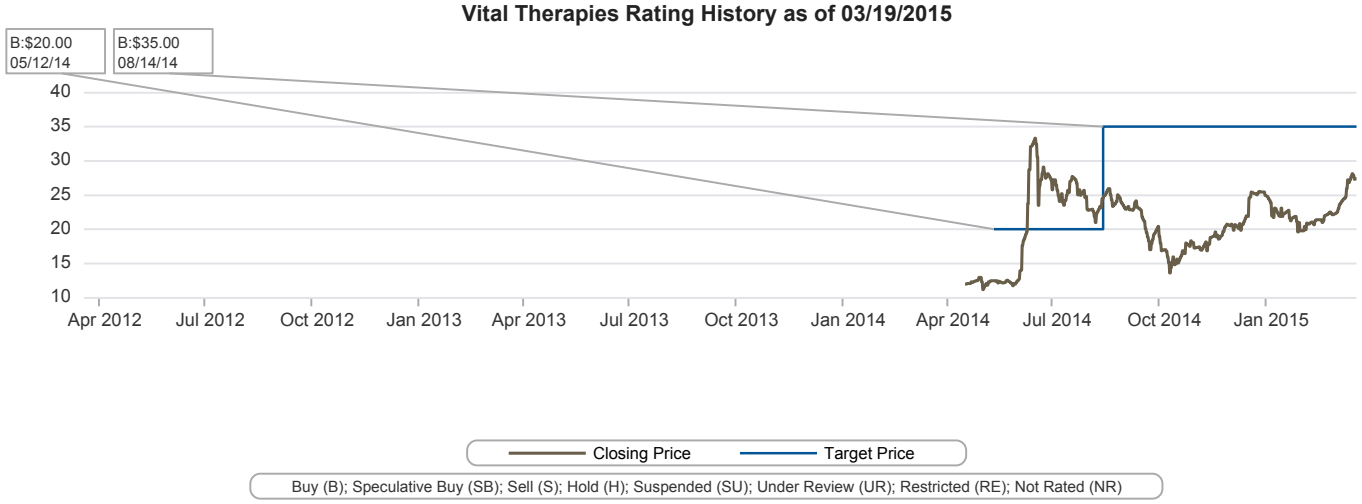

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