

## Viking Therapeutics (VKTX - \$ 1.16)

### 3Q16: VK5211 and VK2809 Phase II Programs Advancing with Potential Top-line Results in 2Q17

Yesterday after the market close, VKTX reported 3Q16 financial results with a net loss of (\$3.8MM) or (\$0.20) net loss per share. VKTX ended 3Q16 with cash of ~\$14.6MM, sufficient to support its operations into late 3Q17, in our opinion. VKTX also has a \$12MM equity line and potential \$3MM ATM that could extend the runway.

- VK5211 in post hip fracture surgery study updates.** The Phase II study (n=120) is ongoing with a total of 30 out of the planned 33 sites opened, including 15 in Europe. It is a randomized, double-blind, placebo-controlled Phase II study with the changes of lean body mass after 12 weeks of treatment as primary endpoint. Secondary endpoints include functional performance assessments, quality-of-life, daily living activities, safety, tolerability and PK. Top-line results could be available in 2Q17.
- VK2809 in hypercholesterolemia and fatty liver disease Phase II trial updates.** The Phase II trial (n=80) evaluating VK2809 as potential treatment in hypercholesterolemia and fatty liver disease [elevated LDL cholesterol (LDL-C) (>130) and fatty liver (min. 10%)] is underway with more than half of the 30 planned clinical sites having opened. The primary endpoint is potential reduction of LDL-C level after 12 weeks of treatment; followed by a 4-week follow-up. Management suggested a reduction in the 'teens to 20% would be clinically meaningful. Secondary endpoints include changes in liver fat content, triglycerides, and inflammatory markers. We estimate top-line results could be available in 2Q17. Together with VK5211, the time-frame for reporting of two critical POCs data could potentially be relatively close together and make 2Q17 an important binary period for VKTX.
- VK0214 in X-ALD positive preclinical results.** Positive in-vivo POC study results of VK0214 in X-linked adrenoleukodystrophy (X-ALD) were reported on Sep. 23, 2016. A preclinical study to evaluate the effect of VK0214 on tissue VLCFA levels is ongoing with data potentially available in 1Q17 and a possible IND filing in 2H17.
- Action.** We are reiterating our Buy rating and target price of \$10. Our valuation is based on peer comparable, probability adjusted DCF and sum-of-the-parts analyses. Outcomes of the two POC clinical studies potentially available in 2017, if positive, could increase VKTX share value significantly, in our opinion.

#### Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
<b>FY-16E</b>	-0.40A	-0.22A	-0.20A	-0.23	-1.04	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:	<b>VKTX</b>
Rating:	<b>Buy</b>
Price Target:	<b>\$ 10.00</b>

#### Trading Data:

Last Price (11/10/2016)	\$ 1.16
52-Week High (12/28/2015)	\$ 5.17
52-Week Low (11/3/2016)	\$ 0.94
Market Cap. (MM)	\$ 23
Shares Out. (MM)	20

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## Anticipated milestones in 2016 and beyond

Product	Indication	Event	Timing	Importance
VK5211	Hip fracture	Report Phase IIa study results	2Q17	****
VK0214/VK2809	X-Linked Adrenoleukodystrophy (X-ALD)	Initiate Phase I POC study	Mid-17	***
		Potentially report Phase I study top-line results	Late '17/ 2018	****
VK2809	Cholesterolemia / NASH	Potentially report Phase II study results	Mid-17	****

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

Source: Laidlaw & Company and company presentation

## 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	2Q16	3Q16	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)	(2,371)	(2,105)	(2,589)	(8,942)	(15,470)	(21,503)	(23,438)	(25,313)	(27,085)
General and administrative	(89)	(1,245)	(5,030)	(1,390)	(1,206)	(1,159)	(1,229)	(4,985)	(6,680)	(7,014)	(7,364)	(7,733)	(8,119)
Marketing and sales											(31,000)	(54,250)	(59,675)
<b>Total Operating Expenses</b>	(101)	(23,468)	(11,996)	(3,267)	(3,577)	(3,264)	(3,818)	(13,927)	(22,149)	(28,516)	(61,802)	(87,296)	(94,879)
<b>Operating Incomes (losses)</b>	(101)	(23,468)	(11,996)	(3,267)	(3,577)	(3,264)	(3,818)	(13,927)	(22,149)	(28,516)	27,187	210,233	531,619
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	412	(65)	(100)	344	(500)	(500)	(500)	(500)	(500)
Amortization of debt discount	18	558	(894)	(401)	(525)	(431)	(431)	(1,788)	0	0	0	0	0
Amortization of financing costs							(46)	(91)					
Interest expense	6	71	(89)	(15)	(2)	(2)	(2)	(21)	0	0	0	0	0
Total other (income) expenses	45	(1,584)	(11,408)	(320)	(115)	(543)	(578)	(1,556)	(500)	(500)	(500)	(500)	(500)
Loss before tax	(146)	(21,884)	(23,404)	(3,587)	(3,692)	(3,807)	(4,396)	(15,482)	(21,649)	(28,016)	27,687	210,733	532,119
Tax	0	0	0	-	-	-	-	0	0	0	(10,244)	(77,971)	(196,884)
<b>Net Income (Loss)</b>	(146)	(21,884)	(23,404)	(3,587)	(3,692)	(3,807)	(4,396)	(15,482)	(21,649)	(28,016)	17,443	132,762	335,235
Unrealized gain on securities				7	(7)	1		1					
Net Income (Loss) Applicable to Common Shareholders	(146)	(21,884)	(23,404)	(3,580)	(3,699)	(3,807)	(4,396)	(15,482)	(21,649)	(28,016)	17,443	132,762	335,235
Net Earnings (Losses) Per Share—Basic	(\$0.07)	(\$5.23)	(\$3.68)	(\$0.40)	(\$0.22)	(\$0.20)	(\$0.23)	(\$1.04)	(\$1.20)	(\$1.39)	\$0.69	\$5.29	\$13.35
Net Earnings (Losses) Per Share—Diluted	(\$0.07)	(\$5.23)	(\$3.68)	(\$0.40)	(\$0.22)	(\$0.20)	(\$0.23)	(\$1.04)	(\$1.20)	(\$1.39)	\$0.69	\$5.29	\$13.35
Shares outstanding—basic	2,043	4,187	6,356	9,016	17,105	18,992	19,292	16,101	18,101	20,101	25,101	25,104	25,106
Shares outstanding—diluted	2,043	4,187	6,356	9,016	17,105	18,992	19,292	16,101	18,101	20,101	25,101	25,104	25,106
<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	-26%	-9%	-4%
SG&A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-8%	-3%	-1%
Operating Income (loss)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31%	71%	85%
Net Income	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20%	45%	54%
<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%	115%	-16%	-20%	28%	73%	39%	9%	8%	7%
SG&A	119%	1292%	304%	332%	-21%	-35%	-12%	-1%	34%	5%	5%	5%	5%
Marketing and sales												75%	10%
Operating Income (Losses)	-8%	23118%	-49%	609%	36%	-24%	-17%	16%	59%	29%	-195%	673%	153%
Pretax Income	32%	14864%	7%	-37%	-53%	-20%	-14%	-34%	40%	29%	-199%	661%	153%
Net Income	32%	14864%	7%	-37%	-53%	-19%	-14%	-34%	40%	29%	-162%	661%	153%
EPS	-4%	7202%	-30%	-72%	-80%	-62%	-60%	-72%	15%	17%	-150%	661%	152%
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Source: Bloomberg LP; Company reports; Laidlaw &amp; Company estimates

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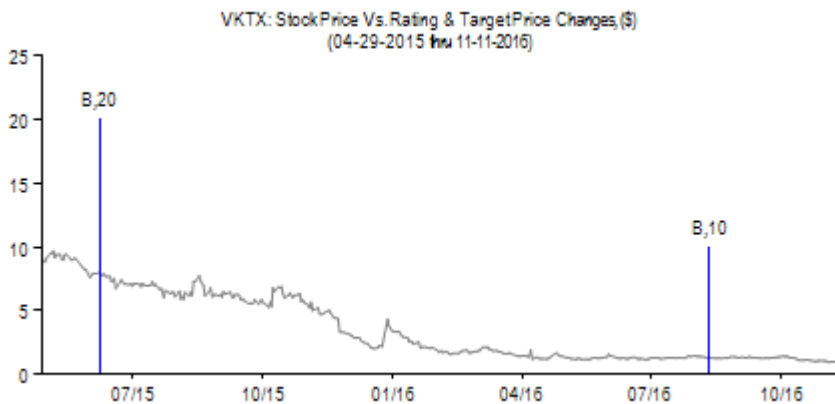
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Date	Rating	Closing Price (\$)
06/08/2015	Buy (B)	8.02

**3 Year Price Change History**

Date	Target Price (\$)	Closing Price, (\$)
06/08/2015	20.00	8.02
08/11/2016	10.00	1.27



Source: Laidlaw &amp; Company

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Laidlaw & Company Rating System*		% of Companies Under Coverage With This Rating	% of Companies for which Laidlaw & Company has performed services for in the last 12 months	
			Investment Banking	Brokerage
<b>Strong Buy (SB)</b>	Expected to significantly outperform the sector over 12 months.	2.56%	2.56%	0.00%
<b>Buy (B)</b>	Expected to outperform the sector average over 12 months.	58.97%	28.21%	2.56%
<b>Hold (H)</b>	Expected returns to be in line with the sector average over 12 months.	5.13%	0.00%	0.00%
<b>Sell (S)</b>	Returns expected to significantly underperform the sector average over 12 months.	2.56%	0.00%	0.00%

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