

COMPANY NOTE | EQUITY RESEARCH | April 8, 2014

Healthcare: Pharmaceuticals

Kindred Biosciences, Inc. | KIN - \$17.44 - NYSE | Neutral

Company Update

Estimates Changed, Target Price Changed

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Stock Data	
52-Week Low - High	\$8.75 - \$26.99
Shares Out. (mil)	19.23
Mkt. Cap.(mil)	\$335.3
3-Mo. Avg. Vol.	147,460
12-Mo.Price Target	\$18.00
Cash (mil)	\$115.0
Tot. Debt (mil)	\$0.0
Cash (mil): Cash is approximate financing	proforma amount post IPO and recent

EPS \$								
Yr Dec	—2013 —	—20°	14E—	—2015E—				
		Curr	Prev	Curr	Prev			
1Q	(0.04)A	(0.19)E	(0.19)E	-	-			
2Q	(0.11)A	(0.18)E	(0.22)E	-	-			
3Q	(0.26)A	(0.21)E	(0.24)E	-	-			
4Q	(0.40)A	(0.23)E	(0.27)E	-	-			
YEAR	(1.13)A	(0.81)E	(0.92)E	(0.91)E	(1.07)E			
P/E	NM	NM	NM	NM	NM			

Revenue (\$ millions)								
Yr Dec	—2013—	—2014E—	—2015E—					
		Curr	Curr					
1Q	0.0A	0.0E	-					
2Q	0.0A	0.0E	-					
3Q	0.0A	0.0E	-					
4Q	0.0A	0.0E	-					
YEAR	0.0A	0.0E	0.5E					



KIN: Updated model post financing; Lowering PT

We publish our updated model for Kindred Bio. We reduced EPS targets to account for dilution from the recent equity financing. We also lowered our valuation target (now \$18/share from \$25) to reflect higher discounts and lower valuations for animal health companies. Even post the recent share price decline, we are not inclined to aggressively purchase shares at current levels.

- Updated model. We are publishing our updated model for Kindred post the recent secondary offering.
- **Dilution reduces EPS targets.** The additional ~3 million shares from the recent secondary offering dilutes our EPS in out years by \$0.15 \$0.20. This is not surprising given the low interest rate environment. The company could offset this through accretive deals.
- Risk aversion also impacting valuation. The market appears to be scrutinizing non-profitable animal health companies to a greater degree. We agree with this sentiment, and expect that this will not change in the near to mid-term. We have adjusted our discount rate higher to 30% from 15% and decreased our target multiple for 2018 forecasted EPS to 25X from 30X. This reduces our price target to \$18/share from \$25/share. The \$18 price target includes an addition for \$6/share in net cash. We also believe that sentiment could go lower and do not view our price target as conservative.
- Next data point should be positive. The next clinical data point for KIN shares should be Cerekin dog data for the treatment of osteoarthritis and inflammation. We expect it to be positive. We are not sure how much this will impact the share price given that most investors also expect it to be positive.
- Maintain Neutral rating. We are impressed by the management team at Kindred Bio, and we believe that the company has positioned itself well by raising additional funds. However, we remain cautious for investors as we continue to believe that "developmental" animal health valuations appear stretched.

VALUATION

We value KIN shares at \$18/share. Our price target of \$18/share is arrived at by applying a 25X multiple to forecasted 2018 EPS of \$1.10, and discounting back three years by 30% per year (we also add \$6/share to reflect the cash balance). We support this multiple by evaluating comparable animal health companies (limited sample size). Our choice of 25X reflects an earlier stage of the EPS growth trajectory curve.

Impediments to our price target include clinical development risk, regulatory risk, forecasting risk and sentiment risk.

RISKS

In addition to the risks inherent in developing, manufacturing, and distributing animal health drugs, key investment risks for Kindred Bio include:

- Clinical development risk Kindred Bio will need to demonstrate both efficacy and safety for its current product pipeline. Failure of pending clinical data to match expectations could have a material adverse impact on company shares.
- Regulatory risk Kindred Bio advances its pipeline through the FDA (CVM), USDA (biologics), and EMA.
 Failure of the company to navigate these channels in line with investor expectations could have a material adverse impact on company shares.
- Forecasting risk We forecast substantial revenues for multiple products within Kindred Bio's pipeline. Failure of actual revenues to match our forecasts could have a material adverse impact on company shares.
- Sentiment risk Animal health companies are currently receiving heightened investor interest, and profits remain multiple years away. A change in investor sentiment away from animal health could have a material adverse impact on company shares.

COMPANY DESCRIPTION

Kindred Biosciences, Inc., a clinical-stage biopharmaceutical company, focuses on the development of therapies for pets. The company provides small molecules and biologics that are in various stages of development for a range of indications in dogs, cats, and horses. Its products include CereKin, an oral interleukin-1 beta inhibitor for osteoarthritis pain and inflammation in dogs; AtoKin, a beef-flavored formulation of fexofenadine for atopic dermatitis in dogs; KIND-009, an oral analgesic formulation of flupirtine to manage post-operative pain in dogs and cats; KIND-007, an inhibitor of Bruton's tyrosine kinase; and KIND-006, an agent for gastrointestinal diseases in cats. The company's products also comprise KIND-502, a biologic for allergic and immune-mediated diseases; KIND-506, a biologic for inflammatory and autoimmune diseases; KIND-507, a biologic for immune-mediated diseases; KIND-504, a cancer vaccine; and KIND-501, an antiangiogenic biologic for cancer in dogs. Kindred Biosciences, Inc. was founded in 2012 and is headquartered in Burlingame, California.

Kindred Biosciences, Inc.																	
Earnings model	FY 2012 A	1Q13A	2Q13A	3Q13A	4Q13A	FY 2013 A	1Q14E	2Q14E	3Q14E	4Q14E	FY 2014 E	FY 2015 E	FY 2016 E	FY 2017 E	FY 2018 E	FY 2019 E	FY 2020 E
Revenues:																	
CereKin AtoKin SentiKin Other indications (Cerekin/AtoKin/SentiKen) Other small molecule drugs Biologics												484,602 - -	12,849,108 3,849,995 1,787,498	33,187,508 13,429,295 6,235,030 10,000,000 15,000,000	51,379,675 23,447,784 10,886,471 20,000,000 25,000,000 15,000,000	63,967,375 34,405,808 15,974,125 25,000,000 35,000,000 25,000,000	69,918,903 39,154,586 18,178,915 30,000,000 45,000,000 50,000,000
Distributor discount												(24,230)	(924,330)	(3,892,592)	(7,285,697)	(9,967,365)	(12,612,620)
Percentage via distributor Total Revenues	-				-					-		25% 460,372	25% 17,562,271	25% 73,959,241	25% 138,428,234	25% 189,379,943	25% 239,639,784
COGS Gross Profits Gross margins		-			-	- -				-	-	460,372 - 0%	10,537,363 7,024,908 40%	36,979,621 36,979,621 50%	69,214,117 69,214,117 50%	90,902,372 98,477,570 52%	109,275,741 130,364,042 54%
Research and Development General and Administrative Selling expenses	74,772 44,864	125,000 30,000	315,791 148,584	953,756 259,153	1,747,674 639,339	3,142,221 1,077,076	2,500,000 650,000	3,000,000 650,000	3,500,000 650,000	4,000,000 650,000	13,000,000 2,600,000	13,500,000 2,750,000 3,000,000	14,000,000 2,825,000 8,900,000	14,000,000 2,850,000 12,100,000	15,500,000 3,000,000 16,700,000	16,500,000 3,250,000 20,700,000	17,500,000 3,500,000 23,750,000
Loss from operations	(119,636)	(155,000)	(464,375)	(1,212,909)	(2,387,013)	(4,219,297)	(3,150,000)	(3,650,000)	(4,150,000)	(4,650,000)	(15,600,000)	(19,250,000)	(18,700,092)	8,029,621	34,014,117	58,027,570	85,614,042
Interest/other income	25	-	-	2,614	3,310	5,924	1,500	51,250	50,000	50,750	153,500	52,500	52,500	100,000	150,000	200,000	250,000
Pretax income (loss) Taxes Rate	(119,611)	(155,000)	(464,375) -	(1,210,295)	(2,383,703)	(4,213,373)	(3,148,500)	(3,598,750)	(4,100,000)	(4,599,250)	(15,446,500)	(19,197,500)	(18,647,592) - 0%	8,129,621 357,703 4%	34,164,117 4,885,469 14%	58,227,570 14,848,030 26%	85,864,042 30,052,415 35%
Net income (loss)	(119,611)	(155,000)	(464,375)	(1,210,295)	(2,383,703)	(4,213,373)	(3,148,500)	(3,598,750)	(4,100,000)	(4,599,250)	(15,446,500)	(19,197,500)	(18,647,592)	7,771,917	29,278,648	43,379,540	55,811,628
EPS	(0.04)	(0.04)	(0.11)	(0.26)	(0.40)	(1.13)	(0.19)	(0.18)	(0.21)	(0.23)	(0.81)	(0.91)	(0.85)	0.30	1.10	1.45	1.80
Shares outstanding	2,718,082	3,500,000	4,070,867	4,713,320	5,899,059	3,731,929	16,500,000	19,750,000	20,000,000	20,250,000	19,125,000	21,000,000	22,000,000	25,500,000	26,500,000	30,000,000	31,000,000

Source: ROTH Capital Partners and Company SEC filings

Scott R Henry, CFA shenry@roth.com (949) 500-0863 Regulation Analyst Certification ("Reg AC"): The research analyst primarily responsible for the content of this report certifies the following under Reg AC: I hereby certify that all views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

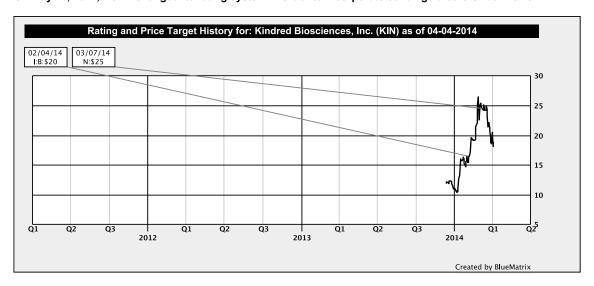
Disclosures:

Within the last twelve months, ROTH has received compensation for investment banking services from Kindred Biosciences,

ROTH makes a market in shares of Kindred Biosciences, Inc. and as such, buys and sells from customers on a principal basis.

Within the last twelve months, ROTH has managed or co-managed a public offering for Kindred Biosciences, Inc..

On September 28, 2010, ROTH changed its rating system in order to replace the Hold rating with Neutral. On May 26, 2011, ROTH changed its rating system in order to incorporate coverage that is Under Review.



Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. Distribution Ratings/IB Services shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

Distribution of IB Services Firmwide

IB Serv./Past 12 Mos. as of 04/07/14

Rating	Count	Percent	Count	Percent
Buy [B]	189	81.82	108	57.14
Neutral [N]	31	13.42	11	35.48
Sell [S]	1	0.43	0	0
Under Review [UR]	9	3.90	4	44.44

Our rating system attempts to incorporate industry, company and/or overall market risk and volatility. Consequently, at any given point in time, our investment rating on a stock and its implied price movement may not correspond to the stated 12month price target.

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Sell: A rating, which at the time it is instituted and or reiterated, that indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

Under Review [UR]: A rating, which at the time it is instituted and or reiterated, indicates the temporary removal of the prior rating, price target and estimates for the security. Prior rating, price target and estimates should no longer be relied upon for UR-rated securities.

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