

## Healthcare: Pharmaceuticals

# Kindred Biosciences, Inc. | KIN - \$24.58 - NYSE | *Neutral*

### Quarterly Update

Estimates Changed, Rating Changed, Target Price Changed

#### Stock Data

52-Week Low - High	\$8.75 - \$26.89
Shares Out. (mil)	16.17
Mkt. Cap.(mil)	\$397.5
3-Mo. Avg. Vol.	NA
12-Mo.Price Target	\$25.00
Cash (mil)	\$65.3
Tot. Debt (mil)	\$0.0

Cash (mil): Cash is approximate proforma amount post IPO

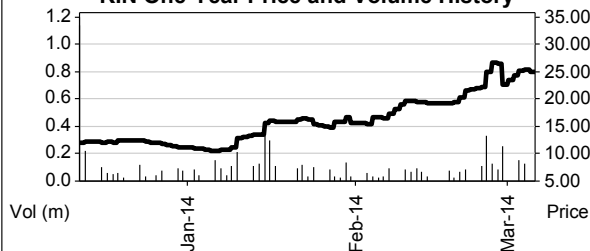
#### EPS \$

Yr Dec	—2013—	—2014E—		—2015E—	
		Curr	Prev	Curr	Prev
1Q	(0.04)A	(0.19)E	(0.15)E	-	-
2Q	(0.11)A	(0.22)E	(0.18)E	-	-
3Q	(0.26)A	(0.24)E	(0.18)E	-	-
4Q	(0.40)A	(0.27)E	(0.18)E	-	-
YEAR	(1.13)A	(0.92)E	(0.70)E	(1.07)E	(0.85)E
P/E	NM	NM	NM	NM	NM

#### Revenue (\$ millions)

Yr Dec	—2013—	—2014E—		—2015E—	
		Curr	Prev	Curr	Prev
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 One-Year Price and Volume History



## KIN: 4Q13 Recap - Execution Strong; Downgrading on Valuation

KIN reported a 4Q13 EPS loss of \$0.40 versus our target of a loss of \$0.19. The greater loss was largely noise, and the quarter was fundamentally as expected. We are downgrading shares to Neutral based on a significant share price run-up that makes the valuation less attractive for new purchases. We did increase our price target to \$25/share to reflect higher multiples for animal health comps.

- **4Q recap - Not that material.** Quarterly results basically just track the rate of spending at KIN at this point in time. Higher R&D negatively impacted EPS by ~\$0.08, higher SG&A negatively impacted EPS by ~\$0.03 and lower shares outstanding negatively impacted EPS by ~\$0.10. Net, the 4Q13 EPS loss of \$0.40 was greater than our targeted \$0.19 EPS loss. Still, we viewed the quarter fundamentally in-line with expectations.
- **Pipeline update - In-line.** Management reiterated R&D targets that matched our expectations including CereKin clinical results mid year 2014, and AtoKin/SentiKin clinical data in 4Q13. No changes to our pipeline targets. Of note, management did mention partnering interest from larger animal health players for its pipeline.
- **Guidance outlook - Accelerating investment.** Management guided spending levels of \$14 - \$16 million in 2014, which was modestly ahead of our target. We believe that this reflects an increased rate of investment given the investor interest level for animal health (and potential for financing).
- **Model changes.** We modestly upped near-term spending, which had a minimal impact beyond 2016.
- **Downgrading shares to Neutral.** We continue to be impressed by the execution and focus of Kindred Bio's management team. This has led to market cap expansion well beyond our price target. At this point, we are downgrading shares to Neutral pending changes in the share price and/or the fundamentals. We increased our PT to \$25/share, which reflects a more generous earnings multiple of 30X placed on forecasted 2018 EPS, but we are hesitant to make any more optimistic assumptions.

## VALUATION

We value KIN shares at \$25/share, which leaves moderate upside from current trading levels. Our price target of \$25/share is arrived at by applying a 30X multiple to forecasted 2018 EPS of \$1.25, and discounting back three years by 15% per year. We support this multiple by evaluating comparable animal health companies (limited sample size). Our choice of 30X reflects the higher end of the valuation range to account for 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												484,602	12,849,108	33,187,508	51,379,675	63,967,375	69,918,903
AtoKin												-	3,849,995	13,429,295	23,447,784	34,405,808	39,154,586
SentiKin												-	1,787,498	6,235,030	10,886,471	15,974,125	18,178,915
Other indications (Cerekin/AtoKin/Sentiken)														10,000,000	20,000,000	25,000,000	30,000,000
Other small molecule drugs														15,000,000	25,000,000	35,000,000	45,000,000
Biologics														15,000,000	25,000,000	35,000,000	50,000,000
Distributor discount												(24,230)	(924,330)	(3,892,592)	(7,285,697)	(9,967,365)	(12,612,620)
Percentage via distributor												25%	25%	25%	25%	25%	25%
Total Revenues	-	-	-	-	-	-	-	-	-	-	-	460,372	17,562,271	73,959,241	138,428,234	189,379,943	239,639,784
COGS	-	-	-	-	-	-	-	-	-	-	-	460,372	10,537,363	36,979,621	69,214,117	90,902,372	109,275,741
Gross Profits	-	-	-	-	-	-	-	-	-	-	-	-	7,024,908	36,979,621	69,214,117	98,477,570	130,364,042
Gross margins												0%	40%	50%	50%	52%	54%
Research and Development	74,772	125,000	315,791	953,756	1,747,674	3,142,221	2,500,000	3,000,000	3,500,000	4,000,000	13,000,000	13,500,000	13,750,000	14,000,000	15,500,000	16,500,000	17,500,000
General and Administrative	44,864	30,000	148,584	259,153	639,339	1,077,076	650,000	650,000	650,000	650,000	2,600,000	2,750,000	2,800,000	2,850,000	3,000,000	3,250,000	3,500,000
Selling expenses												3,000,000	8,900,000	12,100,000	16,700,000	20,700,000	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)	(18,425,092)	8,029,621	34,014,117	58,027,570	85,614,042
Interest/other income	25	-	-	2,614	3,310	5,924	1,500	1,250	1,000	750	4,500	2,500	2,500	50,000	100,000	150,000	200,000
Pretax income (loss)	(119,611)	(155,000)	(464,375)	(1,210,295)	(2,383,703)	(4,213,373)	(3,148,500)	(3,648,750)	(4,149,000)	(4,649,250)	(15,595,500)	(19,247,500)	(18,422,592)	8,079,621	34,114,117	58,177,570	85,814,042
Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	282,787	4,775,976	15,009,813	29,863,287
Rate													0%	4%	14%	26%	35%
Net income (loss)	(119,611)	(155,000)	(464,375)	(1,210,295)	(2,383,703)	(4,213,373)	(3,148,500)	(3,648,750)	(4,149,000)	(4,649,250)	(15,595,500)	(19,247,500)	(18,422,592)	7,796,834	29,338,140	43,167,757	55,950,756
EPS	(0.04)	(0.04)	(0.11)	(0.26)	(0.40)	(1.13)	(0.19)	(0.22)	(0.24)	(0.27)	(0.92)	(1.07)	(0.97)	0.35	1.25	1.60	2.00
Shares outstanding	2,718,082	3,500,000	4,070,867	4,713,320	5,899,059	3,731,929	16,500,000	16,750,000	17,000,000	17,250,000	16,875,000	18,000,000	19,000,000	22,500,000	23,500,000	27,000,000	28,000,000

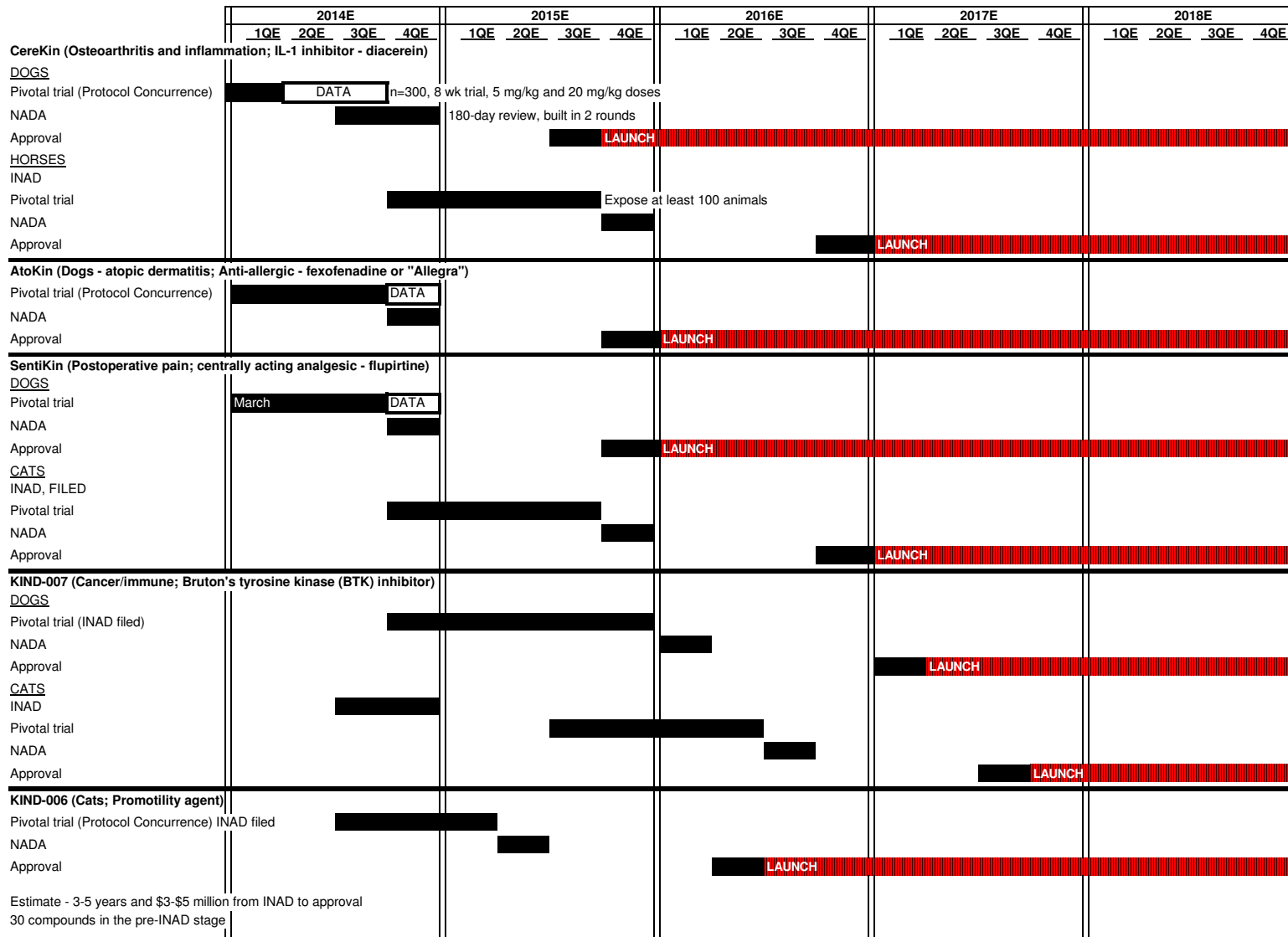
Source: ROTH Capital Partners and Company SEC filings

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## Kindred Biosciences, Inc. Small Molecule Pipeline



Source: ROTH Capital Partners Forecasts

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## Kindred Biosciences, Inc. Biologic Pipeline

	2015E				2016E				2017E				2018E			
	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE
<b>KIND-502 (Dogs, allergic diseases; Anti IgE antibody - Xolair)</b>																
Manufacturing validation																
Pivotal study																
NADA																
Approval																
<b>KIND-506 (Dogs, inflammatory diseases; TNFR-Ig fusion protein - Enbrel)</b>																
Manufacturing validation																
Pivotal study																
NADA																
Approval																
<b>KIND-507 (Dogs, autoimmune disease; CLTA4-Ig fusion protein - Orencia)</b>																
Manufacturing validation																
Pivotal study																
NADA																
Approval																
<b>KIND-504 (Dogs; Cancer vaccine)</b>																
Manufacturing validation																
Pivotal study																
NADA																
Approval																
<b>KIND-501 (Dogs, Cancer; Anti-VEGF fusion protein)</b>																
Manufacturing validation																
Pivotal study																
NADA																
Approval																
Estimate - 3-5 years and \$3-\$5 million from INAD to approval																

Source: ROTH Capital Partners Forecasts

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Kindred Biosciences, Inc. CereKin model							RISK ADJUSTED AT		75%
Quarter	Canine NSAID market	Quarterly growth rate	MARKET SHARE			CereKin	CereKin revenues		
			Rimadyl	Carprofen	Other		Quarterly	Annual	
1Q14	\$56,250,000		40%	20%	40%	0%		\$0	
2Q14	\$57,375,000	2.0%	39%	21%	40%	0%		\$0	
3Q14	\$58,522,500	2.0%	38%	22%	40%	0%		\$0	
4Q14	\$59,692,950	2.0%	37%	23%	40%	0%		\$0	\$0
1Q15	\$60,886,809	2.0%	36%	24%	40%	0%		\$0	
2Q15	\$62,104,545	2.0%	35%	25%	40%	0%		\$0	
3Q15	\$63,346,636	2.0%	34%	26%	40%	0%		\$0	
4Q15	\$64,613,569	2.0%	33%	27%	39%	1%	\$484,602		\$484,602
1Q16	\$65,905,840	2.0%	32%	28%	38%	3%	\$1,482,881		
2Q16	\$67,223,957	2.0%	31%	28%	36%	5%	\$2,520,898		
3Q16	\$68,568,436	2.0%	30%	29%	35%	7%	\$3,599,843		
4Q16	\$69,939,805	2.0%	29%	29%	32%	10%	\$5,245,485		\$12,849,108
1Q17	\$71,338,601	2.0%	28%	30%	31%	12%	\$6,420,474		
2Q17	\$72,765,373	2.0%	27%	30%	29%	14%	\$7,640,364		
3Q17	\$74,220,680	2.0%	26%	31%	28%	16%	\$8,906,482		
4Q17	\$75,705,094	2.0%	25%	31%	26%	18%	\$10,220,188		\$33,187,508
1Q18	\$77,219,196	2.0%	24%	32%	25%	20%	\$11,582,879		
2Q18	\$78,763,580	2.0%	23%	32%	24%	21%	\$12,405,264		
3Q18	\$80,338,851	2.0%	22%	33%	24%	22%	\$13,255,910		
4Q18	\$81,945,628	2.0%	21%	33%	23%	23%	\$14,135,621		\$51,379,675
1Q19	\$83,584,541	2.0%	20%	34%	23%	24%	\$15,045,217		
2Q19	\$85,256,232	2.0%	19%	34%	22%	25%	\$15,985,543		
3Q19	\$86,961,356	2.0%	18%	35%	23%	25%	\$16,305,254		
4Q19	\$88,700,584	2.0%	17%	35%	23%	25%	\$16,631,359		\$63,967,375
1Q20	\$90,474,595	2.0%	16%	36%	24%	25%	\$16,963,987		
2Q20	\$92,284,087	2.0%	15%	36%	24%	25%	\$17,303,266		
3Q20	\$94,129,769	2.0%	14%	37%	25%	25%	\$17,649,332		
4Q20	\$96,012,364	2.0%	13%	37%	25%	25%	\$18,002,318		\$69,918,903

Source: ROTH Capital Partners estimates

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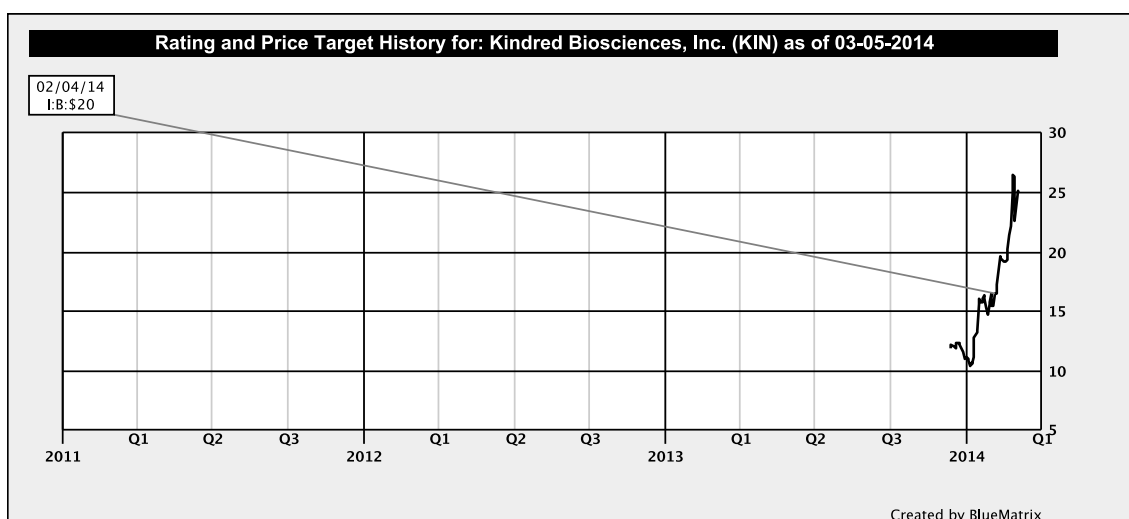
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ROTH makes a market in shares of Kindred Biosciences, Inc. and as such, buys and sells from customers on a principal basis.

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

Rating	Count	Percent	IB Serv./Past 12 Mos. as of 03/06/14	
			Count	Percent
Buy [B]	180	77.25	99	55.00
Neutral [N]	34	14.59	13	38.24
Sell [S]	1	0.43	0	0
Under Review [UR]	18	7.73	7	38.89

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 12-month price target.

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**Neutral:** A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return between negative 10% and 10% over the next 12 months.

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**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.

**Not Covered [NC]:** ROTH does not publish research or have an opinion about this security.

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