



CRAIG-HALLUM
CAPITAL GROUP LLC

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Changes	Previous	Current
Rating:		Buy
Fundamental Trend:		Improving
Price Target:		\$25.00
FY14E Rev M:		\$0.0
FY15E Rev M:		\$2.3
FY16E Rev M:		\$44.0
FY14E EPS:	(\$1.47)	(\$1.66)
FY15E EPS:	(\$2.04)	(\$2.11)
FY16E EPS:	(\$1.77)	(\$1.81)

Profile		
Price:		\$15.82
52 Wk Range:	\$8.75	- \$26.99
Avg Daily Vol:		83,800
Shares Out M:*		19.4
Market Cap M:*		\$307.3
Insiders Own:		24%
Short Interest:		4.7%
BV/Sh:		\$5.65
Est LT EPS Gr:		15%
Net Cash/Sh:*		\$5.79
Debt / Capital:		0%
Year Ends:		Dec.

*Fully diluted share include recent secondary equity offering on 4/8/14

Rev (M)	2014E	2015E	2016E
Mar	\$0.0A	-	-
Jun	\$0.0A	-	-
Sep	\$0.0	-	-
Dec	\$0.0	-	-
FY	\$0.0	\$2.3	\$44.0

EPS	2014E	2015E	2016E
Mar	(\$0.38)A	-	-
Jun	(\$0.42)A	-	-
Sep	(\$0.42)	-	-
Dec	(\$0.44)	-	-
FY	(\$1.66)	(\$2.11)	(\$1.81)

FY P/E	NA	NA	NA
FY EV/S	NA	NA	4.4x

Management	
CEO	Richard H. Chin
COO	Denise Bevers

August 14, 2014
Institutional Research

Kindred Biosciences, Inc.
(KIN - \$15.82)

BUY
Price Target: \$25

Evolution Of Pipeline Continues. Multiple Shots On Goal. CereKin Top-line Data Disclosed Next Week. Reiterate BUY Rating And \$25 Price Target.

Kindred Biosciences develops innovative small molecule and biologic therapeutics for cats, dogs and horses.

OUR CALL

Yesterday, after the close, KIN reported 2Q14 results. We continue to be encouraged by the progress within KIN's pipeline and believe that with a total addressable market approaching \$1B, KIN is well-positioned in the lucrative companion animal therapeutics market.

	2Q14A		3Q14E		FY14E		FY15E	
	Rev	EPS	Rev	EPS	Rev	EPS	Rev	EPS
Actuals:	\$0.0	(\$0.42)	--	--	--	--	--	--
C-H Previous Est.:	\$0.0	(\$0.34)	\$0.0	(\$0.36)	\$0.0	(\$1.47)	\$2.3	(\$2.04)
Prior Consensus Est.:	\$0.0	(\$0.36)	\$0.0	(\$0.40)	\$0.0	(\$1.60)	\$4.4	(\$2.04)
C-H Revised Est.:	--	--	\$0.0	(\$0.42)	\$0.0	(\$1.66)	\$2.3	(\$2.11)

Source: Kindred Biosciences, Inc., First Call, Craig-Hallum Capital Group

KEY TAKEAWAYS

Development programs:

- CereKin (canine osteoarthritis) - Management said on their call that they expect to release top-line results next week. It is important to note that this is a 3-arm study so a significant p-value would be 0.025 for this trial. Management stated on their call that they have been submitting some NADA technical sections and reiterated they are conservatively estimating that their application will require two rounds of 180-day reviews followed by a 60-day administrative turnaround. In-sum, a 14-month approval timeline post-submission.
- AtoKin (canine atopic dermatitis) - Reiterated 4Q14 topline data released and NADA filing late this year. Estimated marketing approval and launch by end of 2015.
- SentiKin (canine post-operative pain) - Reiterated 4Q14 topline data released and NADA filing by end of 2014. Estimated marketing approval and launch by end of 2015.
- Extended Release SentiKin (feline post-operative pain) - This was a new product they disclosed. Pharmacokinetics (PK) study has been completed.
- KIND-006 (feline constipation) - Replaced with a more potent molecule of the same class.
- KIND-007 (canine BTK inhibitor) - Placed on hold due to very short half-life.
- New small molecules and biologics disclosed on 2Q call were for (1) equine fever, (2) feline appetite stimulation, and (3) erythropoietin for feline anemia (~15% of older cats develop kidney failure).

Management changes: The company announced that CFO Steve Galliker (age 67) would be returning to retirement and CSO Kevin Schultz (age 63) would be retiring due to family issues. Both will continue as active consultants to the company.

STOCK OPPORTUNITY

We believe that Kindred Bioscience is extremely well positioned to bring novel and specifically targeted specialty pharmaceuticals for companion animals to the veterinary market. Its differentiated strategy includes (1) utilizing chewable, beef-flavored pills; (2) performing all of their own clinical testing as opposed to using an outside CRO (contract research organization) which saves money and increases control; and (3) including horses in its target market (potentially quite lucrative because horses' larger size/weight requires higher dosages and owners' investment in horses is frequently more than dogs or cats, which leads to less product price sensitivity).

Our \$25 target price is a function of a long term DCF analysis (see page 7).

Product Pipeline

Molecule	Indication	Pilot / Formulation	INAD Filed	Pivotal Study	NADA
Small Molecule Product Candidates					
CereKin – IL-1 inhibitor	Osteoarthritis pain in dogs				Anticipated filing in 2014
	Osteoarthritis pain in horses				
AtoKin – Anti-allergic drug	Atopic dermatitis in dogs				Anticipated filing in 2014
SentiKin – Centrally acting analgesic	Postoperative pain in dogs				Anticipated filing in 2014
	Postoperative pain in horses				
KIND-007 – BTK inhibitor	Cancer/immune disease in dogs				
	Cancer/immune disease in cats				
KIND-006 – Pro-motility agent	Gastrointestinal disease in cats				
Molecule	Indication	Discovery/ Process Development	Mfg. Process Development	Pivotal Study	PLA
Biologic Product Candidates					
KIND-502 – Anti-IgE antibody	Allergic diseases in dogs				
KIND-506 – TNFR-Ig fusion protein	Inflammatory diseases in dogs				
KIND-507 – CLTA4-Ig fusion protein	Autoimmune diseases in dogs				
KIND-504 – Cancer vaccine	Cancer in dogs				
KIND-501 – Anti-VEGF fusion protein	Cancer in dogs				

Source: Company presentation

Potential Catalysts

Kindred Biosciences		
Expected Impact	Event	Date
+	AtoKin trial initiation	complete
+	SentiKin trial initiation	complete
+	Management addition of Chief commercial officer	complete
+	CereKin pivotal trial full enrollment	complete
+	CereKin pivotal data	Week of Aug. 18th
+	CereKin NADA filing	3Q14
+	AtoKin and SentiKin pivotal data released	4Q14
+	AtoKin NADA filing	4Q14
+	SentiKin NADA filing	late 2014
+	Filing of INADs for additional drug candidates	ongoing
++	CereKin potential approval and product launch	2H15
+	AtoKin potential approval and product launch	late 2015
+	SentiKin potential approval and product launch	late 2015
+	Additional indications for Cerekin and SentiKin	2016

RISKS

We believe an investment in Kindred involves the following risks:

- **Government Regulation**

The animal therapeutic industry is highly regulated by the Center for Veterinary Medicine at both the state and federal level. Changes to existing regulation or new legislation could have a material adverse effect on KIN's business and financial performance.

- **Dependence On Suppliers**

The Company's business model relies on third parties to manufacture its products. Any malfunctions in the manufacturing processes of its suppliers or other sources of interruption to the supply of products could have an adverse impact on the Company's financial results.

- **Generic Products**

Generic products may be viewed as more cost effective than branded therapeutics. While the Company's IP should protect its products from generic entry in the near term, substantially cheaper generic versions of competing products, even if they are less efficacious, may represent a challenge to the commercialization of the Company's products.

- **Intellectual Property And Trade Secrets**

The Company's financial success is in part dependent on its ability to secure and enforce its substantial intellectual property. If KIN is forced to defend its intellectual property through litigation or if it is unable to maintain propriety of its trade secrets, the Company may incur extra expenses and financial results may be adversely affected.



- **Ongoing Need To Finance Growth**

While the Company currently has proforma ~\$118M of net cash on its balance sheet and estimates that its current capital is sufficient to fund its operations for the foreseeable future. The Company may seek additional capital in order to continue to fund its operations in the future. Such financing could be dilutive to stockholders.

Financials

Kindred Biosciences Financial Model

FISCAL YEAR ENDS DECEMBER

(\$ thousands)	Fiscal 2012A	Mar Q1-13A	Jun Q2-13A	Sep Q3-13A	Dec Q4-13A	Fiscal 2013A	Mar Q1-14A	Jun Q2-14A	Sep Q3-14E	Dec Q4-14E	Fiscal 2014E	Fiscal 2015E	Fiscal 2016E	Fiscal 2017E
Total Revenue	-	-	-	-	-	-	-	-	-	-	-	2,300	43,950	124,100
Cost of Sales	-	-	-	-	-	-	-	-	-	-	-	1,775	20,895	49,402
Total Gross Margin	-	-	-	-	-	-	-	-	-	-	-	525	23,055	74,698
Operating Expenses														
Research and Development	75	220	220	954	1,747	3,141	4,498	5,639	5,800	6,000	21,937	24,850	29,805	34,920
General and Administrative	45	89	89	259	642	1,079	1,679	2,499	2,400	2,500	9,078	12,000	19,745	22,753
Sales and Marketing	0	0	0	0	0	0	0	0	0	0	0	4,600	8,600	9,756
Total GAAP Operating Expenses	120	309	309	1,213	2,389	4,220	6,177	8,138	8,200	8,500	31,015	41,750	58,550	68,029
GAAP Income (Loss) from Operations	(120)	(309)	(309)	(1,213)	(2,389)	(4,220)	(6,177)	(8,138)	(8,200)	(8,500)	(31,015)	(41,225)	(35,495)	6,669
Non-GAAP Income (Loss) from Operations	(120)	(309)	(309)	(1,213)	(2,389)	(4,220)	(6,177)	(8,138)	(8,200)	(8,500)	(31,015)	(41,225)	(35,495)	6,669
Interest income	0	0	0	0	0	0	9	28	16	16	69	52	40	24
Interest Expense	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Income	0	0	0	3	3	6	0	0	0	0	0	0	0	0
Pre-tax GAAP Income	(120)	(309)	(309)	(1,210)	(2,386)	(4,214)	(6,168)	(8,110)	(8,184)	(8,484)	(30,946)	(41,173)	(35,455)	6,693
Income Tax (benefit)	0	-	-	-	-	0	-	-	-	-	0	0	0	4,311
GAAP Net Income	(120)	(309)	(309)	(1,210)	(2,386)	(4,214)	(6,168)	(8,110)	(8,184)	(8,484)	(30,946)	(41,173)	(35,455)	2,382
Change in unrealized gains or losses on available-for-sale securities								(14)	0	0	(14)			
Net Loss Attributable to Common Stockholders	(2,155)	(1,082)	(1,117)	(1,210)	(2,386)	(5,795)	(6,168)	(8,124)	(8,184)	(8,484)	(30,960)	(41,173)	(35,455)	2,382
EPS Attributable to Common Stockholders	(\$0.06)	(\$0.10)	(\$0.10)	(\$0.40)	(\$0.64)	(\$1.32)	(\$0.38)	(\$0.42)	(\$0.42)	(\$0.44)	(\$1.66)	(\$2.11)	(\$1.81)	\$0.12
Weighted Avg. Shares Outstanding DILUTED	2,113	3,000	3,000	3,001	3,732	3,183	16,222	19,426	19,441	19,456	18,636	19,494	19,554	19,614
Margin Analysis % of Sales														
Total Gross Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	52.5%	60.2%
Research and Development	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1080%	67.8%	28.1%
General and Administrative	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	522%	44.9%	18.3%
Sales and Marketing	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	200%	20%	8%
Total GAAP Operating Expense	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	133.2%	54.8%
GAAP Operating Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-80.8%	5.4%
GAAP Pre-tax Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-80.7%	5.4%
Tax Rate (Effective)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GAAP Net Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-80.7%	1.9%
Percent Change (Yr/Yr)														
Total Revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	182.4%
Research and Development						NM	NM	NM	NM	243.4%	598.4%	13.3%	19.9%	17.2%
General and Administrative						NM	NM	NM	NM	289.6%	741.6%	32.2%	64.5%	15.2%
Sales and Marketing						NM	NM	NM	NM	NM	NM	NM	87.0%	13.4%
Total GAAP Operating Expense						NM	NM	NM	NM	255.8%	635.0%	34.6%	40.2%	16.2%
GAAP Operating Income						NM	NM	NM	NM	NM	NM	NM	NM	NM
GAAP Pre-tax Income						NM	NM	NM	NM	NM	NM	NM	NM	NM
GAAP Net Income						NM	NM	NM	NM	NM	NM	NM	NM	NM
GAAP Earnings Per Share						NM	NM	NM	NM	NM	NM	NM	NM	NM

Revenue Build

Kindred Biosciences, Inc.
FISCAL YEAR ENDS DECEMBER

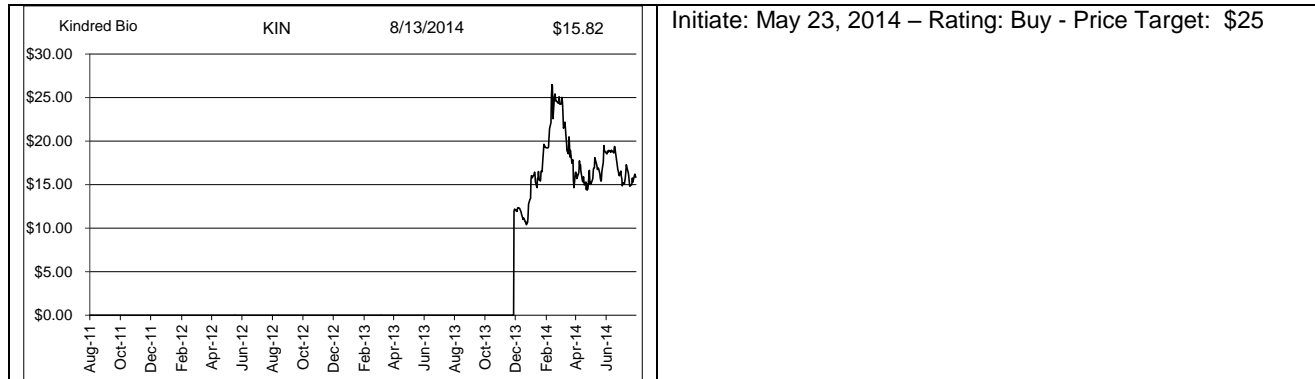
Revenue Build (\$ millions)	Fiscal 2013E	Mar Q1-14A	Jun Q2-14A	Sep Q3-14E	Dec Q4-14E	Fiscal 2014E	Fiscal 2015E	Fiscal 2016E	Fiscal 2017E
Small Molecule Product Candidates									
CereKin - IL-1 Inhibitor Osteoarthritis (dogs)									
Total Revenues	0	0	0	0	0	0	2,000	26,000	49,475
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	90%
AtoKin - Atopic dermatitis (dogs)									
Total Revenues	0	0	0	0	0	0	300	13,700	49,950
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	265%
SentiKin - Post-operative pain (dogs)									
Total Revenues	0	0	0	0	0	0	0	3,750	16,975
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	353%
KIND-006 - Pro-motility [constipation] agent (cats)									
Total Revenues	0	0	0	0	0	0	0	0	3,000
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extended Release SentiKin - Post-Op pain (cats)									
Total Revenues	0	0	0	0	0	0	0	500	4,700
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	840.0%
KIND-00x - Fever (horse)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
KIND-00y - Appetite Stimulation (cats)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Biologic Product Candidates									
KIND-501 - Anti-VEGF fusion protein (dogs)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
KIND-502 - Anti-IgE antibody (dogs)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
KIND-504 - Cancer vaccine (dogs)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
KIND-507 - CLTA4-Ig fusion protein (dogs)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
KIND-506 - TNFR-Ig fusion protein (dogs)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
KIND-50x Erythropoietin (cats)									
Total Revenues	0	0	0	0	0	0	0	0	0
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Revenue	0	0	0	0	0	0	2,300	43,950	124,100
Growth (% yr/yr)	NA	NA	NA	NA	NA	NA	NA	NA	182%

Discounted Cash Flow Model

Kindred Biosciences, Inc.
Discounted Cash Flow Model

Estimates										
(\$ in Thousands)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Sales	0	2,300	43,950	124,100	221,870	280,666	339,605	390,546	425,695	438,466
Operating Profit	(31,015)	(41,225)	(35,495)	6,669	62,368	106,653	135,842	160,124	178,792	173,194
Less: Cash Taxes Paid	0	0	0	4,311	21,834	0	20,376	56,844	63,471	64,082
Operating Profit After Tax	(31,015)	(41,225)	(35,495)	2,358	40,533	106,653	115,466	103,280	115,321	109,112
Depreciation & Amortization	23	176	548	616	693	780	878	987	1,111	1,250
Fixed Cap Expenditures	107	2,114	1,163	1,244	1,331	1,424	1,524	1,630	1,745	1,867
Working Cap Increase	2,000	2,140	5,206	10,019	12,221	7,349	7,367	6,368	4,394	1,596
FCF	(33,099)	(45,304)	(41,316)	(8,288)	27,675	98,659	107,452	96,269	110,293	106,899
PV FCF	(29,034)	(34,860)	(27,887)	(4,907)	14,373	44,948	42,942	33,748	33,916	28,835
Perpetual FCF										
Base FCF	106,899									
Weighted Avg. Cost of Capital (k)	14.0%									
Perpetual Growth Rate (g)	3.0%									
Base Year	2013									
Perpetual Start Year	2023									
Perpetual Value	1,000,961									
PV of Perpetual Growth Period	270,003									
Total FCF										
Value of FCF	372,077									
Intrinsic Value										
Cash	112,438									
Debt	0									
After Tax ESO Liability	2,213									
Value of Equity	482,302									
Shares Outstanding	19,426									
Intrinsic Value per Share										
	\$24.83									

Sensitivity Analysis					
Terminal Period Variables			FCF Growth		
Cost of Capital	24.83%	2.5%	3.0%	3.5%	4.0%
	12.5%	\$29.24	\$30.24	\$31.36	\$32.60
	13.0%	\$27.37	\$28.24	\$29.20	\$30.28
	13.5%	\$25.68	\$26.44	\$27.28	\$28.21
	14.0%	\$24.16	\$24.83	\$25.56	\$26.37
	14.5%	\$22.78	\$23.37	\$24.01	\$24.71
	15.0%	\$21.52	\$22.04	\$22.61	\$23.22

**REQUIRED DISCLOSURES**

Source: Thomson

Ratings definitions:

Buy rated stocks generally have twelve month price targets that are more than 20% above the current price. **Hold** rated stocks generally have twelve month price targets near the current price. **Sell** rated stocks generally have no price target and we would sell the stock.

Fundamental trend definitions:

Improving means growth rates of key business metrics are generally accelerating. **Stable** means growth rates of key business metrics are generally steady. **Mixed** means growth rates of some key business metrics are positive but others are negative. **Declining** means growth rates of key business metrics are generally decelerating.

Ratings Distribution (6/30/2014)

Rating	% Of Companies Covered	% With Investment Banking Relationships
Buy	76%	25%
Hold	22%	4%
Sell	2%	0%
Total	100%	20%

Information about valuation methods and risks can be found in the “STOCK OPPORTUNITY” and “RISKS” sections, respectively, of this report.

CHLM makes a market in this security.

CHLM has received investment banking revenue from the subject company in the last 12 months. CHLM expects to receive or intends to seek compensation for investment banking services from the subject company in the next three months.

Analysts receive no direct compensation in connection with the firm's investment banking business. Analysts may be eligible for bonus compensation based on the overall profitability of the firm, which takes into account revenues from all of the firm's business, including investment banking.

OTHER DISCLOSURES

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