

Trevena Inc.

## Pipeline Moving Along

**What's New:** Trevena announced full year 2013 earnings and provided an update of its pipeline.

**First TRV130 phase 2 trial expected to start 2Q14:** Additional data from the TRV130 phase 1b trial will be presented on May 2<sup>nd</sup> at the American Pain Society meeting. We expect to see incremental details on efficacy as well as adverse events. TRVN will start two phase 2 trials for TRV130 in 2014 – the first bunionectomy study is on track to start in 2Q14 and will complete in 1Q15 and the second soft tissue study will start in the second half of 2014 and complete by the end of 2015.

**BLAST-AHF study for TRV027 on track.** TRVN dosed the first patient in the phase 2b BLAST-AHF study in January and continues to expect to report results from the trial in the second half of 2015. There will be an interim analysis conducted at 300 patients for safety and efficacy exploratory measures. The company will also decide whether or not to adjust or reduce the number of doses being evaluated. These interim results will not be released.

**Earlier pipeline moving along as well:** Results from an early phase 1 TRV734 trial (oral compound for treating pain) are expected in 3Q14. This first-in-man study will evaluate ascending doses of TRV734 in healthy adults and will measure tolerability and safety and also pupil constriction for analgesic effect. The company also plans to select a candidate from the delta opioid receptor program later this year and expects to move it into the clinic by the end of 2015.

**Diversified portfolio:** Unlike most early stage development companies, TRVN has several products in its pipeline, helping diversify development risks and offering investors multiple opportunities for upside. We include only TRV130 and TRV027 in our valuation given the lack of clinical data from earlier pipeline products. Our price target is based on TRV130 (\$6/share) and TRV027 (\$4/share) and cash of ~\$4/share. Success of the earlier pipeline products would provide additional upside to our valuation.

### TRVN: Quarterly and Annual EPS (USD)

	2013		2014		2015		Change y/y		
FY Dec	Actual	Old	New	Cons	Old	New	Cons	2014	2015
Q1	N/A	-0.35E	-0.40E	-0.39E	N/A	-0.54E	-0.65E	N/A	-35%
Q2	N/A	-0.37E	-0.44E	-0.46E	N/A	-0.50E	-0.66E	N/A	-14%
Q3	-0.64A	-0.39E	-0.47E	-0.51E	N/A	-0.46E	-0.51E	27%	2%
Q4	-0.42A	-0.40E	-0.53E	-0.55E	N/A	1.91E	-0.36E	-26%	460%
Year	-1.61A	-1.52E	-1.84E	-1.92E	N/A	0.42E	-0.93E	-14%	123%
P/E	N/A		N/A			19.9			

Source: Barclays Research.

Consensus numbers are from Thomson Reuters

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PLEASE SEE ANALYST CERTIFICATION(S) AND IMPORTANT DISCLOSURES BEGINNING ON PAGE 3.

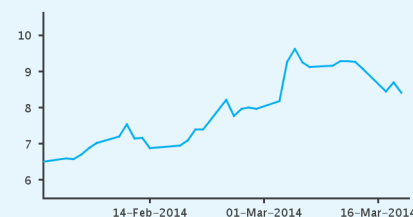
Stock Rating	<b>OVERWEIGHT</b>
	Unchanged
Industry View	<b>NEUTRAL</b>
	Unchanged
Price Target	<b>USD 14.00</b>
	Unchanged

Price (19-Mar-2014)	USD 8.42
Potential Upside/Downside	+66%
Tickers	TRVN

Market Cap (USD mn)	217
Shares Outstanding (mn)	25.73
Free Float (%)	85.60
52 Wk Avg Daily Volume (mn)	0.2
Dividend Yield (%)	N/A
Return on Equity TTM (%)	N/A
Current BVPS (USD)	-3.36

Source: Thomson Reuters

Price Performance	Exchange-Nasdaq
52 Week range	USD 9.95-6.35



[Link to Barclays Live for interactive charting](#)

### U.S. Biotechnology

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## U.S. Biotechnology

Industry View: NEUTRAL

## Trevena Inc. (TRVN)

Stock Rating: OVERWEIGHT

Income statement (\$k)	2013A	2014E	2015E	2016E	CAGR
Revenue	135	0	65,000	0	-100.0%
EBITDA (adj)	-22,649	-47,338	12,629	-56,553	N/A
EBIT (adj)	-23,345	-48,000	12,000	-57,150	N/A
Pre-tax income (adj)	-23,585	-48,496	11,491	-57,596	N/A
Net income (adj)	-23,585	-48,496	11,491	-57,596	N/A
EPS (adj) (\$)	-1.61	-1.84	0.42	-2.08	N/A
Diluted shares (k)	14,669	26,369	27,189	27,737	23.7%
DPS	N/A	N/A	N/A	N/A	N/A

Margin and return data	Average				
EBITDA (adj) margin (%)	N/A	N/A	N/A	N/A	N/A
EBIT (adj) margin (%)	N/A	N/A	N/A	N/A	N/A
Pre-tax (adj) margin (%)	N/A	N/A	N/A	N/A	N/A
Net (adj) margin (%)	N/A	N/A	N/A	N/A	N/A
ROIC (%)	0.0	0.0	0.0	0.0	0.0
ROA (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	-60.5	-95.1	18.2	-891.1	-257.1

Balance sheet and cash flow (\$k)	CAGR				
Tangible fixed assets	343	-119	-248	-145	N/A
Intangible fixed assets	N/A	N/A	N/A	N/A	N/A
Cash and equivalents	37,965	56,330	69,234	12,722	-30.5%
Total assets	42,393	56,771	69,591	13,219	-32.2%
Short and long-term debt	0	0	0	0	N/A
Other long-term liabilities	N/A	N/A	N/A	N/A	N/A
Total liabilities	3,401	5,786	6,316	6,755	25.7%
Net debt/(funds)	-37,965	-56,330	-69,234	-12,722	N/A
Shareholders' equity	38,992	50,985	63,275	6,463	-45.1%
Change in working capital	36,109	51,641	64,060	7,145	-41.7%
Cash flow from operations	-23,676	-41,925	12,604	-56,596	N/A
Capital expenditure	-108	-200	-500	-700	N/A
Free cash flow	-23,568	-41,725	13,104	-55,896	N/A

Valuation and leverage metrics	Average				
P/E (adj) (x)	N/A	N/A	19.9	N/A	19.9
EV/EBITDA (adj) (x)	-2.2	-0.7	1.4	-1.3	-0.7
Equity FCF yield (%)	N/A	N/A	N/A	N/A	N/A
EV/sales (x)	367.1	N/A	0.3	N/A	183.7
P/BV (x)	N/A	N/A	N/A	N/A	N/A
Dividend yield (%)	N/A	N/A	N/A	N/A	N/A
Total debt/capital (%)	0.0	0.0	0.0	0.0	0.0

Selected operating metrics	Average				
SG&A/sales (%)	N/A	N/A	N/A	N/A	N/A
R&D/sales (%)	N/A	N/A	N/A	N/A	N/A
R&D growth (%)	N/A	N/A	N/A	N/A	N/A
SG&A growth (%)	N/A	N/A	N/A	N/A	N/A

Price (19-Mar-2014) USD 8.42  
Price Target USD 14.00

**Why Overweight?** Trevena develops GPCR targeted therapies and its Advanced Biased Ligand Explorer platform discovers biased ligands that will help TRVN develop more targeted and selective therapies with improved efficacy and safety. It has two products in ph 2 trials in large markets (AHF and pain), which if successfully developed offer significant market opportunities.

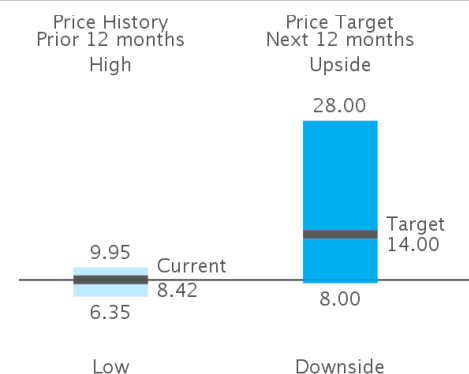
**Upside case** USD 28.00

Our upside scenario of \$28 assumes an FDA approval for TRV130 as well as a positive outcome for the phase 2b for TRV027.

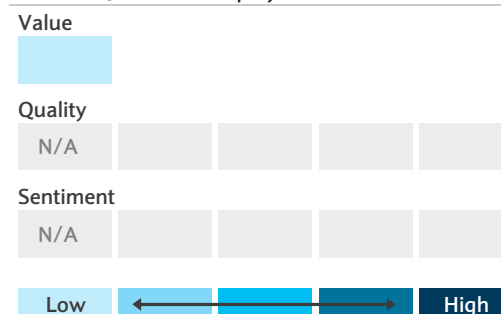
**Downside case** USD 8.00

Our downside scenario of \$8 assumes the TRV027 acute heart failure program fails with TRV130 representing \$6/share and some cash value.

## Upside/Downside scenarios



## POINT® Quantitative Equity Scores



Source: POINT®. The scores are valid as of the date of this report and are independent of the fundamental analysts' views. To view the latest scores, please go to the equity company page on Barclays Live.

Source: Company data, Barclays Research  
Note: FY End Dec

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Trevena Inc. (TRVN, 19-Mar-2014, USD 8.42), Overweight/Neutral, A/C/D/I/L

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**Negative** - industry coverage universe fundamentals/valuations are deteriorating.

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Halozyne Therapeutics Inc. (HALO)	Idenix Pharmaceuticals (IDIX)	Incyte Corp. (INCY)
Intrexon Corp. (XON)	Medivation Inc. (MDVN)	Regeneron Pharmaceuticals (REGN)
Tetraphase (TTPH)	Trevena Inc. (TRVN)	Vertex Pharmaceuticals (VRTX)

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IMPORTANT DISCLOSURES CONTINUED

Trevena Inc. (TRVN)

USD 8.42 (19-Mar-2014)

Stock Rating

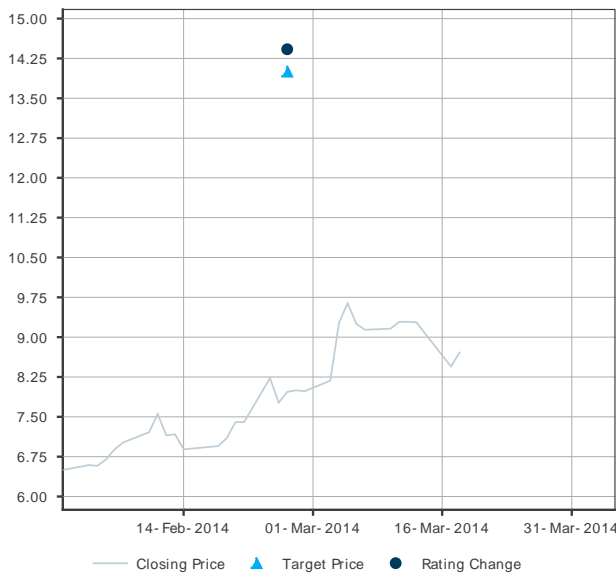
OVERWEIGHT

Industry View

NEUTRAL

Rating and Price Target Chart - USD (as of 19-Mar-2014)

Currency=USD



Date	Closing Price	Rating	Adjusted Price Target
26-Feb-2014	7.97	Overweight	14.00

Source: Thomson Reuters, Barclays Research

Historical stock prices and price targets may have been adjusted for stock splits and dividends.

Source: IDC, Barclays Research

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**Valuation Methodology:** We arrive at our price target using a probability-adjusted NPV analysis. We value the two foremost pipeline products - TRV130 at \$6/share and TRV027 at \$4/share. Including cash value of \$4/share, we arrive at our price target of \$14.

**Risks which May Impede the Achievement of the Barclays Research Price Target:** Downside risks include failure of trials results for both TRV130 and TRV027, ACT/FRX not opting to license TRV027, and inability to raise additional capital in the future.

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