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EQUITY RESEARCH
Company Report

March 8, 2018

Viking Therapeutics (VKTX - $6.06)

Healthcare/Biotechnology

Ticker:	**VKTX**
Rating:	**Buy**
Price Target:	**$10.00**

4Q17: Major Near-term Investor Focus is VK2809 in Hypercholesterolemia and NAFLD Phase II Trial Readout

VKTX reported 4Q17 financial results yesterday after the market close with a net loss of ($4.1MM) vs. Laidlaw ($5.2MM) and the Street ($5.1MM) estimates. Net loss/share was ($0.14) vs. ($0.16) and ($0.18) for Laidlaw and the Street. Combined with the recent financing of $78MM, we believe VKTX currently has cash of $94MM (proforma), sufficient to support operations into 2020, in our opinion.

- **VK2809 program updates.** For the VK2809 in hypercholesterolemia and non-alcoholic fatty liver disease (NAFLD) Phase II trial (n=80), patient enrollment is ongoing and top-line results are expected in 2H18 (possibly in mid-2H18). Primary endpoint is potential LDL-C level reduction measured after 12 weeks of treatment and 4-week follow-up. We believe the patient enrollment is near completion and the company might want more patients in the study to provide a more robust outcome, especially since resources are no longer a near term concern. In addition, Madrigal (MDGL - NR) recently reported that the week 12 MGL-3196 in biopsy-proven NASH Phase II study results will be presented at the upcoming European Association for the Study of the Liver (EASL) meeting (April 11-15). Given the similar MOC [thyroid hormone receptor (THR) β-selective agonist] between the two programs, we believe MGL-3196 clinical results readout could potentially have an impact on VKTX share value as well.
- **FDA discussion in 2H18 regarding VK5211 in post hip fracture surgery future regulatory path.** After recently reported robust VK5211 in post hip fracture surgery Phase II study results, VKTX plans to conduct a Type C meeting with the FDA in 2H18 regarding the future regulatory path for VK5211. VKTX also plans to present the 12-week follow up results at the 2018 American Society for Bone and Mineral Research (ASBMR) annual meeting (Sep. 28–Oct. 1).
- **VK2809 in glycogen storage disease type Ia (GSD Ia) updates.** VKTX is scheduled to start a VK2809 in GSD Ia Phase I trial in 2Q18. Patients would be treated for 28 days; the level of plasma triglyceride and possibly liver fat will be measured to test VK2809's potency.
- **VK0214 in X-ALD IND could be filed in 4Q18 with Phase I trial to start in 2019.**
- **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 in 2018, if positive, could increase VKTX share value significantly, in our opinion.

Trading Data:

Last Price (3/7/2018)	$6.06
52–Week High (2/22/2018)	$7.36
52–Week Low (8/2/2017)	$0.88
Market Cap. (MM)	$305
Shares Out. (MM)	25.98

Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
FY-18E	-0.17	-0.19	-0.18	-0.16	-0.60	N.A.
FY-17A	-0.23	-0.21	-0.22	-0.14	-0.79	N.A
FY-16A	-0.40	-0.22	-0.20	-0.18	-0.90	N.A.
FY-15A	-1.40	-1.07	-0.53	-0.56	-3.68	N.A.

Source: Laidlaw & Company estimates

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Anticipated milestones in 2018 and beyond

Product	Indication	Event	Timing	Importance
VK5211	Hip fracture	Report Phase IIa study full dataset results at the ASBMR annual meeting	**Sep. 28–Oct. 1, 2018**	***
		Discussion with the FDA for the nest step	**2H18**	***
VK0214	X-Linked Adrenoleukodystrophy (X-ALD)	Potentially file an IND	**4Q18**	***
VK2809	Cholesterolemia / NASH	Potentially report Phase II study results	**2H18**	****
	Glycogen storage disease type Ia (GSD Ia).	Potentially start Phase II study	**2Q18**	***

***** / ***** 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

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-β 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-β 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-β 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 ~$95MM (proforma) 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.

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Figure 1: Income Statement

Viking Therapeutics – Income Statement

($',000)	2013	2014	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18E	2Q18E	3Q18E	4Q18E	2018E	2019E	2020E
Revenue																
Product revenue	0.0	0.0	0	0	-	-	-	-	0	-	-	-	-	0	0	0
Other revenue	0.0	0.0	0	0	-	-	-	-	0	-	-	-	-	0	0	0
Total revenue	0.0	0.0	0	0	-	-	-	-	0	-	-	-	-	0	0	0
Costs of goods															0	0
Gross sales															0	0
Research and development	(12)	(22,223)	(6,967)	(9,000)	(3,528)	(3,715)	(3,465)	(3,033)	(13,741)	(3,549)	(3,691)	(3,395)	(3,327)	(13,962)	(15,219)	(16,436)
General and administrative	(89)	(1,245)	(5,030)	(4,846)	(1,441)	(1,267)	(1,227)	(1,394)	(5,329)	(1,464)	(1,493)	(1,508)	(1,614)	(6,079)	(6,383)	(6,702)
Marketing and sales																0
Total Operating Expenses	(101)	(23,468)	(11,996)	(13,846)	(4,969)	(4,983)	(4,692)	(4,427)	(19,070)	(5,013)	(5,184)	(4,903)	(4,941)	(20,041)	(21,602)	(23,138)
Operating Incomes (losses)	(101)	(23,468)	(11,996)	(13,846)	(4,969)	(4,983)	(4,692)	(4,427)	(19,070)	(5,013)	(5,184)	(4,903)	(4,941)	(20,041)	(21,602)	(23,138)
Change in fair value of accrued license fees	0	(1,822)	(9,382)	0	0	0	0	0	0	0	0	0	0	0	0	0
Change in fair value of debt conversion features	21	(391)	(1,043)	1,064	278	571	(1,136)	633	345	189	(200)	(158)	205	36	(500)	(500)
Amortization of debt discount	18	558	(894)	(1,788)	(431)	(337)	(257)	(258)	(1,283)	(320)	(340)	(350)	(355)	(1,365)	(1,365)	(1,365)
Amortization of financing costs				(139)	(98)	(422)	(18)	(34)	(571)	(30)	(69)	(88)	(87)	(274)		
Interest expense	6	71	(89)	(22)	(2)	(1)	2	2	1	(2)	(2)	(2)	(2)	(8)	(8)	(8)
Total other (income) expenses	45	(1,584)	(11,408)	(885)	(253)	(189)	(1,408)	343	(1,507)	(163)	(611)	(598)	(239)	(1,611)	(1,873)	(1,873)
Loss before tax	(146)	(21,884)	(23,404)	(14,731)	(5,222)	(5,172)	(6,100)	(4,084)	(20,578)	(5,176)	(5,795)	(5,501)	(5,180)	(18,430)	(19,729)	(21,265)
Tax	0	0	0	0	-	-	-	-	0	-	-	-	-	0	0	0
Net Income (Loss)	(146)	(21,884)	(23,404)	(14,731)	(5,222)	(5,172)	(6,100)	(4,084)	(20,578)	(5,176)	(5,795)	(5,501)	(5,180)	(18,430)	(19,729)	(21,265)
Unrealized gain on securities				0	(1)	2	2	(16)	(13)							
Net Income (Loss) Applicable to Common Shareholders	(146)	(21,884)	(23,404)	(14,731)	(5,222)	(5,170)	(6,097)	(4,101)	(20,591)	(5,176)	(5,795)	(5,501)	(5,180)	(18,430)	(19,729)	(21,265)
Net Earnings (Losses) Per Share—Basic	($0.07)	($5.23)	($3.68)	($0.90)	($0.23)	($0.21)	($0.22)	($0.14)	($0.79)	($0.17)	($0.19)	($0.18)	($0.16)	($0.60)	($0.55)	($0.59)
Net Earnings (Losses) Per Share—Diluted	($0.07)	($5.23)	($3.68)	($0.90)	($0.23)	($0.21)	($0.22)	($0.14)	($0.79)	($0.17)	($0.19)	($0.18)	($0.16)	($0.60)	($0.55)	($0.59)
Shares outstanding—basic	2,043	4,187	6,356	16,278	22,353	24,119	27,470	29,872	25,953	30,272	30,672	31,072	31,472	30,872	35,872	35,875
Shares outstanding—diluted	2,043	4,187	6,356	16,278	22,353	24,119	27,470	29,872	25,953	30,272	30,672	31,072	31,472	30,872	35,872	35,875
Margin Analysis (% of Sales/Revenue)																
Costs of goods															12%	12%
R&D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SG&A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Operating Income (loss)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Net Income	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Financial Indicator Growth Analysis (YoY%)																
Total Revenue	-100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
R&D	-83%	191264%	-69%	29%	88%	57%	65%	15%	53%	1%	-1%	-2%	10%	2%	9%	8%
SG&A	119%	1292%	304%	-4%	4%	5%	6%	28%	10%	2%	18%	23%	16%	14%	5%	5%
Marketing and sales																75%
Operating Income (Losses)	-8%	23118%	-49%	15%	52%	39%	44%	18%	38%	1%	4%	5%	12%	5%	8%	7%
Pretax Income	32%	14864%	7%	-37%	46%	40%	60%	12%	40%	-1%	12%	-10%	27%	-10%	7%	8%
Net Income	32%	14864%	7%	-37%	46%	40%	60%	13%	40%	-1%	12%	-10%	26%	-10%	7%	8%
EPS	-4%	7202%	-30%	-75%	-41%	-1%	11%	-25%	-12%	-27%	-12%	-20%	20%	-25%	-8%	8%

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

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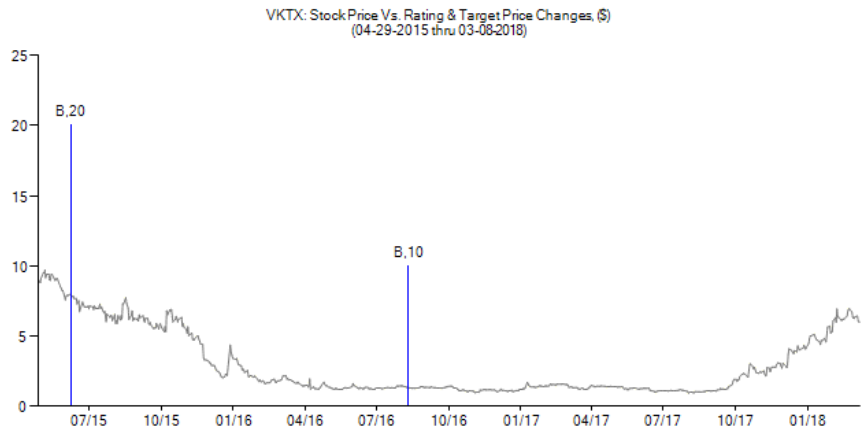
Rating and Price Target Change History



3 Year Rating Change History

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

3 Year Price Change History

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

Source: Laidlaw & Company **Created by: Blue-Compass.net**

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			Investment Banking	Brokerage
Strong Buy (SB)	Expected to significantly outperform the sector over 12 months.	0.00%	0.00%	0.00%
Buy (B)	Expected to outperform the sector average over 12 months.	65.38%	26.92%	3.85%
Hold (H)	Expected returns to be in line with the sector average over 12 months.	0.00%	0.00%	0.00%
Sell (S)	Returns expected to significantly underperform the sector average over 12 months.	0.00%	0.00%	0.00%

ADDITIONAL COMPANIES MENTIONED

Madrigal (MDGL – Not Rated)

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