

bluebird bio (BLUE)

Q1:14, Initial Results of LentiGlobin in Beta-Thal at Upcoming Scientific Meeting, Reiterate OUTPERFORM

- BLUE reported a Q1 net loss of \$10.6M, below our \$8.0M estimate, and reported \$192.5M in cash and equivalents.
- Preliminary results from the ongoing French Phase I/II (HGB-205) study of LentiGlobin in patients with beta-thalassemia will be presented at the European Hematology Association Congress (June 13-16 in Milan). Abstracts for the congress will be made available online on May 21. We expect the data to include analysis of hemoglobin levels, LentiGlobin vector measurements and any changes in transfusion frequency. LentiGlobin is also being evaluated in the Phase I/II Northstar (HGB-204) study in beta thalassemia patients in the US. Interim data from this trial, and additional data from the HGB-205 study, is expected in late 2014.
- An IND for LentiGlobin in sickle cell disease was approved, and we expect a study (HGB-206) to begin in H2:14 in the US. Separately, BLUE has filed an IND amendment to conduct an observational study (ALD-103) in patients with childhood cerebral adrenoleukodystrophy (CCALD) treated by allogeneic stem cell transplant. Data from this study will aid in the development of Lenti-D, which is currently being evaluated in the ongoing Phase II/III Starbeam trial in CCALD.
- Reiterate OUTPERFORM and our \$40 price target. Our price target is derived from applying an 8X multiple to estimated 2020 revenues of \$1.36B for Lenti-D and LentiGlobin products, discounted 35% annually.

Risks to the achievement of our price target include failure to gain approval for products in development, failure to achieve sales estimates for any marketed product and failure to achieve earnings estimates.

May 14, 2014

Price
\$22.61

Rating
OUTPERFORM

12-Month Price Target
\$40

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Company Information

Shares Outst (M)	24.1
Market Cap (M)	\$546.0
52-Wk Range	\$17.03 - \$36.25
Book Value/sh	\$5.94
Cash/sh	\$7.97
Enterprise Value (M)	\$353.5
LT Debt/Cap %	0%
Cash Burn (M)	\$40.3

Company Description

Bluebird bio is developing LENTI-D, a gene therapy in a Phase II/III trial for treating CCALD, and LENTIGLOBIN, a gene therapy in Phase I/II trials for treating beta-thalassemia and sickle cell disease. With Celgene, it is also developing CAR-T in oncology.



Source: Thomson Reuters

FYE Dec	2013A	2014E			2015E		
REV	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	\$1.1A	\$6.3A		\$6.3A	\$5.94E		5.9E
Q2 Jun	6.3A	6.3E		6.2E	6.3E		6.3E
Q3 Sep	6.4A	6.3E		6.2E	6.3E		6.3E
Q4 Dec	6.3A	6.3E		6.2E	6.3E		6.3E
Year*	\$20.2A	\$25.2E		\$24.9E	24.8E		25.2E
Change	5836%	25%			--		
	2013A	2014E			2015E		
EPS	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	(\$0.39)A	(\$0.44)A	(\$0.33)A	(\$0.44)A	(\$0.55)E	(\$0.44)E	(\$0.44)E
Q2 Jun	(0.19)A	(0.44)E	(0.34)E	(0.34)E	(0.49)E	(0.39)E	(0.39)E
Q3 Sep	(0.26)A	(0.44)E	(0.34)E	(0.35)E	(0.50)E	(0.40)E	(0.40)E
Q4 Dec	(0.34)A	(0.45)E	(0.34)E	(0.38)E	(0.52)E	(0.41)E	(0.41)E
Year*	(\$1.15)A	(\$1.77)E	(\$1.35)E	(\$1.39)E	(2.06)E	(1.64)E	(1.55)E
P/E	--	--			--		
Change	36%	-54%			--		

Consensus estimates are from Thomson First Call.

* Numbers may not add up due to rounding.

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Investment Thesis

Bluebird bio is a gene therapy company focused on the treatment of rare genetic diseases, with two product candidates currently in development. Recent technical advances in gene therapy have revived strong interest in its curative potential and bluebird bio has made significant strides in the clinic. LENTI-D, its lead clinical product, is in a pivotal Phase II/III trial in patients with childhood adrenoleukodystrophy (ALD). Its other product in clinical development, LENTIGLOBIN, is in two Phase I/II trials in patients with the inherited hemoglobin disorders, β -thalassemia and sickle cell disease. Bluebird is also collaborating with Celgene to discover, develop and commercialize genetically modified T-cells, also called chimeric antigen receptor (CAR) cells, for the targeted destruction of cancer cells.



David M. Nierengarten, Ph.D.

5/14/2014

Bluebird Bio, Inc.

Annual Financial Results & Projections

(\$ in thousands except per share data)

Ticker: BLUE (Nasdaq)

	FY:12A	FY:13A	Q1	Q2	Q3	Q4	FY:14E	FY:15E	FY:16E	FY:17E	FY:18E	FY:19E	FY:20E
Revenue:													
Sales	0	0	0	0	0	0	0	0	0	116,154	115,864	692,511	1,355,330
Collaboration revenue	0	19,792	6,250	6,150	6,150	6,150	24,700	24,243	6,027	0	0	0	0
Grant, license fees and other revenue	340	389	85	150	150	150	535	600	1,050	1,200	1,200	1,200	1,200
Total Revenues	\$340	\$20,181	\$6,335	\$6,300	\$6,300	\$6,300	\$25,235	\$24,843	\$7,077	\$117,354	\$117,064	\$693,711	\$1,356,530
Cost and Expenses:													
Costs of goods sold	0	0	0	0	0	0	0	0	0	29,038	28,966	173,128	338,833
Research and Development	17,210	31,002	11,463	11,520	11,578	11,636	46,197	50,140	56,433	66,707	81,083	98,557	119,797
Sales, General and Administrative	6,846	14,126	5,540	5,568	5,596	5,624	22,327	29,712	45,864	54,679	54,624	164,187	290,123
Other operating expenses	0	0	0	0	0	0	0	0	0	0	0	0	8,000
Total Costs and Expenses	\$24,056	\$45,128	\$17,003	\$17,088	\$17,173	\$17,259	\$68,524	\$79,852	\$102,298	\$150,425	\$164,673	\$435,872	\$756,752
Operating Income (loss)	(23,716)	(24,947)	(10,668)	(10,788)	(10,873)	(10,959)	(43,289)	(55,009)	(95,221)	(33,071)	(47,609)	257,839	599,778
Net Interest Income (Expense)	5	29	59	192	173	156	581	669	561	619	444	466	5,068
Other income / (Expense)	41	(403)	0	0	0	0	0	0	0	0	0	0	0
Income Before Income Taxes	(23,670)	(25,321)	(10,609)	(10,596)	(10,700)	(10,803)	(42,708)	(54,340)	(94,660)	(32,452)	(47,165)	258,305	604,846
Net Income	(\$23,671)	(\$25,321)	(\$10,609)	(\$10,596)	(\$10,700)	(\$10,803)	(\$42,708)	(\$54,340)	(\$94,660)	(\$32,452)	(\$47,165)	\$245,390	\$429,575
GAAP Basic EPS with sFAS123	(1.81)	(1.15)	(0.44)	(0.44)	(0.44)	(0.45)	(1.77)	(2.06)	(3.39)	(1.08)	(1.56)	8.12	14.20
GAAP Diluted EPS with sFAS123	(1.81)	(1.15)	(0.44)	(0.44)	(0.44)	(0.45)	(1.77)	(2.06)	(3.39)	(1.08)	(1.56)	7.36	12.87
Shares outstanding	13,112	21,986	24,148	24,148	24,148	24,148	24,148	26,398	27,898	30,148	30,148	30,211	30,248
Cash Burn	(22,849)	(18,821)	(10,005)	(9,992)	(10,096)	(10,199)	(40,293)	(51,700)	(91,870)	(29,438)	(44,150)	248,411	432,599
Cash Balance	67,011	206,279	192,499	173,362	156,321	139,208	139,208	174,322	181,481	127,366	79,380	275,089	672,504

Analyst Biography

David is an Analyst covering stocks in the Biotechnology/Biopharmaceuticals/BioDefense sector. His prior sell-side research experience at Robert W. Baird & Co. covered biotechnology companies of all market capitalizations, with a focus on oncology and rare diseases.

David received his B.S. (Biochemistry) from the University of Wisconsin-Madison and Ph.D. (Molecular and Cell Biology) from the University of California-Berkeley.

David's Edge: David's early stage venture capital investing experience gives him a balanced perspective on developmental-stage biotechnology companies and their ultimate risk/reward potential. His experience on the other side of that equation in a clinical-stage, venture backed biotechnology company provides him with insights into corporate operations. The combination of experiences creates a focus on value creation in this event-driven space.

Analyst Certification

I, David M. Nierengarten, Ph.D., Christopher N. Marai, Ph.D., Dilip Joseph, certify that the views expressed in this report accurately reflect my personal opinion and that I have not and will not, directly or indirectly, receive compensation or other payments in connection with my specific recommendations or views contained in this report.

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Neutral: 43%	Neutral: 2%
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Company	Disclosure
bluebird bio	1,3,4,5

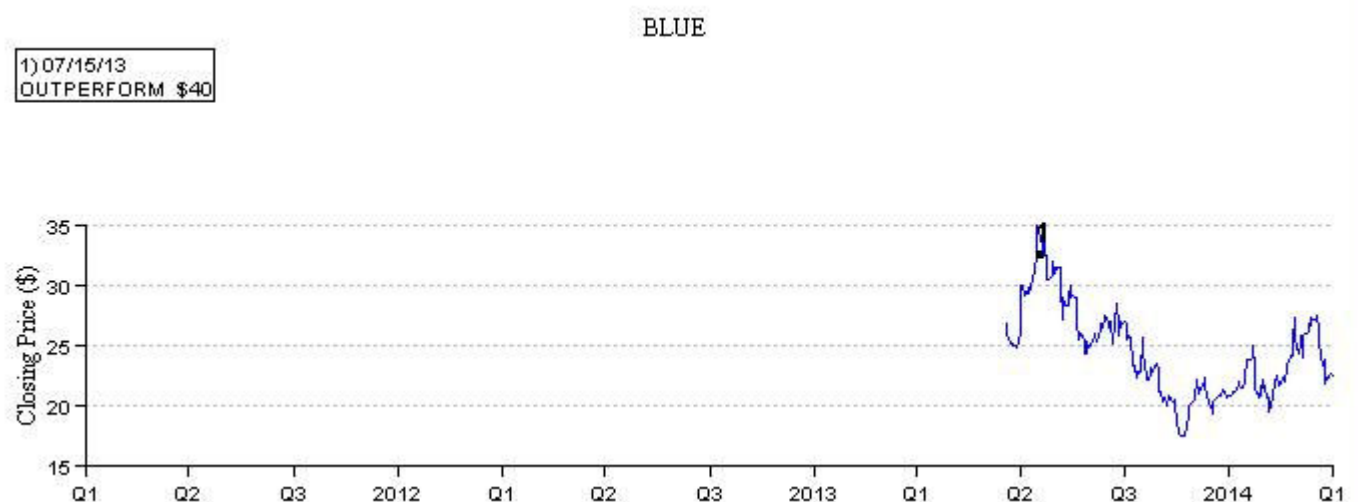
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