

Reason for report:

FLASH NOTE

KINDRED BIOSCIENCES, INC.

Presentation Highlights 6-Mo Readout Delay, Added Power for AtoKin/SentiKin

• **Bottom Line:** KIN posted a new investor presentation with the SEC yesterday, which includes changes to the size and timelines of the company's pivotal programs for AtoKin and SentiKin. The pivotal trials for the canine atopic dermatitis and post-operative pain are now expected to read out in mid-2015, versus year-end 2014 previously. The delay reflects mgmt's plan to increase the number of dogs in each study, taking the statistical power to >90% from 80%. While this change in timelines was likely following the CereKin failure, the ~6-month timeline delay eliminates KIN's remaining pivotal 2014 catalysts. The increased power for AtoKin and SentiKin supports our constructive outlook and several longer-term upside opportunities remain.

• **Increased size & power for AtoKin and SentiKin is the right decision, in our view.** KIN's pivotal programs for AtoKin and SentiKin feature important differences from the recently failed CereKin program including (1) less subjective clinical endpoints / evaluations, and now (2) increased recruitment and power, which should help minimize statistical risk or variability from an inflated placebo effect. Though mgmt saw few problems in the clinical execution for CereKin, the primary issue under evaluation is the unexpected placebo response on the highly subjective, owner evaluated, Canine Brief Pain Inventory (CBPI) endpoint. By contrast, SentiKin is a short-term evaluation of pain and treatment failure by the vet and AtoKin is an evaluation by both the vet on validated Canine Atopic Dermatitis Lesion Index (CADLI) endpoint and a more subjective evaluation by the owner on pruritus visual analog score (PVAS). Increased recruitment supports this aim and supports our constructive outlook on the efficacy prospects for both programs.

• **Presentation points to new strategic considerations, including potentially outlicensing instead of direct marketing.** Though the changes in trial designs are only likely to result in a slight (few hundred thousand dollar) increase in costs, the ~6 month delay eliminates any meaningful catalysts from 2014. The lack in significant cost increases reflects KIN's cost-efficient model, with mgmt continuing to emphasize other shots on goal. New programs mentioned include SentiKin for add'l indications, KIND-010 for inappetence in cats (to initiate pilot studies this quarter), as well as biologics and strategies for fully canine/feline/equine antibodies, and feline erythropoietin KIND-510. Business development also is highlighted as a core strategy, including the potential to minimize early investment in AtoKin or SentiKin via licensing agreements, or potential marketed product acquisitions, geared to advance the commercial footprint sooner.

Key Stats:

(NASDAQ:KIN)

S&P 600 Health Care Index:	1,303.70
Price:	\$10.10
52 Week High:	\$26.99
52 Week Low:	\$8.75
Shares Outstanding (mil):	19.2
Market Capitalization (mil):	\$193.9

Disclosures Appendix

Analyst Certification

I, Seamus Fernandez, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

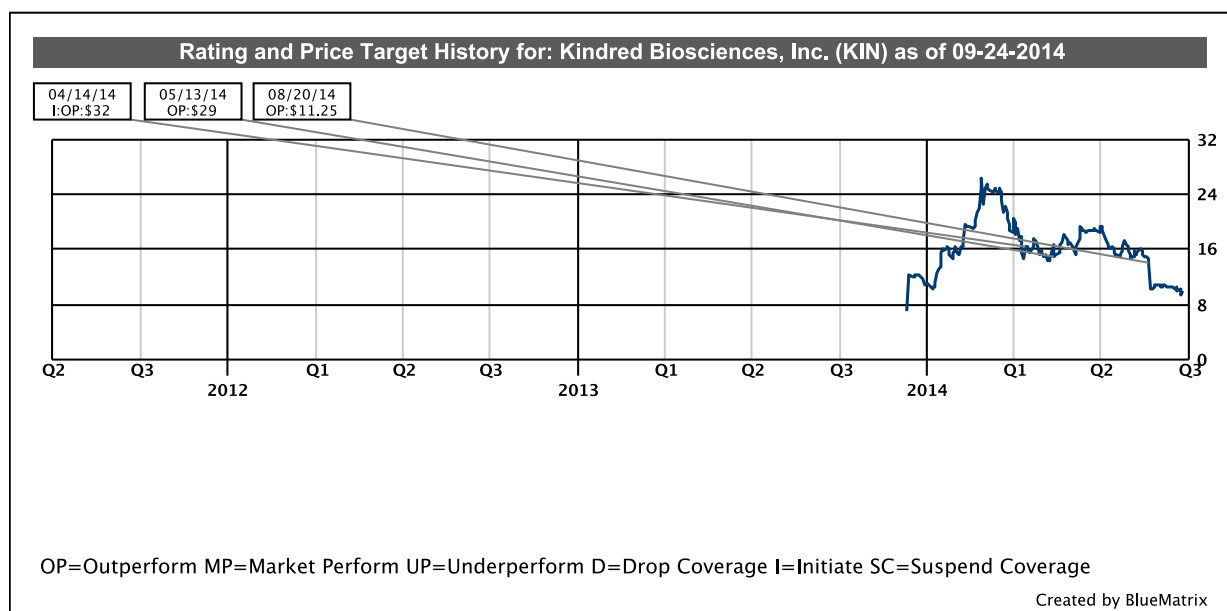
Valuation

We value KIN at \$11.25/share. Our price target is based on our DCF valuation, which assumes a 12% discount rate on sales and profits through 2022E and applies a 2% terminal growth rate. This equates to 17x 2020E EPS of \$1.35 discounted back 5 years at a 15% discount rate. Our analysis of a wide range of potential comparable companies suggests a price range from \$18/shr (animal health comps) to \$27/shr (mid-cap biotech comps) on 2018 consensus sales forecasts.

Risks to Valuation

Kindred is a late stage pet therapeutics company with no revenues and clinical assets.

- Clinical and Regulatory Risk: its success is dependent on the clinical and regulatory outcome of its pipeline assets which positive data and approvability are not assured.
- Commercial Risk: KIN plans to independently sell its products in the US, which will require significant capital, effort, and expertise that still needs to be developed for its 2015 launches.
- Competitive Landscape: Given limited IP protection and lower regulatory hurdles in pet therapeutics, KIN may face intensifying competition either from new product entrants or from generics.
- Financing Risk: Although Kindred has completed a secondary raise and currently has >\$100M of cash on the balance sheet, the company may need to raise additional capital to fund additional clinical development or to complete product acquisitions before becoming substantially cash flow positive, possibly diluting existing shareholders.



Distribution of Ratings/Investment Banking Services (IB) as of 06/30/14				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	138	69.00	50	36.20
HOLD [MP]	62	31.00	2	3.20
SELL [UP]	0	0.00	0	0.00

Explanation of Ratings

Outperform (Buy): We expect this stock to outperform its benchmark over the next 12 months.

Market Perform (Hold/Neutral): We expect this stock to perform in line with its benchmark over the next 12 months.

Underperform (Sell): We expect this stock to underperform its benchmark over the next 12 months. The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

Important Disclosures

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In the past 12 months, the Firm has received compensation for providing investment banking services to Kindred Biosciences, Inc. .

Leerink Partners LLC makes a market in Kindred Biosciences, Inc.

Leerink Partners LLC has acted as the manager for a public offering of Kindred Biosciences, Inc. in the past 12 months.

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