

COMPANY NOTE | EQUITY RESEARCH | November 17, 2014

#### **Healthcare: Pharmaceuticals**

### Kindred Biosciences, Inc. | KIN - \$8.74 - NYSE | Neutral

#### **Quarterly Update**

Estimates Changed, Target Price Changed

Stock Data	
52-Week Low - High	\$8.13 - \$26.99
Shares Out. (mil)	19.71
Mkt. Cap.(mil)	\$172.3
3-Mo. Avg. Vol.	209,779
12-Mo.Price Target	\$10.50
Cash (mil)	\$106.4
Tot. Debt (mil)	\$0.0

EPS \$				
Yr Dec	—2013—	—20°	14E—	—2015E—
		Curr	Prev	Curr
1Q	(0.07)A	(0.38)A	(0.38)A	-
2Q	(0.13)A	(0.42)A	(0.42)A	-
3Q	(0.26)A	(0.31)A	(0.48)E	-
4Q	(0.40)A	(0.42)E	(0.50)E	-
YEAR	(1.13)A	(1.53)E	(1.79)E	(1.70)E
P/E	NM	NM	NM	NM

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



## KIN: 3Q14 Recap - Watchful Waiting Until Mid 2015

KIN reported a 3Q14 EPS loss of \$0.31 versus our target of a loss of \$0.48. The smaller loss largely reflected lower temporary discretionary spending levels. The next catalyst is likely to be clinical data in mid 2015 for AtoKin and SentiKin (a delay of about 6 months from our prior expectations post 2Q14 earnings). We maintain our Neutral rating with a \$10.50/share price target.

- 3Q recap Lower spending = lower loss. Quarterly results basically just track the rate of spending at KIN at this point in time. Lower SG&A reduced the EPS loss by ~\$0.01 and lower R&D reduced the EPS loss by another ~\$0.16 versus our expectations. Net, the 3Q14 EPS loss of \$0.31 was smaller than our targeted \$0.48 EPS loss. We view this as timing related due to the removal of CereKin from the pipeline post mixed clinical data. Cash is robust at \$106 million, which is sufficient to fund planned operations for "at least the next 24 months".
- Takeaway #1 AtoKin and SentiKin delayed ~6 months to add more subjects. The company disclosed (in a September investor presentation) that it is increasing the # of dogs in both clinical trials to increase statistical power from ~80% to ~90%. This pushes out AtoKin/SentiKin clinical data to "mid 2015" from our target of late 2014. Thus, we pushed out revenues for these programs by ~6 months. We view this as a neutral event. One positive event AtoKin CMC Technical Section of NADA approved by the FDA, but this does not alter our timing.
- Takeaway #2 Spending should rebound in 4Q14. The company maintains full year 2014 operating expense guidance of \$29.5M \$39.5M, which implies a rapid rebound to expenses in 4Q14. We are expecting this # to be just below the low end of guidance. Management is clear that R&D is expected to increase for the foreseeable future.
- Model changes. Delaying the AtoKin and SentiKin launches by 6 months negatively impacted EPS by ~\$0.05 in outer years.
- Maintain Neutral rating. Kindred Bio is a well run company that appears to be ramping up for a land grab in the animal health development space by rapidly increasing spending levels. However, we remain concerned that product revenues may fail to match expectations. Price target inched downward to \$10.50 to reflect EPS reductions. We do believe that shares are bottoming out given the cash backstop of \$5-\$6/share although the next catalysts are now ~6 months away.

#### **VALUATION**

We value KIN shares at \$10.50. Our price target of \$10.50/share is arrived at by applying a 35X multiple to forecasted 2020 EPS of \$0.75, and discounting back five years by 20% per year (we do not add back the ~\$5/share in cash as we expect it to be spent). We support this multiple by evaluating comparable animal health companies (limited sample size).

We acknowledge that our price target falls outside of ROTH's stated rating system for a Neutral rating. However, we believe that limited visibility into KIN revenues creates the need for a larger margin of error for KIN shares.

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.

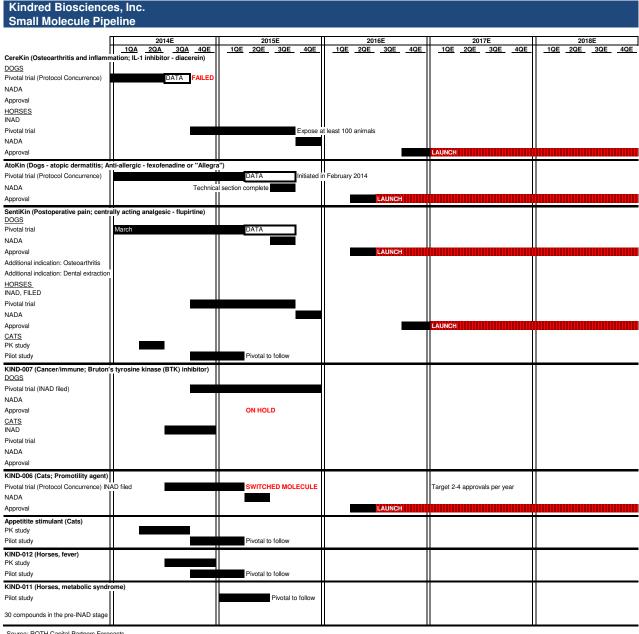
#### COMPANY DESCRIPTION

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					FY					FY	FY	FY	FY	FY	FY	FY
Revenues:	2012 A	1Q13A	2Q13A	3Q13A	4Q13A	2013 A	1Q14A	2Q14A	3Q14A	4Q14E	2014 E	2015 E	2016 E	2017 E	2018 E	2019 E	2020 E
CereKin AtoKin SentiKin Other indications (Cerekin/AtoKin/SentiKen) Other small molecule drugs Biologics												- - -	- 974,357 677,456	8,808,515 4,323,837 10,000,000 15,000,000	18,992,043 8,817,734 20,000,000 25,000,000 15,000,000	30,203,674 14,023,134 25,000,000 35,000,000 25,000,000	39,154,586 16,966,987 30,000,000 45,000,000 50,000,000
Distributor discount Percentage via distributor												- <b>25</b> %	(82,591) 25%	(1,906,618) 25%	(4,390,489) 25%	(6,461,340) 25%	(9,056,079) 25%
Total Revenues	-											-	1,569,222	36,225,734	83,419,288	122,765,468	172,065,494
COGS Gross Profits Gross margins	-	- -	-		-	-	<del>-</del> -			-	<del>-</del> -	- - 0%	1,176,917 392,306 25%	19,924,154 16,301,580 45%	43,378,030 40,041,258 48%	58,559,128 64,206,340 52%	79,494,258 92,571,236 54%
Research and Development General and Administrative Selling expenses	74,772 44,864	141,000 83,000	300,000 96,000	953,756 259,153	1,747,674 639,339	3,142,430 1,077,492	4,498,000 1,679,000	5,639,000 2,499,000	3,755,000 2,342,000	6,000,000 2,500,000	19,892,000 9,020,000	25,250,000 10,000,000 -	26,000,000 10,250,000 3,250,000	27,000,000 10,750,000 6,425,000	28,000,000 11,150,000 10,300,000	29,000,000 12,000,000 13,525,000	30,000,000 12,500,000 16,412,500
Profit (loss) from operations	(119,636)	(224,000)	(396,000)	(1,212,909)	(2,387,013)	(4,219,922)	(6,177,000)	(8,138,000)	(6,097,000)	(8,500,000)	(28,912,000)	(35,250,000)	(39,107,694)	(27,873,420)	(9,408,742)	9,681,340	33,658,736
Interest/other income	25	-	-	2,614	3,310	5,924	9,000	14,000	25,000	50,750	98,750	52,500	52,500	85,000	150,000	200,000	300,000
Pretax income (loss) Taxes	(119,611)	(224,000)	(396,000)	(1,210,295) -	(2,383,703)	(4,213,998)	(6,168,000)	(8,124,000)	(6,072,000)	(8,449,250)	(28,813,250)	(35,197,500)	(39,055,194)	(27,788,420)	(9,258,742) -	9,881,340 988,134	33,958,736 9,746,157
Rate Net income (loss)	(119,611)	(224,000)	(396,000)	(1,210,295)	(2,383,703)	(4,213,998)	(6,168,000)	(8,124,000)	(6,072,000)	(8,449,250)	(28,813,250)	(35,197,500)	0% (39,055,194)	0% (27,788,420)	(9,258,742)	10% 8,893,206	29% 24,212,579
EPS	(0.04)	(0.07)	(0.13)	(0.26)	(0.40)	(1.13)	(0.38)	(0.42)	(0.31)	(0.42)	(1.53)	(1.70)	(1.80)	(1.10)	(0.35)	0.30	0.75
Shares outstanding	2,718,082	3,000,000	3,000,000	4,713,320	5,899,059	3,731,929	16,222,000	19,426,000	19,713,000	19,963,000	18,831,000	20,713,000	21,713,000	25,213,000	26,213,000	29,713,000	32,213,000

Source: ROTH Capital Partners and Company SEC filings

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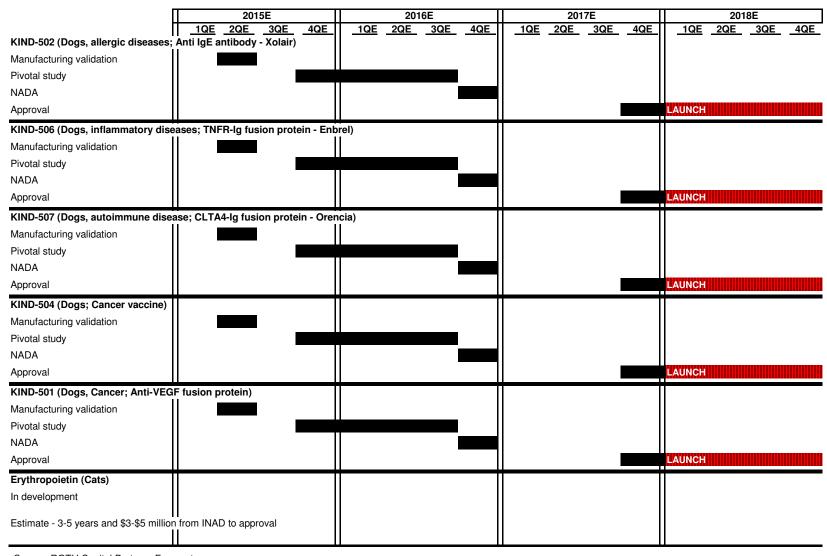


Source: ROTH Capital Partners Forecasts

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# Kindred Biosciences, Inc. Biologic Pipeline



Source: ROTH Capital Partners Forecasts

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					RISK ADJUSTED A	70%
Quarter	Market size	Quarterly growth rate	MARKET SHA Other At	ARE oKin	CereKin reve Quarterly	nues Annual
1Q14	28,125,000	growthrate	100%	0%	- Quarterry	Ailliuai
2Q14	28,687,500	2.0%	100%	0%	<u>-</u>	
3Q14	29,261,250	2.0%	100%	0%	<u>-</u>	
4Q14	29,846,475	2.0%	100%	0%	<u>-</u>	_
1Q15	30,443,405	2.0%	100%	0%	<del>-</del>	
2Q15	31,052,273	2.0%	100%	0%	-	
3Q15	31,673,318	2.0%	100%	0%	-	
4Q15	32,306,784	2.0%	100%	0%	-	-
1Q16	32,952,920	2.0%	100%	0%	-	
2Q16	33,611,978	2.0%	100%	0%	-	
3Q16	34,284,218	2.0%	99%	1%	239,990	
4Q16	34,969,902	2.0%	97%	3%	734,368	974,357
1Q17	35,669,300	2.0%	95%	5%	1,248,426	,
2Q17	36,382,686	2.0%	93%	7%	1,782,752	
3Q17	37,110,340	2.0%	90%	10%	2,597,724	
4Q17	37,852,547	2.0%	88%	12%	3,179,614	8,808,515
1Q18	38,609,598	2.0%	86%	14%	3,783,741	
2Q18	39,381,790	2.0%	84%	16%	4,410,760	
3Q18	40,169,426	2.0%	82%	18%	5,061,348	
4Q18	40,972,814	2.0%	80%	20%	5,736,194	18,992,043
1Q19	41,792,271	2.0%	78%	22%	6,436,010	
2Q19	42,628,116	2.0%	76%	24%	7,161,523	
3Q19	43,480,678	2.0%	74%	26%	7,913,483	
4Q19	44,350,292	2.0%	72%	28%	8,692,657	30,203,674
1Q20	45,237,298	2.0%	70%	30%	9,499,833	
2Q20	46,142,044	2.0%	70%	30%	9,689,829	
3Q20	47,064,884	2.0%	70%	30%	9,883,626	
4Q20	48,006,182	2.0%	70%	30%	10,081,298	39,154,586

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Kindred B SentiKin n	iosciences, Inc.					
	iiouei				RISK ADJUSTED A	65%
		Quarterly	MARKET SH	HARE	CereKin reve	
Quarter	Market size	growth rate		toKin	Quarterly	Annual
1Q14	28,125,000		100%	0%	-	
2Q14	28,687,500	2.0%	100%	0%	-	
3Q14	29,261,250	2.0%	100%	0%	-	
4Q14	29,846,475	2.0%	100%	0%	-	-
1Q15	30,443,405	2.0%	100%	0%	-	
2Q15	31,052,273	2.0%	100%	0%	-	
3Q15	31,673,318	2.0%	100%	0%	-	
4Q15	32,306,784	2.0%	100%	0%	-	_
1Q16	32,952,920	2.0%	100%	0%	-	
2Q16	33,611,978	2.0%	100%	0%	-	
3Q16	34,284,218	2.0%	99%	1%	222,847	
4Q16	34,969,902	2.0%	98%	2%	454,609	677,456
1Q17	35,669,300	2.0%	97%	3%	695,551	
2Q17	36,382,686	2.0%	96%	4%	945,950	
3Q17	37,110,340	2.0%	95%	5%	1,206,086	
4Q17	37,852,547	2.0%	94%	6%	1,476,249	4,323,837
1Q18	38,609,598	2.0%	93%	7%	1,756,737	
2Q18	39,381,790	2.0%	92%	8%	2,047,853	
3Q18	40,169,426	2.0%	91%	9%	2,349,911	
4Q18	40,972,814	2.0%	90%	10%	2,663,233	8,817,734
1Q19	41,792,271	2.0%	89%	11%	2,988,147	
2Q19	42,628,116	2.0%	88%	12%	3,324,993	
3Q19	43,480,678	2.0%	87%	13%	3,674,117	
4Q19	44,350,292	2.0%	86%	14%	4,035,877	14,023,134
1Q20	45,237,298	2.0%	86%	14%	4,116,594	
2Q20	46,142,044	2.0%	86%	14%	4,198,926	
3Q20	47,064,884	2.0%	86%	14%	4,282,904	
4Q20	48,006,182	2.0%	86%	14%	4,368,563	16,966,987

Size relative to OA market

50.0%

### Kindred Biosciences, Inc.

Balance Sheets December Year Net cash Per share 106,427,000 5.40

	2012	2013	1Q14	2Q14	3Q14
ASSETS					
Cash and equivalents	937,516	65,328,787	60,528,000	112,438,000	106,427,000
Prepaids and other	504	147,589	565,000	532,000	688,000
Total current assets	938,020	65,476,376	61,093,000	112,970,000	107,115,000
Property and equip, net	-	11,694	27,000	109,000	194,000
Other		-			22,000
TOTAL ASSETS	938,020	65,488,070	61,120,000	113,079,000	107,331,000
LIABILITIES AND SHAREHOLDERS E	QUITY				
Accounts payable	5,499	688,641	1,671,000	1,711,000	744,000
Due to related party	5,122	-	-	-	-
Accured expenses	59,660	1,520,955	958,000	1,684,000	1,635,000
LT liabilities					44,000
Total Liabilities	70,281	2,209,596	2,629,000	3,395,000	2,423,000
Convertible preferred stock	987,050	-	-	-	-
Common stock	300	1,621	2,000	2,000	2,000
APIC	-	67,609,832	68,990,000	128,307,000	129,579,000
Accumulated other comp loss				(14,000)	10,000
Deficit accumulated during the develop	(119,611)	(4,332,979)	(10,501,000)	(18,611,000)	(24,683,000)
Total liabs and SE	938,020	65,488,070	61,120,000	113,079,000	107,331,000

Source: 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.

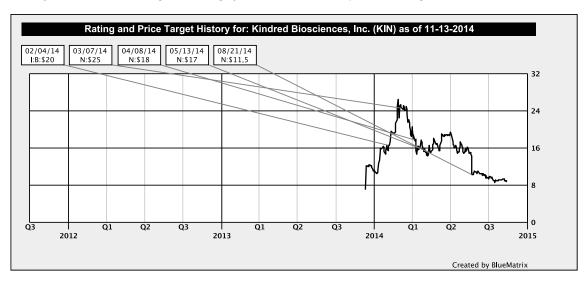
#### Disclosures:

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

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 11/16/14

Rating	Count	Percent	Count	Percent
Buy [B]	195	79.92	115	58.97
Neutral [N]	32	13.11	12	37.50
Sell [S]	0	0.00	0	0
Under Review [UR]	16	6.56	9	56.25

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.

Ratings System Definitions - ROTH employs a rating system based on the following:

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

**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.

**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.

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

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