

Biotechnology

RDUS - NASDAQ May 6, 2015 Closing Price 05/5/2015 \$36.04 Rating: Buy 12-Month Target Price: \$50.00 52-Week Range: \$7.46 - \$51.22 Market Can (M): \$1.263

Market Cap (M):	\$1,363
Shares O/S (M):	38
Float:	70.6%
Avg. Daily Volume (000):	422
Dividend:	\$0.00
Dividend Yield:	0.00%
Risk Profile:	High
Fiscal Year End:	December

	Total Revenues ('000)									
	2017E									
1Q	0A	21,531	41,047							
2Q	0	24,340	46,401							
3Q	0	22,468	42,832							
4Q	0	25,276	48,186							
FY	0	93.615	178.466							

	GAAP Net Income (loss) ('000)									
2015E 2016E 2017E										
1Q	(17,057)A	(1,195)	12,575							
2Q	(17,500)	(1,351)	14,215							
3Q	(18,500)	(1,247)	13,122							
4Q	(19,500)	(1,403)	14,762							
FY	(71,815)	(5,195)	54,673							
Prior	(75,000)	(8,539)	51,162							

		GAAP EPS		
	2015E	2016E	2017E	
1Q	(0.47)A	(0.03)	0.34	
2Q	(0.48)	(0.04)	0.39	
3Q	(0.51)	(0.03)	0.36	
4Q	(0.54)	(0.04)	0.40	
FY	(2.00)	(0.14)	1.49	
Prior	(1.98)	(0.22)	1 34	



Jason McCarthy, Ph.D. (212) 895-3556 jmccarthy@maximgrp.com

Radius Health, Inc.

Buv

Reports 1Q15: More Data Coming and Pipeline Expansion

Summary

- Radius reported 1Q15 with a net loss of \$17.1M or (\$0.47) per share. The
 company ended the quarter with \$243.1M in cash, which includes a successful
 public offering in January that netted Radius \$158.4M.
- Radius is well funded to drive abaloparatide-SC over the finish line, as well as support other pipeline programs, including RAD1901, for metastatic breast cancer (phase I, data coming end of May 2015 at ASCO), RAD1901 for vasomotor symptoms (phase IIb initiation likely in 2H15) and clinical advancement of an abaloparatide transdermal patch (update coming May 11, 2015)
- Radius continues to layer in the benefits of abalopartide-SC over Forteo, which
 already includes a better safety profile, longer anabolic window and improved
 BMD in bones where Forteo falls short (i.e. wrist, hip). Post-hoc data from the
 phase III ACTIVE study show, when compared to Forteo, a 72% reduction in
 wrist fractures. Remember, abaloparatide also achieved the highest reported
 reduction of vertebral fractures vs placeb (86%)
- The six month extension study data should be reported late Q2, keeping Radius on track to submit final 24-month fracture data for both NDA and MAA submissions in 2H15.
- Conclusion: We anticipate approval and launch of abaloparatide-SC by mid-2016. Final 24-month fracture data could continue to build valuation. Additionally, we anticipate positive data in metastatic breast cancer at ASCO which should help define a more clear development path.

Details

Building bone for osteoporosis. The only anabolic approved for osteoporosis is Forteo, a synthetic peptide of parathyroid hormone (PTH), teriparatide, which has a limited window of efficacy and side effects. Radius has developed a synthetic peptide of parathyroid hormone-related protein (PTHrP), abaloparatide-SC, a structurally similar peptide that drives a very different molecular outcome and may result in a potentially safer and more purely anabolic (bone building) therapeutic for osteoporosis.

Abaloparatide-SC beat Forteo in a Phase III study. The phase III ACTIVE study showed osteoporosis subjects treated with abaloparatide-SC (vs placebo) had an 86% reduction in vertebral fractures (0.58% fracture rate) compared to an 80% reduction (0.84% fracture rate) with Forteo (open-label, active control). An 86% reduction in vertebral fracture is the largest reduction ever reported vs placebo. Though, the difference in vertebral fracture reduction between abaloparatide and Forteo was not statistically significant, improvements in multiple secondary endpoints, including increased bone mineral density (BMD), non-vertebral fracture rate, time to fracture, and reduced hypercalcemia were. Most important, is that abaloparatide is building bone density and reducing fractures in bones where Forteo is not as efficacious (wrist, hip). An extension study (ACTIVExtend) should add the additional 6 months of fracture data (24 month total) for NDA and MAA submissions (2H15). We expect final fracture data to be announced late 2Q15. Abaloparatide could launch in mid-2016.

Valuation. We expect abaloparatide-SC to launch in 2016 in the U.S. and Europe. We apply risk cuts of 80% and 50% for RAD1901 in breast cancer and vasomotor symptoms, respectively, due to the early development stage. As data emerges for RAD1901 the risk could be reduced, adding upside to valuation. With the likelihood of abaloparatide approval, we apply a 15% discount rate to our free cash flow, discounted EPS, and sum-of-the-parts models, which points to a \$50.00 price target.

Radius Health Inc.: Income Statement (\$000)																	
Radius Health Inc.: YE December 31	3Q14A	4Q14A	2014A	1Q15A	2Q15E	3Q15E	4Q15E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E
Product sales																	
Abaloparatide-SC and TD (US)									79,498	148,820	203,139	266,193	301,449	337,960	375,762	398,934	487,913
Abaloparatide-SC and TD (EU, Royalties)									14,117	29,646	49,027	72,070	81,576	91,573	98,155	101,001	103,931
RAD1901 (Vasomotor symptoms)									-	-	-	-	29,994	89,408	156,812	261,052	343,494
RAD1901 (Breast cancer)													-	48,209	72,347	99,230	122,049
. , ,														-,	,-	,	
Total Product Sales	-	-	-	-	-	-	-	-	93,615	178,466	252,166	338,263	413,019	567,150	703,077	860,218	1,057,387
Expenses																	i
Cost of Goods Sold									23,404	44,616	57,998	67,653	82,604	102,087	112,492	129,033	158,608
%COGS									25%	25%	23%	20%	20%	18%	16%	15%	15%
Research and Development	13,817	11,567	45,719	11,559	12,500	13,000	13,500	50,559	53,087	55,741	58,528	61,455	58,382	55,463	52,690	50,055	47,553
%R&D										·		-		-	-		
General and Administrative	2,836	5,629	13,674	4,756	5,000	5,500	6,000	21,256	22,319	23,435	30,000	31,500	33,075	34,729	36,465	38,288	40,203
%SG&A										·		-		-	-		
Total expenses	16,653	17,196	59,393	16,315	17,500	18,500	19,500	71,815	98,809	123,792	146,527	160,607	174,061	192,279	201,647	217,376	246,363
Operating Income (Loss)	(16,653)	(17,196)	(59,393)	(16,315)	(17,500)	(18,500)	(19,500)	(71,815)	(5,195)	54,673	105,639	177,656	238,958	374,871	501,430	642,842	811,023
Other income (expense), net		(4)	(510)	(50)													
Loss on retirement of notepayable		-	(203)														
Interest income	35	52	94	105													i
Interest expense	(802)	(814)	(2,467)	(797)													
Total other income	(767)	(766)	(3,086)	(742)	-	-	-	-	-	-	-	-	-	-	-	-	
Pretax Income	(17,420)	(17,962)	(62,479)	(17,057)	(17,500)	(18,500)	(19,500)	(71,815)	(5,195)	54,673	105,639	177,656	238,958	374,871	501,430	642,842	811,023
Income Tax Benefit (Provision)	-	-	-	-	-		-	-	-	-	10,564	26,648	47,792	93,718	150,429	224,995	300,079
Tax Rate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	15%	20%	25%	30%	35%	37%
GAAP Net Income (loss)	(17,420)	(17,962)	(62,479)	(17,057)	(17,500)	(18,500)	(19,500)	(71,815)	(5,195)	54,673	95,076	151,007	191,166	281,153	351,001	417,847	510,945
Loss atributable to common Stock holders	(17,420)	(17,962)	(71,479)	(17,057)	(17,500)	(18,500)	(19,500)	(71,815)	(5,195)	54,673	95,076	151,007	191,166	281,153	351,001	417,847	510,945
Basic EPS	(0.59)	(0.55)	(4.04)	(0.47)	(0.48)	(0.51)	(0.54)	(2.00)	(0.14)	1.49	2.59	4.09	5.16	7.56	9.40	11.14	13.57
Diluted EPS	(0.59)	(0.55)	(4.04)	(0.47)	(0.48)	(0.51)	(0.54)	(1.98)	(0.14)	1.49	2.59	4.09	5.16	7.56	9.40	11.14	13.57
Wgtd Avg Shrs (bas) - '000s	29,746	32,678	17,699	36,269	36,305	36,342	36,378	36,323	36,469	36,615	36,762	36,909	37,057	37,205	37,354	37,504	37,654
Wgtd Avg Shrs (dil) - '000s	29,746	32,678	17,699	36,269	36,305	36,342	36,378	36,323	36,469	36,615	36,762	36,909	37,057	37,205	37,354	37,504	37,654

Source: Company reports and Maxim

Maxim Group LLC 2

DISCLOSURES

Radius Health, Inc. Rating History as of 05/05/2015





Maxim	Group LLC Ratings Distribution		As of: 05/05/15
		% of Coverage Universe with Rating	% of Rating for which Firm Provided Banking Services in the Last 12 months
Buy	Fundamental metrics and/or identifiable catalysts exist such that we expect the stock to outperform its relevant index over the next 12 months.	76%	43%
Hold	Fundamental metrics are currently at, or approaching, industry averages. Therefore, we expect this stock to neither significantly outperform nor underperform its relevant index over the next 12 months.	22%	12%
Sell	Fundamental metrics and/or identifiable catalysts exist such that we expect the stock to underperform its relevant index over the next 12 months.	2%	0%
	*See valuation section for company specific relevant indices		

I, Jason McCarthy, Ph.D., attest that the views expressed in this research report accurately reflect my personal views about the subject security and issuer. Furthermore, no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation or views expressed in this research report.

The research analyst(s) primarily responsible for the preparation of this research report have received compensation based upon various factors, including the firm's total revenues, a portion of which is generated by investment banking activities.

Maxim Group makes a market in Radius Health, Inc.

For Radius we use the BTK (Biotechnology) as the relative index

Valuation Methods

Our current assumption is for abaloparatide-SC approval and launch by 2016 in the US and Europe (with a partner). RAD1901 for both indications ins risk adjusted at 50% (hot flash) and 80% (BC) based on development stages. We apply a discount rate of 15% (given the likelihood of approval in osteoporosis) in our free cash flow, discounted EPS, and sum-of-the-parts model to arrive our price target.

Price Target and Investment Risks

Radius faces multiple risks including 1: Development: Radius may not be successful in developing products with therapeutic benefit 2) Regulatory: Radius faces regulatory risk. Products may not meet regulatory guidelines to gain approval. Additionally, the company may have to conduct additional clinical trials to gain approvals. 3) Financial: Radius is not a profitable company may have to raise capital prior to generating profitiability. 4)Commercial: Radius products (if approved) may not be successful in the market.

Maxim Group LLC 3

RISK RATINGS

Risk ratings take into account both fundamental criteria and price volatility.

Speculative – <u>Fundamental Criteria:</u> This is a risk rating assigned to early-stage companies with minimal to no revenues, lack of earnings, balance sheet concerns, and/or a short operating history. Accordingly, fundamental risk is expected to be significantly above the industry. <u>Price Volatility:</u> Because of the inherent fundamental criteria of the companies falling within this risk category, the price volatility is expected to be significant with the possibility that the investment could eventually be worthless. Speculative stocks may not be suitable for a significant class of individual investors.

High – <u>Fundamental Criteria:</u> This is a risk rating assigned to companies having below-average revenue and earnings visibility, negative cash flow, and low market cap or public float. Accordingly, fundamental risk is expected to be above the industry. <u>Price Volatility:</u> The price volatility of companies falling within this category is expected to be above the industry. High-risk stocks may not be suitable for a significant class of individual investors.

Medium – <u>Fundamental Criteria:</u> This is a risk rating assigned to companies that may have average revenue and earnings visibility, positive cash flow, and is fairly liquid. Accordingly, both price volatility and fundamental risk are expected to approximate the industry average.

Low – <u>Fundamental Criteria:</u> This is a risk rating assigned to companies that may have above-average revenue and earnings visibility, positive cash flow, and is fairly liquid. Accordingly, both price volatility and fundamental risk are expected to be below the industry.

DISCLAIMERS

Some companies that Maxim Group LLC follows are emerging growth companies whose securities typically involve a higher degree of risk and more volatility than the securities of more established companies. The securities discussed in Maxim Group LLC research reports may not be suitable for some investors. Investors must make their own determination as to the appropriateness of an investment in any securities referred to herein, based on their specific investment objectives, financial status and risk tolerance.

This communication is neither an offer to sell nor a solicitation of an offer to buy any securities mentioned herein. This publication is confidential for the information of the addressee only and may not be reproduced in whole or in part, copies circulated, or disclosed to another party, without the prior written consent of Maxim Group, LLC ("Maxim").

Information and opinions presented in this report have been obtained or derived from sources believed by Maxim to be reliable, but Maxim makes no representation as to their accuracy or completeness. The aforementioned sentence does not apply to the disclosures required by NASD Rule 2711. Maxim accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to Maxim. This report is not to be relied upon in substitution for the exercise of independent judgment. Maxim may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and Maxim is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by Maxim and are subject to change without notice. The price, value of and income from any of the securities mentioned in this report can fall as well as rise. The value of securities is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities. Investors in securities such as ADRs, the values of which are influenced by currency volatility, effectively assume this risk. Securities recommended, offered or sold by Maxim: (1) are not insured by the Federal Deposit Insurance Company; (2) are not deposits or other obligations of any insured depository institution; and (3) are subject to investment risks, including the possible loss of principal invested. Indeed, in the case of some investments, the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support these losses.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

Maxim Group LLC 4



Corporate Headquarters

The Chrysler Building 405 Lexington Ave., 2nd FL New York, NY 10174

Tel: 212-895-3500

Capital Markets/Syndicate: 212-895-3695

Corporate Finance: 212-895-3511

Equity/Options Trading: 212-895-3790

Equity Research: 212-895-3736

Event Driven/Risk Arb Group: 212-895-3878

Fixed Income Trading: 212-895-3875

Global Equity Trading: 212-895-3623

Institutional Sales: 212-895-3755

Institutional Sales Trading: 212-895-3873

Prime Brokerage: 212-895-3723

Wealth Management: 212-895-3624

Woodbury, Long Island

20 Crossways Park Drive North Suite 304 Woodbury, NY 11797

Tel: 516-393-8300

Red Bank, New Jersey

246 Maple Avenue Red Bank, NJ 07701

Tel: 732-784-1900

San Francisco Bay Area

3730 Mt. Diablo Blvd Suite 158

Lafayette, CA 94549

Tel: 415-762-0114

Boca Raton, Florida

7900 Glades Road

Suite 505

Boca Raton, FL 33434

Tel: 561-465-2605