

## Viking Therapeutics (VKTX - \$ 1.27)

1Q16: Two Phase II Trials Are Underway With Top-line Results of Both to Be Reported in 1H17

VKTX recently reported 1Q16 financial results with a net loss of (\$3.6MM) or (\$0.40) net loss per share. As of May 1<sup>st</sup>, the company has ~\$19.5MM cash including \$10.8MM raised in 2Q16, sufficient to support its operations into 2H17, in our opinion.

- **VK5211 in post hip fracture surgery Phase II trial underway.** VKTX already started a Phase II study in 4Q15. Due to a slightly slower than expected patient recruitment, management anticipates to add more clinical sites both in the U.S. (+3) and Europe (+15). As such, VKTX expects the top-line results will be available in 1Q17. Given this is the first proof-of-concept (POC) trial to test efficacy and safety of VK5211 in elderly patients, a positive outcome could be an inflection point for VKTX share value.
- **VK2809 in hypercholesterolemia and fatty liver disease Phase II study to start in mid-16.** VKTX reiterated that the VK2809 in hypercholesterolemia and fatty liver disease Phase II study would start in mid-2016. It is a randomized, double-blind, parallel group, placebo-controlled trial designed to evaluate the efficacy, safety and tolerability of VK2809 in ~ 100 patients with elevated LDL cholesterol and fatty liver disease. Biopsies will be conducted in ~25% of patients for gaining greater insight. The primary endpoint is to measure LDL cholesterol reduction after 12 weeks of dosing, while secondary endpoints include changes in liver fat, insulin sensitivity, inflammatory markers, and other measures. The top-line data could be available in 4Q16/1Q17. Together with VK5211, the time for reporting the two critical POC data would be relatively close together and make 1Q17 an important binary period.
- **X-linked adrenoleukodystrophy (X-ALD) therapy development update.** VKTX already started a preclinical animal model study in Kennedy Krieger Institute evaluating VK2809 and VK0214 as possible candidates advancing into clinical study. Results could potentially be available in mid-16, and if positive, the first clinical study could start in 1H17.
- **Action.** We are reiterating our Buy rating and \$20 target price based on peer comparable, probability adjusted DCF and sum-of-the-parts analyses. Outcomes of the POC clinical studies of the two leading assets could be available over the next 4 – 5 quarters. If the results are positive, VKTX share value could rise significantly, in our opinion.

### Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
<b>FY-16E</b>	-0.40A	-0.18	-0.21	-0.23	-0.89	N.A.
<b>FY-15A</b>	-1.40	-1.07	-0.53	-0.56	-3.68	N.A.
<b>FY-14A</b>	-0.07	3.88	-3.01	-2.01	-5.23	N.A.
<b>FY-13A</b>	0.00	-20.39	-5.57	-0.33	-0.07	N.A.

Source: Laidlaw & Company estimates

Healthcare/Biotechnology

Ticker: **VKTX**  
Rating: **Buy**  
Price Target: **\$ 20.00**

### Trading Data:

Last Price (05/10/2016)	\$ 1.27
52-Week High (5/15/2015)	\$ 9.83
52-Week Low (4/8/2016)	\$ 1.06
Market Cap. (MM)	\$ 24
Shares Out. (MM)	19

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## Anticipated milestones in 2016 and beyond

Product	Indication	Event	Timing	Importance
VK5211	Hip fracture	Report Phase IIa study results	1Q17	****
VK0214/VK2809	X-Linked Adrenoleukodystrophy (X-ALD)	Report pre-clinical animal model study results	Mid-16	***
		Initiate Phase I POC study	Mid-17	***
		Potentially report Phase I study top-line results	Late '17/2018	****
VK2809	Cholesterolemia / NASH	Potentially start Phase II study	Mid-16	***
		Potentially report Phase II study results	1Q17	****

\*\*\*\* / \*\*\*\*\* Major catalyst event that could impact share price very significantly while \*\*\* event is more informative

Source: Laidlaw & Company and company presentation

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## Major Risks

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**Risks of clinical study failure could have a major impact on VKTX share value.** Despite promising aspects of the company's lead products, VK5211 in the post hip fracture surgery rehabilitation and thyroid- $\beta$  agonists (VK2809 / VK0214) in X-ALD, it remains too early to predict the safety and efficacy from the two upcoming Phase I and Phase II studies. Given that clinical validation or POC for these programs has not been established, it would be critical for these studies to demonstrate a positive outcome in order to increase the asset and shareholder value. Negative results of either clinical study could potentially impair their value and have a materially negative impact on shareholder value, especially since success of each study could illustrate the value of VK5211 in hip fracture rehabilitation and thyroid- $\beta$  agonists in X-ALD. Further, it remains too early to predict any potential future success of clinical trials should these programs further advance into next stage clinical stage development. In thyroid- $\beta$  agonists in X-ALD, although it is possible that the drug could reduce or eliminate VLCFA, it remains too early to forecast that the drug could slow and stop the progression of symptoms to provide clinical benefits.

**Product may not be approved or reach anticipated sales.** Although Viking's current pipeline products have exhibited the potential to generate positive clinical outcomes from current and future trials; it remains too early to project whether any of these products would be approved by regulatory agencies. Even if the products were to enter the market, sales could be significantly below projections due to the specific product label under approval, physician consensus for prescribing the drug, changes of treatment paradigms, entrance of competitors, and possibly the changes in pricing flexibility and payer reimbursement. A revenue outlook below expectations could also negatively affect VKTX shareholder value.

**Positive relationship with Ligand is important.** Given that Viking is substantially dependent on technologies and drug candidates licensed from Ligand for further development, it would be important for the company to maintain a positive relationship with Ligand. If Viking loses the right to license these technologies and drug candidates or the Master License Agreement with Ligand is terminated for any reason, VKTX's ability to develop existing and new drug candidates would be harmed.

**Additional financings could dilute shareholder value.** Although the company currently has ~\$14MM cash, VKTX could need more financial resources going forward if they want to expand and further develop its pipeline. Should the product not receive FDA approval, or product revenue does not reach expectations; the company might need to issue new equity to raise additional cash. Under such a scenario, the share value of existing shareholders could be diluted.

**Limited trading liquidity limits shareholder options.** Given VKTX shares only entered the public market recently; daily trading volume and name recognition are relatively modest. With relatively illiquid trading volume, shareholders wanting to increase or reduce their positions in a volatile stock market may face constraints.

Figure 1: Income Statement

Viking Therapeutics – Income Statement													
(\$',000)	2013	2014	2015	1Q16	2Q16E	3Q16E	4Q16E	2016E	2017E	2018E	2019E	2020E	2021E
<b>Revenue</b>													
Product revenue	0.0	0.0	0	-	-	-	-	0	0	0	88,989	297,528	626,498
Other revenue	0.0	0.0	0	-	-	-	-	0	0	0	0	0	0
Total revenue	0.0	0.0	0	-	-	-	-	0	0	0	88,989	297,528	626,498
Costs of goods											10,679	35,703	75,180
Gross sales											78,310	261,825	551,318
Research and development	(12)	(22,223)	(6,967)	(1,877)	(2,384)	(2,932)	(3,372)	(10,566)	(18,279)	(25,407)	(27,694)	(29,910)	(32,003)
General and administrative	(89)	(1,245)	(5,030)	(1,390)	(1,529)	(1,652)	(1,767)	(6,338)	(8,493)	(8,918)	(9,364)	(9,832)	(10,324)
Marketing and sales											(31,000)	(54,250)	(59,675)
<b>Total Operating Expenses</b>	(101)	(23,468)	(11,996)	(3,267)	(3,913)	(4,584)	(5,139)	(16,904)	(26,772)	(34,325)	(68,058)	(93,992)	(102,002)
<b>Operating Incomes (losses)</b>	(101)	(23,468)	(11,996)	(3,267)	(3,913)	(4,584)	(5,139)	(16,904)	(26,772)	(34,325)	20,931	203,537	524,496
Change in fair value of accrued license fees	0	(1,822)	(9,382)	0	0	0	0	0	0	0	0	0	0
Change in fair value of debt conversion features	21	(391)	(1,043)	97	(100)	(100)	(100)	(203)	(500)	(500)	(500)	(500)	(500)
Amortization of debt discount	18	558	(894)	(401)	(401)	(401)	(401)	(1,603)	0	0	0	0	0
Interest expense	6	71	(89)	(15)	(15)	(15)	(15)	(62)	0	0	0	0	0
Total other (income) expenses	45	(1,584)	(11,408)	(320)	(516)	(516)	(516)	(1,868)	(500)	(500)	(500)	(500)	(500)
Loss before tax	(146)	(21,884)	(23,404)	(2,948)	(3,397)	(4,068)	(4,623)	(15,036)	(26,272)	(33,825)	21,431	204,037	524,996
Tax	0	0	0	-	-	-	-	0	0	0	(7,929)	(75,494)	(194,249)
<b>Net Income (Loss)</b>	(146)	(21,884)	(23,404)	(3,587)	(3,397)	(4,068)	(4,623)	(15,036)	(26,272)	(33,825)	13,501	128,543	330,748
Unrealized gain on securities				7									
Net Income (Loss) Applicable to Common Shareholders	(146)	(21,884)	(23,404)	(3,580)	(3,397)	(4,068)	(4,623)	(15,036)	(26,272)	(33,825)	13,501	128,543	330,748
Net Earnings (Losses) Per Share—Basic	(\$0.07)	(\$5.23)	(\$3.68)	(\$0.40)	(\$0.18)	(\$0.21)	(\$0.23)	(\$0.89)	(\$1.39)	(\$1.62)	\$0.52	\$4.97	\$12.78
Net Earnings (Losses) Per Share—Diluted	(\$0.07)	(\$5.23)	(\$3.68)	(\$0.40)	(\$0.18)	(\$0.21)	(\$0.23)	(\$0.89)	(\$1.39)	(\$1.62)	\$0.52	\$4.97	\$12.78
Shares outstanding—basic	2,043	4,187	6,356	9,016	19,269	19,469	19,769	16,881	18,881	20,881	25,881	25,884	25,886
Shares outstanding—diluted	2,043	4,187	6,356	9,016	19,269	19,469	19,769	16,881	18,881	20,881	25,881	25,884	25,886
<b>Margin Analysis (% of Sales/Revenue)</b>													
Costs of goods											12%	12%	12%
R&D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-31%	-10%	-5%
SG&A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-11%	-3%	-2%
Operating Income (loss)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24%	68%	84%
Net Income	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15%	43%	53%
<b>Financial Indicator Growth Analysis (YoY%)</b>													
Total Revenue	-100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	234%	111%
R&D	-83%	191264%	-69%	1251%	117%	17%	5%	52%	73%	39%	9%	8%	7%
SG&A	119%	1292%	304%	332%	0%	-7%	26%	26%	34%	5%	5%	5%	5%
Marketing and sales												75%	10%
Operating Income (Losses)	-8%	23118%	-49%	609%	49%	7%	11%	41%	58%	28%	-161%	872%	158%
Pretax Income	32%	14864%	7%	-48%	-57%	-14%	-9%	-36%	75%	29%	-163%	852%	157%
Net Income	32%	14864%	7%	-37%	-57%	-14%	-9%	-36%	75%	29%	-140%	852%	157%
EPS	-4%	7202%	-30%	-72%	-84%	-60%	-59%	-76%	56%	16%	-132%	852%	157%

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Source: Bloomberg LP; Company reports; Laidlaw &amp; Company estimates

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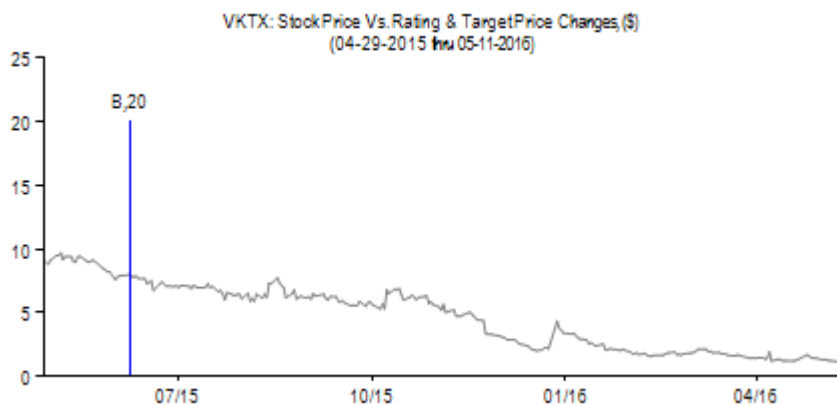
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#### 3 Year Rating Change History

Date	Rating	Closing Price (\$)
06/08/2015	Buy (B)	8.02

#### 3 Year Price Change History

Date	Target Price (\$)	Closing Price, (\$)
06/08/2015	20.00	8.02

Source: Laidlaw & Company

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			Investment Banking	Brokerage
<b>Strong Buy (SB)</b>	Expected to significantly outperform the sector over 12 months.	0.00%	0.00%	0.00%
<b>Buy (B)</b>	Expected to outperform the sector average over 12 months.	66.67%	27.78%	2.78%
<b>Hold (H)</b>	Expected returns to be in line with the sector average over 12 months.	0.00%	0.00%	0.00%
<b>Sell (S)</b>	Returns expected to significantly underperform the sector average over 12 months.	0.00%	0.00%	0.00%

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