

Vital Therapies, Inc. (VTL)

Rating (from Outperform) **NEUTRAL*** [V]
Price (09 Sep 14, US\$) 23.01
Target price (US\$) (from 16.00) 25.00¹
52-week price range 33.31 - 11.21
Market cap. (US\$ m) 501.41
Enterprise value (US\$ m) 435.00

*Stock ratings are relative to the coverage universe in each analyst's or each team's respective sector.

¹Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

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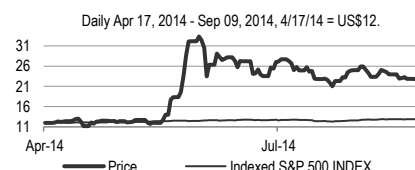
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DOWNGRADE RATING

Downgrade to Neutral on Valuation

- **Downgrading on Valuation; Raising TP to \$25 from \$16:** VTL shares have increased to \$23 from \$12 since its IPO despite a lack of news flow. The company's US pivotal trial in alcohol-induced liver decompensation (AILD), VTI 208, is on track to complete enrollment by 12/14 (data 1H15); however, until VTI 208 data are available, clinical trial/approval risk remains (given the limited extracorporeal liver assist device [ELAD] data to date). Thus, while we don't have reason to suspect that the VTI-208 data will be very different than the phase 2b VTI-206 experience (~25% 90 day absolute mortality benefit, N = 29), we are downgrading to Neutral given our belief that favorable clinical data will be required for meaningful upside & our further belief that an absolute mortality benefit in VTI-208 of much below 20% (the level below which approvability is likely to come into doubt) could drive downside. Based on our conversations with key opinion leaders (KOL), we believe the ELAD has merit in treating AILD patients & very well could show sufficient treatment effect to garner approval (we place likelihood of approval at ~70%); however, we do not see the current risk/reward as favorable enough to recommend the stock. We're raising our DCF-based price target to \$25 from \$16 based on a higher assumed terminal growth (leaving estimates unchanged). Our price target is consistent with taking our 2023 VTL ~\$500M sales estimate (implies ~3,000 patients assuming a \$150K ASP or ~5% of the developed markets opportunity) discounted back to 2018 at a 10% WACC & applying a 2.3X EV/Sales multiple (consistent with peers) & further discounting that by 30% to account for clinical trial risk.
- **Upside to ~\$30-\$40 on Favorable Data:** If VTI-208 shows a ~20% statistically significant mortality benefit, this should de-risk ELAD approval (expected in 2017 in US/Europe). Given the large AILD opportunity (~\$9B / year opportunity) & the lack of AILD treatment alternatives we believe VTL could be valued at \$30-\$40/share on favorable 208 data.

Share price performance



On 09/09/14 the S&P 500 INDEX closed at 1988.44

Quarterly EPS	Q1	Q2	Q3	Q4
2013A	—	—	—	—
2014E	-21.05	-0.65	-0.53	-0.53
2015E	-0.55	-0.55	-0.56	-0.52

Financial and valuation metrics

Year	12/13A	12/14E	12/15E	12/16E
EPS (CS adj.) (US\$)	-3.14	-2.99	-2.18	-1.19
Prev. EPS (US\$)	—	—	—	—
P/E (x)	-7.3	-7.7	-10.6	-19.3
P/E rel. (%)	-40.9	-46.5	-71.5	-145.4
Revenue (US\$ m)	—	—	—	—
EBITDA (US\$ m)	-30.6	-45.8	-48.3	-32.0
OCFPS (US\$)	-2.86	-2.77	-2.25	-1.21
P/OCF (x)	—	-8.3	-10.2	-19.0
EV/EBITDA (current)	-13.4	-9.0	-8.5	-12.8
Net debt (US\$ m)	-38	-66	-115	-82
ROIC (%)	-971.60	26,534.58	-1,704.66	-908.79
Number of shares (m)	21.79	IC (current, US\$ m)	3.23	
BV/share (Next Qtr., US\$)	—	EV/IC (x)	-513.7	
Net debt (Next Qtr., US\$ m)	-78.5	Dividend (current, US\$)	—	
Net debt/tot eq (Next Qtr., %)	-101.1	Dividend yield (%)	—	

Source: Company data, Credit Suisse estimates.

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Companies Mentioned (Price as of 09-Sep-2014)

Vital Therapies, Inc. (VTL.OQ, \$23.01, NEUTRAL[V], TP \$25.0)

Disclosure Appendix

Important Global Disclosures

I, Bruce Nudell, certify that (1) the views expressed in this report accurately reflect my personal views about all of the subject companies and securities and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

3-Year Price and Rating History for Vital Therapies, Inc. (VTL.OQ)

VTL.OQ	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
07-Apr-14			R
12-May-14	12.49	16.00	O *

* Asterisk signifies initiation or assumption of coverage.



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Price Target: (12 months) for Vital Therapies, Inc. (VTL.OQ)

Method: Our \$25 DCF-derived price target is based on an ~11% WACC and a 2% terminal growth rate.

Risk: Risks to our \$25 price target are: (1) a large, clean dataset does not yet exist, and while early data are encouraging, the ultimate clinical benefit of the ELAD system is yet to be proven; (2) ultimate pricing of the system is likely dependent on the mortality benefit demonstrated in VTL's ongoing phase 3 trial; (3) VTL will likely need additional financing prior to commercialization; (4) approval process in China is opaque; and (5) VTL's IP could ultimately afford exclusivity for a shorter period of time than we anticipate.

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See the Companies Mentioned section for full company names

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