



**Equity Research** 

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# Radius Health, Inc. (RDUS-\$32.03)

**Rating: BUY** 

Target Price: \$52.00

# Phase III Abaloparatide-SC Meets Significance; Raising Price Target to \$52

EPS 2014E 2015E 2016E	1Q (50.48)A —	2Q A (2.22)A —	3Q (0.59)A —	4Q (0.70)E —
REV 2014E 2015E 2016E	1Q 0.0A —	2Q 0.0A —	3Q 0.0A —	4Q 0.0E —
FY EPS Prev REV	2014E (4.34)E — 0.0E	2015 (1.81 (1.71 0.0E	)E (1	<b>016E</b> 1.19)E 1.12)E 3.9E

- Positive Abaloparatide-SC Data. The Phase III ACTIVE trial, evaluating abaloparatide-SC for the treatment of severe post-menopausal osteoporosis, achieved statistical significance, suggesting commercialization as early as late 2016. This dataset includes 18-month fracture data versus placebo (the primary endpoint) and highly statistically significant improvements in bone mineral density (BMD) versus both placebo and Forteo.
- **De-Risked Abaloparatide-SC, Raising PT to \$52 from \$26.** With the first hurdle (18-month data) achieved, we believe that abaloparatide-SC is significantly de-risked, prompting us to raise our PT to \$52 from \$26. This is based on a lowering of the discount rate to 20% vs. 30% on future abaloparatide-SC sales forecast, yielding \$46 per share. RAD-1901 contributes an additional \$6, in our view, suggesting a valuation of \$52 per share. With the second hurdle the six-month extension study (24-month fracture data) likely in 1H:15, we believe abaloparatide-SC will be further de-risked, suggesting additional upside. The company expects an NDA to be filed in 2H:15 with the FDA.
- The Data. Abaloparatide-SC demonstrated a statistically significant reduction (83%) in vertebral fracture versus placebo (p<0.0001), meeting the primary endpoint. On secondary endpoints, abaloparatide-SC also achieved statistical significance in fracture rate reduction in the adjudicated non-vertebral fracture patient group (43%), the adjudicated clinical fracture group (41%), as well as in the difference in time to first incident non-vertebral fracture in both of these groups. In terms of comparison with Forteo, the secondary endpoint of non-veterbral fractures was not met (possibly due to low incidence overall) while the emergence of hypercalcemia, a potential differentiating factor between abaloparatide-SC and teriparatide, was lower in the abaloparatide arm (6.0% versus 10.8%).
- Life-cycle Management with Abaloparatide-TD. In addition to the strong Phase III results, Radius also announced that it will advance a transdermal formulation of abaloparatide (abaloparatide-TD), revealing that comparable AUC and Cmax relative to abaloparatide-SC has been achieved. This means that Radius could have important life-cycle management, while offering unique and differentiating features to patients, available to market alongside abaloparatide-SC. We think this further enhances the attractiveness of Radius to a corporate partner.

#### **Current Statistics**

Market Cap (\$Mil)	<b>\$1,054.6</b>
Avg. Daily Trading Volume (3 mo.):	180,805
Shares Out (Mil):	32.924
52 Wk. Range	\$32.82-\$7.46



# **Summary**

Radius Health (Radius) is a development-stage company focused on commercializing treatments for osteoporosis and other serious endocrine-mediated disorders. The company has a portfolio of compounds in development for a variety of disorders predominantly affecting women, including a candidate for the treatment of osteoporosis. With compelling Phase III data (statistically significant 18month fracture data), our view that abaloparatide offers a potential replacement for Forteo, a \$1+ billion drug for the treatment of severe osteoporosis, is reinforced. Given this potential to have clinically meaningful differentiation versus Forteo (lower rate of hypercalcemia reported in the Phase III, no need for refrigeration), and a relatively short time to commercialization, we believe the opportunity for additional upside exists, particularly as the valuation could expand when the 6-month extension study results (24-month fracture data) become known in 1H:15. In addition, RAD1901, a SERD for the treatment of hormonally receptive breast cancers and vasomotor symptoms, is included in our model, which we believe can become a larger component of the valuation as the drug and the platform overall advances in development. Our \$52 price target is based on a discounted revenue calculation, based on U.S. revenues of abaloparatide-SC and the inclusion of value for RAD1901. We have not yet incorporated revenue from Europe or other sources in our model, including abaloparatide-TD, a transdermal delivery system that could be an important line extension.

**Exhibit 1: Upcoming Milestones** 

Date	Candidate	Indication	Milestone
1Q:15	RAD1901	BCBM	Phase Ib enrollment
1H:15	Abaloparatide-SC	Osteoporosis	Phase III 6-month extension fracture data
2H:15	Abaloparatide-SC	Osteoporosis	NDA Submission
2H:15	RAD1901	Vasomotor	Phase IIb Initiation
2016	Abaloparatide-SC	Osteoporosis	FDA Approval

Source: Radius Health, Cantor Fitzgerald research

# Abaloparatide

Abaloparatide is a synthetic peptide analog of parathyroid hormone-related protein (PTHrP) that functions as a bone anabolic treatment (grows bone). The 18-month Phase III program was conducted in 2,468 patients across 28 sites in the U.S., Europe, Asia, and Latin America. The drug's profile, we believe, is directly tied to its mechanism as a regulator of bone formation and its selectivity for receptor conformation (R<sup>0</sup>, RG), suggesting it has the ability to activate the parathyroid hormone receptor but with less downstream signaling than Forteo, a 34 N-terminal amino acid sequence of human parathyroid hormone. Forteo is able to stimulate new bone formation, but in addition to binding with high affinity to osteoblast receptors in bone, also binds to cell surface receptors in the kidney. Forteo is able to build bone but is also associated with hypercalcemia, a condition in which excess calcium remains in the bloodstream. In the top-line Phase III ACTIVE trial results, hypercalcemia rates were lower in the abaloparatide arm compared to the Forteo arm (6.0% vs. 10.8%).

Exhibit 2. Review of ACTIVE Phase III Trial, 18-month BMD

Trial Arm		Lumbar Spine			Total Hip		Femoral Neck			
IIIai AIIII	6 months	12 months	18 months	6 months	12 months	18 months	6 months	12 months	18 months	
Placebo	0.60%	0.45%	0.63%	0.31%	0.09%	-0.10%	-0.13%	-0.41%	-0.43%	
Abaloparatide-SC*	6.58%	9.77%	11.20%	2.32%	3.41%	4.18%	1.72%	2.65%	3.60%	
Teriparatide**	5.25%	8.28%	10.49%	1.44%	2.29%	3.26%	0.87%	1.54%	2.66%	

\* p<0.0001 vs. placebo and teriparatide, \*\* p<0.0001 vs. placebo

Source: Radius Health, Cantor Fitzgerald research



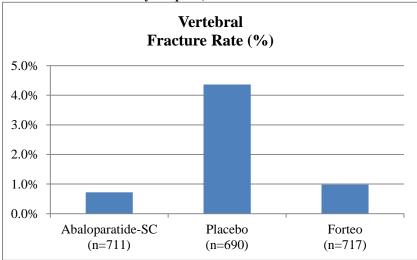


Exhibit 3. ACTIVE Primary Endpoint, Vertebral Fracture Rate

Source: Radius Health, Cantor Fitzgerald research

The Abaloparatide-SC ACTIVE trial randomized patients to receive either abaloparatide (80 mcg), placebo, or Forteo (20 mcg) for 18 months. Following the initiation of the trial, the FDA informed Radius that 24-month fracture data would be required for approval, and subsequently agreed to accept an NDA that included (and preserved the integrity of) the Phase III 18-month endpoint, plus data from a six-month extension study (to collect fracture at 24-months), which is currently ongoing. The primary endpoint of the study is new vertebral fractures associated with abaloparatide-SC vs. placebo at 18 months, with secondary measures including non-vertebral fractures vs. placebo, BMD (lumbar spine, hip, femoral neck) vs. Forteo, number of hypercalcemic events vs. Forteo, and 24-month fracture data. The trial is 90% powered for the primary endpoint of new vertebral fractures versus placebo. We expect results from the full trial (including extension) in 1H:15, followed by NDA submission in 2H:15.

Exhibit 4. Review of Adverse Events

Trial Arm	Back Pain	Arthralgia	Upper Respiratory Infection	Hypercalciuria	Dizziness	Hypercalcemia
Placebo	10.0%	9.8%	8.9%	8.9%	6.1%	1.2%
Abaloparatide-SC	8.6%	8.5%	9.0%	10.9%	10.0%	6.0%
Teriparatide	7.2%	8.6%	9.8%	12.5%	7.3%	10.8%

Source: Radius Health, Cantor Fitzgerald research

### Potential of Abaloparatide

We are intrigued by the potential of abaloparatide as a replacement for Forteo, as well as the opportunity to expand the market for anabolic bone agents. In simplest terms, abaloparatide may offer unique advantages to Forteo that make it both more physician and patient-friendly. For example, unlike Forteo, abaloparatide-SC will not need refrigeration. While Forteo also carries a warning regarding concern of osteosarcoma, this is largely seen as an observed effect in rats, and abaloparatide's carcinogenicity studies suggest the same.

# **RAD1901**

Licensed from Eisai in 2006 (worldwide rights except for Japan), RAD1901 is a selective estrogen regulator in development for the treatment of brain metastases associated with breast cancer (BCBM)



and in a second formulation (lower dose) for the treatment of post-menopausal vasomotor symptoms (hot flashes). RAD1901, consistent with agents such as Evista (raloxifene), has both estrogen agonist and estrogen antagonist properties in different tissues. For instance, RAD1901 appears to protect against bone loss through its estrogen-like activities on bone, but unlike estrogen, does not stimulate endometrial growth. Preclinical studies show that RAD1901 does not stimulate replication of breast cancer cells, and has antiproliferative properties in mouse models of human breast cancer. But RAD1901 is able to cross the blood brain barrier at pharmacological levels that are detectable in the brain, and that suggests that the drug could be a meaningful treatment to estrogen receptor positive (ER+) brain cancers that have metastasized to the brain, as well as for the treatment of vasomotor symptoms in women experiencing menopausally-related hot flashes.

- Vasomotor Symptoms: A study examining RAD1901 in vasomotor symptoms was conducted in 100 healthy perimenopausal women, evaluating four doses from 10mg to 100mg of RAD1901 versus placebo. Efficacy was observed at the 10 mg dose level, with a statistically significant reduction in the frequency of moderate and severe hot flashes for the study period, as well as at weekly time intervals from 2 to 4 weeks, compared to placebo. The drug did not produce a linear dose-response, and while numerical reductions in mean severity were observed, these did not reach statistical significance. However, given the effect on reduction in frequency of hot flashes over time and the modest safety profile of the drug, Radius believes that a larger Phase IIb study in vasomotor symptoms is warranted, and will begin such a trial in 2015.
- **Breast Cancer:** In breast cancer, the use of anti-estrogen agents is well established. Tamoxifen, the first SERM to be employed in the treatment of breast cancer, is used both as a therapeutic for women with metastatic disease, and as a preventative agent for ER+ early-stage breast cancer. Because RAD1901 appears to have similar anticancer properties and crosses the blood brain barrier at pharmacologic doses, **Radius is exploring this indication**, with enrollment of a Phase Ib study expected into early 2015. We think there is substantial opportunity in this area, particularly given Roche's recent acquisition of Seragon, a private company working on drugs with similar mechanism of action, for \$725 million plus \$1 billion in contingent milestone payments.

# Valuation

We believe shares of Radius have the potential for valuation expansion to \$52. This is based on:

- **Discounted revenue** Based on the possibility of revenues from U.S. sales of abaloparatide beginning in 2016, we are forecasting 2020 sales of approximately \$425 million. Using an 8x multiple on revenue and a 20% discount rate, Radius shares could be worth \$46 per share.
- RAD1901 -- Now that a more clear development path of RAD1901 is established, we think
  the shares should incorporate at least \$200 million, or an additional \$6 per share of value for
  this candidate.

# **Risks**

Radius Health is a development-stage company, and investment is subject to risk. These risks include but are not limited to:

 Development of new drugs carries a high failure rate, either because the drug in question fails to show efficacy, or significant safety issues arise during the clinical trial process. Additionally, regulatory authorities such as the Food & Drug Administration (FDA) and European Medicines Agency (EMA) may delay the approval process or reject Radius' clinical findings.



- The clinical landscape is crowded with hundreds of clinical trials. It is possible that other drugs
  will show greater benefit to patients than Radius' candidates, thus rendering potential products
  obsolete or non-competitive. Additionally, drug development is inherently risky, and it is possible
  that Radius' proprietary and partnered candidates will not be associated with successful clinical
  outcomes.
- Radius has rights and patents for its technologies and compounds, many of which have been licensed from third parties. There can be no assurances that such patents will not be subject to challenges, though none are known at this time.
- Radius is not cash flow positive and has not generated profits. There is no guarantee that the company will do so in the near future. The company has roughly \$50 million in cash and has stated that current development plans should allow cash to last into 2015.
- The market is competitive, and we expect potential competitor drugs to abaloparatide to lose exclusivity while Radius' drugs are commercially available. There are no assurances that payors, either public or private, will adopt Radius' products over generic drugs.
- The market for Radius stock can be volatile, particularly because there is limited history as a publicly-traded company.



Exhibit 5: Annual Sales and Earnings Radius Health, Inc.

All figures in millions, fiscal year ended June 30	2020E	2019E	2018E	2017E	2016E	2015E	2014E
Revenue	\$424.52	\$281.41	\$204.21	\$100.36	\$43.91	\$0.00	\$0.00
Cost of Goods Sold	53.49	36.86	31.92	17.36	12.30	0.00	0.00
Gross Profit	\$371.03	\$244.54	\$172.29	\$82.99	\$31.62	\$0.00	\$0.00
Gross Profit Margin	87.40%	86.90%	84.37%	82.70%	72.00%	NM	NM
Operating Expenses							
G&A	45.01	40.55	36.21	31.00	26.91	18.76	12.27
R&D	72.00	64.80	58.91	52.93	45.63	39.71	52.47
Total Operating Expenses	117.01	105.36	95.12	83.93	72.54	58.47	64.74
Profit (Loss) from Operations	\$254.02	\$139.19	<b>\$77.17</b>	(\$0.94)	(\$40.92)	(\$58.47)	(\$64.74)
Operating Profit Margin	60%	49%	38%	NM	NM	NM	NM
Interest Income (Expense)	(1.03)	(0.98)	(0.94)	(0.89)	(0.85)	(1.35)	(2.36)
Other Income (Expense)	1.53	1.46	1.39	1.32	1.26	0.90	(0.03)
Income (Loss) from Continuing Operations	\$254.52	\$139.66	\$77.62	(\$0.51)	(\$40.51)	(\$58.92)	(\$67.13)
Pretax Margin	59.95%	49.63%	38.01%	-0.50%	NM	NM	NM
Income Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax Rate	NM	NM	NM	NM	NM	NM	NM
Net Income	\$254.52	\$139.66	\$77.62	(\$0.51)	(\$40.51)	(\$58.92)	(\$67.13)
Diluted Earnings (Net Loss) Per Share	\$5.75	\$3.47	\$2.00	(\$0.01)	(\$1.19)	(\$1.81)	(\$4.34)
Shares Outstanding	44.23	40.21	38.85	35.80	34.10	32.48	17.53

Source: Radius Health, Cantor Fitzgerald research



# **Exhibit 6: Sales and Earnings by Quarter**

# Radius Health, Inc.

All figures in millions	2014E	4Q14E	9Mos14A	3Q14A	6Mos14A	2Q14A	1Q14A
Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cost of Goods Sold	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Profit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Gross Profit Margin	NM						
Operating Expenses							
SG&A	12.27	4.22	8.05	2.84	5.21	3.07	2.14
R&D	52.47	18.32	34.15	13.82	20.34	10.62	9.72
Total Operating Expenses	64.74	22.54	42.20	16.65	25.54	13.69	11.86
Profit (Loss) from Operations	(\$64.74)	(\$22.54)	(\$42.20)	(\$16.65)	(\$25.54)	(\$13.69)	(\$11.86)
Operating Profit Margin	NM						
Interest (Expense) & Other Income (Expense)	(2.36)	(0.04)	(2.32)	(0.77)	(1.55)	1.08	(1.62)
Unrealized gain from marketable securities	(0.03)	(0.02)	(0.01)	(0.01)	0.00	0.00	0.00
Pretax Income (Loss)	(\$67.13)	(\$22.60)	(\$44.53)	(\$17.43)	(\$27.10)	(\$12.61)	(\$13.48)
Pretax Margin	NM						
Accretion of Preferred Stock	(9.00)	0.00	(9.00)	0.00	(9.00)	(4.03)	(4.97)
Net Income (Loss)	(\$76.13)	(\$22.60)	(\$53.53)	(\$17.43)	(\$36.10)	(\$16.64)	(\$8.51)
Basic & Diluted Net Loss Per Share	(\$4.34)	(\$0.70)	(\$4.27)	(\$0.59)	(\$9.11)	(\$2.22)	(\$50.48)
Shares Outstanding	17.53	32.48	12.54	29.75	3.96	7.50	0.39



Exhibit 7: Select Biotechnology Stocks Biotechnology Mara Goldstein - 212.610.2215 Cantor Fitzgerald

Mkt Cap.	Company (a)	Ticker	Rating	Price	Market	52-V	Veek	Pe	rformance (	b)	Earni	ngs Per Sha	re (c)	Reve	nue Per Sha	re (c)	Per Share	EV	Short
Range	Company (a)	Ticker	Kating	12/19/14	Cap. (mil)	High	Low	YTD	QTD	1-Year	2013A	2014E	2015E	2013A	2014E	2015E	Cash	(mil)	Interest
	Curis	CRIS	NC	\$1.17	\$100.63	\$3.40	\$1.09	-59.2%	-10.0%	-57.3%	(\$0.15)	(\$0.22)	(\$0.24)	\$0.17	\$0.12	\$0.18	\$0.63	\$75.1	3,524,864
	Cyclacel	CYCC	NC	0.68	15.7	4.84	0.61	-83.6%	-76.8%	-82.8%	(1.28)	(0.95)	(0.95)	0.05	0.07	0.00	1.16	(11.0)	1,025,204
	Endocyte*	ECYT	BUY	6.24	260.3	33.70	5.31	-42.1%	4.0%	-40.1%	(0.50)	0.06	(1.18)	1.56	1.67	0.00	NA	131.7	6,555,714
	Exelixis	EXEL	NC	1.33	259.6	8.41	1.28	-78.5%	-11.9%	-77.1%	(1.33)	(1.40)	(0.95)	0.16	0.13	0.18	NA	410.6	49,737,607
Cap	Galena Biopharma	GALE	SELL	1.57	190.7	7.77	1.51	-69.1%	-21.1%	-61.3%	(0.46)	(0.35)	(0.28)	0.02	0.12	0.20	0.43	145.3	19,418,538
ŭ	ImmunoCellular	IMUC	NC	0.72	45.1	1.58	0.53	-26.7%	-15.4%	-0.4%	(0.16)	(0.17)	(0.23)	0.00	0.00	0.00	0.37	21.6	772,518
Small	Oncothyreon	ONTY	HOLD	1.80	164.8	4.08	1.52	-1.1%	-7.7%	1.7%	(0.62)	(0.42)	(0.41)	0.00	0.00	0.00	0.88	84.1	6,106,840
SO.	Progenics	PGNX	NC	7.25	504.3	7.57	3.10	34.5%	45.3%	47.1%	(0.76)	0.12	(0.24)	0.11	0.76	0.51	1.26	416.8	9,529,854
	Stemline	STML	NC	15.57	206.8	31.48	10.50	-23.5%	27.5%	-17.0%	(2.35)	(2.31)	(2.40)	0.01	0.02	0.01	3.35	162.3	1,110,921
	Sunesis Pharma	SNSS	HOLD	2.53	156.7	8.46	1.00	-45.7%	-61.8%	-45.6%	(0.66)	(0.76)	(0.28)	0.13	0.10	0.31	0.72	123.6	5,878,421
	Synta	SNTA	NC	2.80	304.9	7.22	2.54	-46.8%	-7.9%	-37.1%	(1.27)	(0.89)	(0.92)	0.00	0.00	0.00	1.10	201.8	11,656,536
	Verastem	VSTM	BUY	8.44	218.5	16.60	7.10	-32.4%	-3.9%	-31.2%	(1.82)	(1.99)	(2.13)	0.00	0.00	0.00	4.25	108.5	3,418,793
	Average				\$188.8			-40.0%	-13.5%	-34.4%	(\$1.06)	(\$0.83)	(\$0.91)	\$0.17	\$0.25	\$0.12	\$1.50	\$144.7	9,138,483
	Agios Pharmaceuticals	AGIO	NC	\$119.62	\$4,381.56	\$124.39	\$21.40	398.0%	92.5%	449.0%	(\$2.83)	(\$1.43)	(\$1.96)	\$0.70	\$1.65	\$1.88	\$6.01	\$4,161.6	3,139,046
	Ariad	ARIA	NC	7.22	1,351.7	9.83	4.90	-0.6%	36.7%	30.8%	(1.49)	(1.10)	(0.73)	0.24	0.35	0.85	1.46	1404.5	44,393,600
	Array Biopharma	ARRY	BUY	4.86	641.3	5.64	2.98	-1.4%	39.7%	-0.8%	(0.47)	(0.69)	(0.65)	0.53	0.32	0.37	0.84	635.9	20,934,931
	Celldex	CLDX	BUY	18.92	1,695.0	33.33	10.76	-23.1%	53.0%	-17.7%	(1.02)	(1.30)	(0.87)	0.05	0.03	0.00	2.50	1470.9	21,209,501
	Clovis Oncology	CLVS	NC	56.64	1,925.8	93.33	35.33	-4.3%	22.1%	5.3%	(2.95)	(4.24)	(5.66)	0.00	0.40	0.00	15.19	1696.7	5,916,396
	Epizyme	EPZM	NC	19.98	682.6	41.23	16.51	-1.4%	-25.0%	-2.2%	(0.22)	(1.75)	(1.98)	2.00	1.20	1.42	6.20	470.9	3,203,104
Cap	Immunogen (d)	IMGN	HOLD	6.11	522.3	17.80	5.36	-59.2%	-41.5%	-57.6%	(0.87)	(0.83)	(0.70)	0.42	0.70	1.19	1.42	400.5	8,764,405
Mid	Incyte	INCY	NC	76.86	12,984.9	80.78	40.30	50.0%	60.4%	53.4%	(0.56)	(0.11)	0.21	2.10	3.14	4.09	3.15	13182.2	9,963,308
Σ	Infinity Pharm	INFI	NC	17.73	864.6	18.25	8.40	31.9%	29.4%	40.6%	(2.64)	(0.72)	(2.77)	0.00	3.38	1.53	7.77	492.3	3,270,871
	Medivation	MDVN	NC	108.34	8,409.9	117.23	54.37	70.8%	8.0%	72.3%	(0.57)	2.63	3.31	3.52	8.59	10.86	4.14	8326.0	3,755,589
	Merrimack Pharm.*	MACK	BUY	11.04	1,169.0	11.05	4.13	97.5%	30.3%	124.4%	(1.32)	(0.89)	(1.08)	0.45	0.92	0.79	1.45	1133.7	17,840,642
	NewLink Genetics	NLNK	BUY	40.11	1,118.3	53.48	17.32	87.6%	74.8%	75.9%	(1.23)	(2.03)	(1.21)	0.04	0.04	1.86	2.43	1051.7	5,275,052
	Oncomed	OMED	NC	21.48	640.8	42.34	16.57	-26.7%	9.1%	-26.3%	(1.93)	(1.35)	(0.62)	1.27	1.65	3.28	8.31	392.9	2,959,601
	Pharmacyclics	PCYC	NC	131.45	9,929.6	154.89	82.51	21.2%	13.5%	29.6%	0.87	0.85	0.25	3.44	9.10	12.55	9.75	9193.1	4,657,993
	Seattle Genetics	SGEN	HOLD	32.89	4,052.4 \$3,358.0	55.99	30.50	-18.1% <b>41.5%</b>	-10.9% <b>26.1%</b>	-14.9% <b>50.8%</b>	(0.51) (\$1.18)	(0.87) (\$0.92)	(0.49) (\$1.00)	2.19 <b>\$1.13</b>	2.10 \$2.24	2.80 \$2.90	2.76 \$4.89	3712.8 \$3,181.7	18,726,445 11,600,699
	Average Alexion	ALXN	NC	\$189.53	\$37.581.34	\$203.30	\$126.76	42.0%	13.4%	45.0%	\$3.08	\$5,20	\$5.92	\$7.82	\$11.23	\$13.79	\$8.99	\$35,869.1	2,654,802
		AMGN	NC NC	170.17	129,443.2	173.14	108.20	47.0%	22.6%	51.1%	7.60	8.57	9.28	24.55	26.21	27.50	36.99	134,348.2	8,518,202
Cap	Amgen	BIIB	NC NC	360.67	85,174.0	361.93	270.62	28.7%	11.5%	30.1%	8.96	13.52	16.29	29.35	41.04	47.39	7.88	83,903.1	2,482,567
Ü	Biogen Idec Celgene	CELG	BUY	117.18	97,376.6	119.84	66.85	36.3%	25.4%	42.9%	2.98	3.70	4.91	7.81	8.99	11.16	7.04	98,366.6	11,165,661
Large	Gilead	GILD	NC	108.45	163,614.6	116.83	63.50	44.2%	2.7%	47.7%	2.04	7.95	10.14	7.42	16.13	19.23	4.19	167,033.2	56,571,917
7	Regeneron	REGN	NC	427.64	43,476.2	437.64	262.97	55.7%	20.3%	58.1%	8.17	10.04	11.74	20.70	27.46	33.90	10.25	42,999.3	3,902,220
	Vertex	VRTX	NC	118.90	28,598.1	124.35	59.79	61.0%	10.9%	70.0%	(1.98)	(2.98)	(0.50)	5.04	2.37	5.14	6.14	27,948.6	5,312,891
	Average	VICIA	110	110.50	\$83,609.1	124.33	37.17	45.0%	15.2%	49.3%	\$4.41	\$6.57	\$8.25	\$14.67	\$19.06	\$22.59	\$11.63	\$41,196.8	12,944,037
	S&P 500	SP50	NA	2,071.5	NA	2,079.47	1,737.92	13.1%	6.4%	14.5%	NA	117.42	126.85	NA NA	NA	NA	NA NA	NA NA	NA
35	Dow Jones Ind	DJII	NA	17,804.8	NA	17,991.19	15,340.69	8.3%	6.0%	10.0%	NA	1,121.31	1167.76	NA	NA	NA	NA	NA	NA
Indices	NASDAQ Comp	COMP	NA	4,767.9	NA	4,810.86	3,946.03	15.1%	7.8%	17.5%	NA	193.97	241.40	NA	NA	NA	NA	NA	NA
Ē	Amex Biotech Index	BTK	NA	3,545.6	NA	3,567.89	2,270.48	51.4%	16.1%	57.5%	NA	132.53	165.15	NA	NA	NA	NA	NA	NA
	NASDAO Biotech	NBI	NA	3,252,7	NA	3,338,37	2,168.08	37.0%	15.3%	42.1%	NA	107.60	137.33	NA	NA	NA	NA	NA	NA
Mkt Cap.	THE BOTT Q BIOLEGI			Price Char		3,330.31	P/E	37.070		Price/Sales		107.00	Pri					EV/	1111
Range	Company	Ticker	Rating	High	Low	2013A	2014E	2015E	2013A	2014E	2015E	Cash	Debt	BV	EBITDA	Net Inc.	FCF	Sales	BV
Mid	Medivation	MDVN	NC	-7.6%	99.3%	NA	41.2	32.7	30.81	12.62	9.98	26.16	35.40	106.73	(443.1)	(188.2)	NA	45.8	105.7
Large	Alexion	ALXN	NC	-6.8%	49.5%	61.5	36.4	32.0	24.23	16.88	13.75	21.09	540.74	0.34	63.6	58.7	92.3	31.6	0.3
Large	Amgen	AMGN	NC	-1.7%	57.3%	22.4	19.9	18.3	6.93	6.49	6.19	4.61	3.92	5.81	238.3	23.2	32.1	7.8	6.0
Large	Biogen Idec	BIIB	NC	-0.3%	33.3%	40.3	26.7	22.1	12.29	8.79	7.61	45.76	145.05	NA	27.6	39.7	51.6	15.2	NA
Large	Celgene	CELG	BUY	-2.2%	75.3%	39.3	31.7	23.9	15.00	13.03	10.50	16.65	14.24	17.18	42.0	39.7	51.6	17.9	17.4
Large	Gilead	GILD	NC	-7.2%	70.8%	53.2	13.6	10.7	14.61	6.72	5.64	25.90	NM	14.64	33.8	54.3	59.7	17.2	14.9
Large	Regeneron	REGN	NC	-2.3%	62.6%	52.3	42.6	36.4	20.66	15.57	12.61	41.72	76.91	33.41	53.6	51.77	NA	31.2	33.0
Large	Vertex	VRTX	NC	-4.4%	98.9%	NA	NA	NA	23.60	50.11	23.11	19.35	34.53	25.86	(185.0)	(58.7)	142.1	18.3	NA
	Large Cap Only					44.8	24.4	20.5	16.8	16.8	11.3	\$25.01	\$54.93	29.68	(3.0)	29.8	71.6	19.9	29.6
	ies listed on NASDAO	•							-								•		

<sup>(</sup>a) All companies listed on NASDAQ

<sup>(</sup>b) NA values returned for public companies with less than one year trading history. Figures reflect most current available time period.

<sup>(</sup>c) All figures consensus estimates except for rated companies. Rated companies are Cantor Fitzgerald estimates. EPS and revenue per share exclude option expense and other one-time items, when available, otherwise EPS actual and estimates reflect non GAAP format.

<sup>(</sup>d) ImmunoGen CY estimates represent fiscal year-end (June) figures.

<sup>\*</sup> Covered by another Cantor analyst

Source: Cantor Fitzgerald research, FactSet



# **Company Description**

Radius Health is a development-stage biopharmaceutical firm focused on the commercialization of therapeutics for the treatment of osteoporosis and other serious endocrine-mediated disease.

# **Companies Mentioned:**

Agios Pharmaceuticals, Inc. (AGIO - NASDAQ): NC

Alexion Pharmaceuticals Inc. (ALXN - NASDAQ): NC

Amgen Inc. (AMGN - NASDAQ): NC

Ariad Pharmaceuticals Inc. (ARIA - NASDAQ): NC

Array BioPharma, Inc. (ARRY - NASDAQ): BUY

Biogen Idec (BIIB - NASDAQ): NC

Celgene Corporation (CELG - NASDAQ): BUY

Celldex Therapeutics, Inc. (CLDX - NASDAQ): BUY

Clovis Oncology Inc. (CLVS - NASDAQ): NC

Curis Inc. (CRIS - NASDAQ): NC

Cyclacel Pharmaceuticals, Inc. (CYCC - NASDAQ): NC

Eisai Co., Ltd. (4523 - TSE): NC

Eli Lilly and Company (LLY - NYSE): NC

Endocyte, Inc. (ECYT - NASDAQ): BUY

Epizyme, Inc. (EPZM - NASDAO): NC

Exelixis Inc. (EXEL - NASDAQ): NC

Galena Biopharma (GALE - NASDAQ): SELL

Gilead Sciences Inc. (GILD - NASDAQ): NC

ImmunoCellular Therapeutics Ltd. (IMUC - NASDAQ): NC

ImmunoGen, Inc. (IMGN - NASDAQ): HOLD

Incyte Corporation (INCY - NASDAQ): NC

Infinity Pharmaceuticals, Inc. (INFI - NASDAQ): NC

Medivation Inc. (MDVN - NASDAQ): NC

Merrimack Pharmaceuticals Inc. (MACK - NASDAQ): BUY

NewLink Genetics Corporation (NLNK - NASDAQ): BUY

OncoMed Pharmaceuticals, Inc. (OMED - NASDAQ): NC

Oncothyreon Inc. (ONTY - NASDAQ): HOLD

Pharmacyclics Inc. (PCYC - NASDAQ): NC

Progenics Pharmaceuticals, Inc. (PGNX - NASDAQ): NC

Regeneron Pharmaceuticals Inc. (REGN - NASDAQ): NC

Roche Holdings (ROG.VX - SWX): NC

Seattle Genetics, Inc. (SGEN - NASDAQ): HOLD

Stemline Therapeutics, Inc. (STML - NASDAQ): NC

Sunesis Pharmaceuticals, Inc. (SNSS - NASDAQ): BUY

Synta Pharmaceuticals Corp. (SNTA - NASDAQ): NC

Verastem, Inc. (VSTM - NASDAQ): BUY

Vertex Pharmaceuticals Inc. (VRTX - NASDAQ): NC

Seragon Pharmaceuticals, Inc. (Private)

# **Disclosures Appendix**

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# Distribution of Ratings/Investment Banking Services (IB) as of 12/22/14 Cantor

			IB Serv./Past 12 Mos.			
Rating	Count	Percent	Count	Percent		
BUY [B]	89	60.14	22	24.72		
HOLD [H]	50	33.78	10	20.00		
SELL [S]	9	6.08	1	11.11		