Radius Health

Biotechnology

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US Equity Research
27 January 2015

BUY
unchanged

PRICE TARGET US$70.00
unchanged

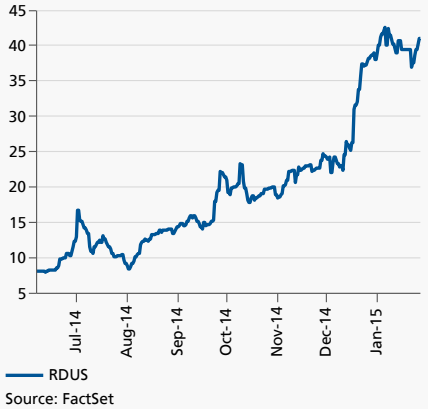
Price (27-Jan)	US$44.29
Ticker	RDUS-NASDAQ

52-Week Range (US$):	7.46 - 44.67
Avg Daily Vol (M) :	206.6
Shares Out. (M) :	29.7
Market Cap (US$M):	1,317

FYE Dec	2013A	2014E	2015E	2016E
Revenue (US$M)	0.0	0.0	0.0	82.1
EPS Adj&Dil (US$)	(3.97)	(54.05)	(3.06)	(1.52)

Quarterly Revenue	Q1	Q2	Q3	Q4
2013A	-	-	-	-
2014E	0.0A	0.0A	0.0A	0.0
2015E	0.0	0.0	0.0	0.0
2016E	-	-	-	-

Quarterly EPS Adj&Dil	Q1	Q2	Q3	Q4
2013A	-	-	-	-
2014E	(50.45)A	(2.22)A	(0.59)A	(0.79)
2015E	(0.68)	(0.88)	(0.75)	(0.75)
2016E	-	-	-	-



Source: FactSet

Radius is a biotechnology company focused on drugs for endocrine disorders, including osteoporosis.

Company Update

Abaloparatide sets high bar for success, strongly positioned vs. AMG-785

Forteo sales consistent despite Prolia entrance

IMS data for Forteo between 2011 to present showed no effect on the number of prescriptions after the introduction of Amgen's Prolia to treat high risk osteoporosis in Sept 2012, which we believe is mainly due to the lack of benefit in reducing vertebral (65% Forteo vs. 68% Prolia) and non-vertebral fractures (35% Forteo vs. 20% Prolia). Despite Prolia's benefits, such as easier route of administration (once every 6 months vs. daily Forteo injections) and positive hip fracture reduction claims, clinicians still continued to use Forteo, which we believe is mainly attributed to the lack of superior fracture reduction rates vs. the current standard of care.

ACTIVE trial establishes high bar for fracture reduction

The results of the ACTIVE trial demonstrated an 86% reduction in incident vertebral fractures for abaloparatide vs. placebo at 18 months, vs. 80% for Forteo, setting a difficult standard for competitors, in our view. We believe this will be a very high bar for AMG-785, and note that no data have yet been seen in severe osteoporosis patients.

Abaloparatide Ph 3 patients more severe vs. Ph 2 AMG 785

The Phase 3 ACTIVE trial for abaloparatide enrolled severe osteoporosis patients, versus non-osteoporosis patients for AMG 785 in Phase 2, making comparisons difficult. Importantly, the Abaloparatide Phase 3 study treated patients with severe osteoporosis with prior vertebral fractures, whereas Amgen's study excluded these patients. Despite the higher numerical bone mineral density (BMD) increase seen in the AMG 785 Phase 2 trial, we remind investors that these patients **did not have osteoporosis** (average T-score BMD ranged from -1.45 to -2.33), while the phase 3 ACTIVE trial only enrolled patients with severe osteoporosis (T-score ≤ -2.5) and a history of fractures, making a comparison between the two products premature.

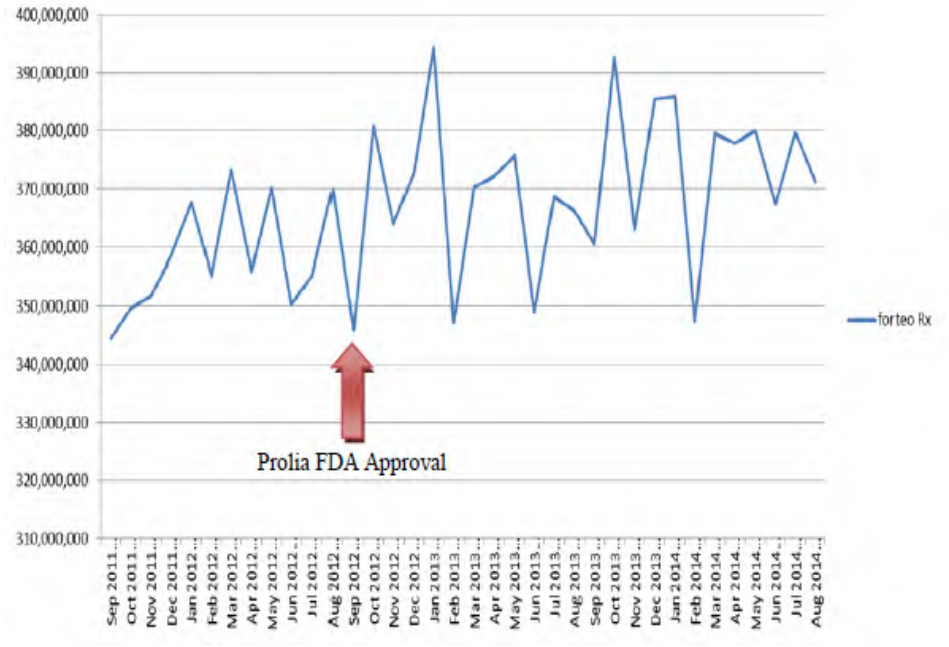
AMG-785 phase 3 data expected mid-H16, RDUS in lead

Phase 3 data for AMG-785 is expected by mid-2016, which will include osteoporosis patients with T-score ≤ -2.5 and history of fractures, similar to the ACTIVE trial. Therefore, it is important to note that although significant BMD increases were seen with AMG-785, the results may not be reproduced in more severe patients in Phase 3. Importantly, no BMD or fracture data have been seen in severe osteoporosis patients for AMG-785 to date. We expect Radius to be close to FDA approval by the time AMG-785 data are presented in mid-2016, giving them a commercial advantage.

Forteo sales consistent despite Prolia entrance, read-through to abaloparatide vs AMG-785

Amgen's Prolia commercialization had virtually no effect on Forteo prescriptions based on revenues and IMS sales, suggesting read-through to abaloparatide when AMG-785 may be introduced. From the figure below, the approval of Prolia in September 2012 showed minimal impact in changing physician-prescribing patterns for Forteo, which we believe is mainly due to minimal perceived benefit by physicians over original recombinant parathyroid hormone. Additionally, we do not believe the lack of effect on Forteo prescriptions is due to the use of Forteo and Prolia in combination, as demonstrated by the DATA trial showing positive BMD increase in lumbar spine, femoral-neck, and total hip with the combination arm, since this data was not published until mid-2013, and fracture data are not yet available (Tsai J et al. *Lancet*. 2013).

Figure 1: Forteo prescriptions remain unaffected after the introduction of Prolia



Source: Canaccord Genuity estimates, IMS database

Prolia showed similar vertebral fracture, poorer non-vertebral fracture vs. Forteo

Although there are no randomized, head-to-head studies between Forteo and Prolia, Prolia showed similar vertebral fracture reduction, and less effective non-vertebral fracture reduction vs. Forteo. This may explain why Prolia had minimal effect on Forteo revenues (Figure 2). When compared to 36 month treatment with Prolia vs. 18-23 month treatment with Forteo, historical values show only a modest benefit in the relative risk reduction of new vertebral fractures with Prolia (68% Prolia vs. 65% Forteo), and a significantly decreased benefit in reducing non-vertebral fractures (35% Forteo vs. 20% Prolia). We believe physicians were not inclined to switch patients off of Forteo due to the lack of benefit, especially in the markedly low benefit in reducing non-vertebral fractures.

Figure 2: Historical data between Forteo and Prolia, ACTIVE trial results

	Forteo (18-23 month tx)	Prolia (36 months tx)	Abaloparatide (ACTIVE) - (18 month tx)	Forteo (ACTIVE) - (18 month tx)
Incidence of new vertebral fractures	5.0%	2.3%	0.7%	1.0%
Absolue risk reduction of new vertebral fractures	9.3%	4.8%		
Relative risk reduction of new vertebral fractures	65.0%	68.0%	86.0%	80.0%
Incidence of non-vertebral fractures	6.3%	6.1%		
Absolute risk reduction of non-vertebral fractures	2.9%	1.5%		
Relative risk reduction of non-vertebral fractures	35.0%	20.0%	43.0%	28.0%
Absolute risk reduction in hip fracture		0.3%		
Relative risk reduction in hip fracture		40.0%		
BMD lumbar spine increase from baseline	10.0%	9.4%	9.2%	9.1%
BMD femoral neck increase from baseline	3.0%	4.4%	2.9%	2.2%
BMD radius increase from baseline	no change	-		
BMD total hip increase from baseline		5.0%	3.4%	2.8%

Source: Canaccord Genuity estimates, Lancet, Radius 10K report, NEJM

Prolia's hip fracture claim and twice yearly dosing did not affect Forteo revenues

Despite a claim for hip fracture reduction (~40%), and once every 6-month dosing vs. once daily for Forteo, Prolia did not have an effect on Forteo revenues. We believe this may suggest a similar outcome for abaloparatide vs. AMG-785, which is dosed once monthly with three injections in a physician's office. Importantly, abaloparatide dosing may improve over the long term, given that the company is developing a microneedle subcutaneous patch formulation, although early in development.

Abaloparatide 86% vertebral fracture reduction high bar for competitors

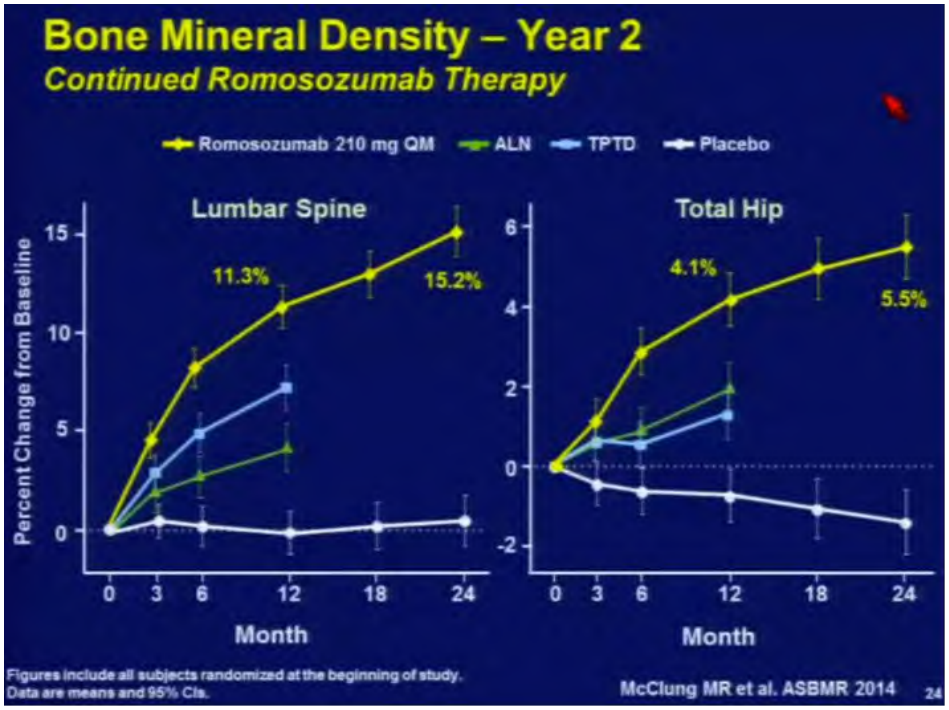
Abaloparatide demonstrated an 86% reduction in new vertebral fractures vs. placebo compared to 80% in the Forteo group in the Phase 3 ACTIVE trial, which we believe sets a high bar for success for competitors entering the space. Additionally, there was a significantly improved relative risk reduction in the non-vertebral fracture endpoint. Although the study did not have enough patients to directly compare the two arms, we believe this benefit is numerically significant and may be key for physicians when comparing and prescribing injectable osteoporosis therapies. We remind investors that these osteoporosis patients are at high risk for fractures and failed oral therapy. Therefore, we believe physicians will do whatever it takes to prevent new fractures for their patients, since the high cost and detriment of hospitalization after a fall is viewed unfavorably by medical practitioners.

Amgen competition manageable, key differences in trial design between AMG 785 and ACTIVE trial

Amgen's Phase 2 trial enrolled healthier patients vs. the Phase 3 ACTIVE trial for abaloparatide, making comparisons less meaningful. **The Phase 2 romosozumab trial enrolled non-osteoporosis patients with low BMD,** whereas the Phase 3 ACTIVE trial for abaloparatide enrolled patients with severe osteoporosis. Therefore the apparent higher BMD for AMG-785 vs Forteo cannot be directly compared to the ACTIVE trial because ACTIVE involved severe osteoporosis, whereas AMG-785 involved non-osteoporosis patients. Figure 3 shows the improved BMD increase with AMG-785 BMD data vs. Forteo in non-osteoporosis patients. Figure 4 is a compilation of Amgen's anti-sclerotin inhibitor romosozuamb in Phase 2, Merck's cathepsin K inhibitor odanacatib in Phase 3, and the results from the current Phase 3 ACTIVE trial with Abaloparatide and Forteo with respect to BMD in total spine, hip, and femoral neck. Again, please note that despite the higher BMD seen with 785 vs. Abaloparatide, the data for AMG-785 were in **non-osteoporosis patients versus** severe osteoporosis for abaloparatide.

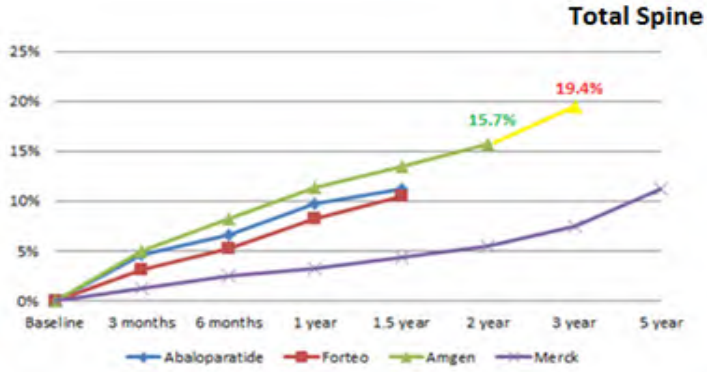
Importantly, the ACTIVE trial enrolled only patients with severe osteoporosis who, in addition to having low BMD T-score of ≤ -2.5, also included patients with radiological evidence of lumbar or thoracic vertebral fractures. The Phase 2 trial with AMG 785 only enrolled patients with low BMD, but was not severe enough to be diagnosed with osteoporosis (patient average BMD score of only –2 – -2.3). Also, **the Phase 2 AMG-785 trial excluded patients with any history of vertebral fractures or fragility fracture of the wrist, humerus, hip, or pelvis, whereas the Phase 3 abaloparatide ACTIVE trial did not**. Therefore, it is premature to make comparisons between the two studies since the ACTIVE trial treated patients in poorer condition.

Figure 3: AMG785 vs. Forteo in lumbar and hip BMD in Phase 2 study – non-osteoporosis patients



Source: ASBMR 2014

Figure 4: Total Spine BMD change

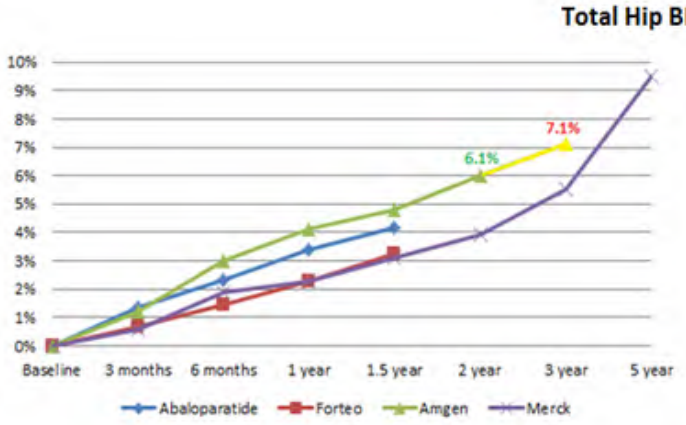


ACTIVE Trial	Abaloparatide	Forteo	Amgen	Merck
Baseline	0%	0%	0%	0%
3 months	4.6%	3.2%	5%	1.2%
6 months	6.6%	5.3%	8.2%	2.5%
1 year	9.8%	8.3%	11.4%	3.2%
1.5 year	11.2%	10.5%	-	-
2 year	-	-	15.7%	5.5%
3 year	-	-	19.4%	7.5%
5 year	-	-	-	11.2%

Abaloparatide – Phase 3, Severe Osteoporosis
Forteo – Phase 3, Severe osteoporosis
Amgen's Romosozumab – Phase 2, Non-Osteoporosis
Merck's Odanacatib – Phase 3, Osteoporosis

Source: ACTIVE trial, Amgen and Merck Corporate presentation

Figure 5: Total hip BMD change

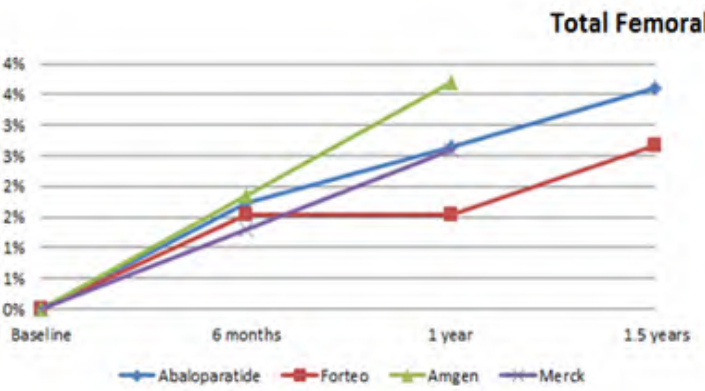


ACTIVE Trial	Abaloparatide	Forteo	Amgen	Merck
Baseline	0%	0%	0%	0%
3 months	1.4%	0.7%	1.2%	0.6%
6 months	2.3%	1.4%	3%	1.9%
1 year	3.4%	2.3%	4.1%	2.3%
1.5 year	4.2%	3.3%	-	-
2 year	-	-	6.1%	3.9%
3 year	-	-	7.1%	5.5%
5 year	-	-	-	9.5%

Abaloparatide – Phase 3, Severe Osteoporosis
Forteo – Phase 3, Severe osteoporosis
Amgen's Romosozumab – Phase 2, Non-Osteoporosis
Merck's Odanacatib – Phase 3, Osteoporosis

Source: ACTIVE trial, Amgen and Merck Corporate presentation

Figure 6: Total femoral neck BMD change



ACTIVE Trial	Abaloparatide	Forteo	Amgen	Merck
Baseline	0%	0%	0%	0%
6 months	1.7%	1.5%	2%	1%
1 year	2.7%	1.5%	3.7%	2.6%
1.5 years	3.6%	2.7%	-	-

Abaloparatide – Phase 3, Severe Osteoporosis
Forteo – Phase 3, Severe Osteoporosis
Amgen's Romosozumab – Phase 2, Non-Osteoporosis
Merck's Odanacatib – Phase 3, Osteoporosis

Source: ACTIVE trial, Amgen and Merck Corporate presentation

Expect Phase 3 data for AMG-785 by 1H16, Abaloparatide in lead

Amgen is currently running three Phase 3 clinical studies with AMG 785 in different patient populations. Figure 7 below is a compilation between the Radius ACTIVE and ACTIVExtend trials and Amgen's FRAME, STRUCTURE, and ARCH trials. We believe that despite the larger patient population in Amgen's studies, Abaloparatide is still in the lead because of better numerical vertebral and non-vertebral fracture differences vs. Forteo in severe osteoporosis. Importantly, no bone mineral density or fracture data have been seen to date for AMG-785 in severe osteoporosis patients.

In the FRAME trial, Amgen will be enrolling 7,180 postmenopausal women to receive either AMG 785 or placebo for 12 months, followed by Prolia for 24 months. This trial does enroll osteoporosis patients, unlike the Phase 2 trial which did not, but the FRAME trial **excludes severe osteoporosis patients** (patients with a history of fracture). We believe that physicians will be more likely to use AMG-785 in moderate osteoporosis patients vs severe, due to the trial design. Given that the Phase 3 trial for abaloparatide involved severe osteoporosis patients, we believe AG-785 and abaloparatide will be used in separate patient populations, preserving the commercial opportunity for abaloparatide.

The ARCH trial, will enroll 4,000 patients, randomized to AMG785 or AMG 785 + alendronate, for 12 months, followed by alendronate for an additional 12 months. The trial will enroll postmenopausal patients with severe osteoporosis, but will not include a Forteo comparator arm, unlike the ACTIVE, which did include an active Forteo arm.

Finally, the STRUCTURE trial will be comparing AMG 785 vs. Forteo for 12 months duration in postmenopausal patients with severe osteoporosis, similar to the ACTIVE trial. However, this trial will only enroll 436 patients, likely too small to show a difference in vertebral fractures. Rather, the primary and secondary outcomes are only BMD changes at the hip in 6 and 12 months.

In conclusion, even though Amgen will have trials in severe osteoporosis patients, they lack a trial that compares vertebral and non-vertebral fracture rates of AMG785 against standard of care Forteo. Therefore, as the totality of data rolls out by 1H16 from the three Amgen trials, we believe physicians will still regard abaloparatide data as more relevant for severe osteoporosis patients based on Phase 3 fracture data from the ACTIVE study.

Figure 7: Comparison of current Phase 3 trials in Osteoporosis - Radius vs. Amgen

Trial	Patients	Intervention	Inclusion criteria	Primary Endpoint	Secondary Endpoint
ACTIVE	2463	A – Placebo B – Abaloparatide C – Teriparatide (18 mon f/u)	(Postmenopausal severe osteoporosis pts) 1. Postmenopausal women 2. BMD ≤ -2.5 and >-5 @ lumbar spine or femoral neck + 2 or more mild or one or more moderate lumbar or thoracic vertebral fractures or history of low trauma to forearm, humerus, sacral, pelvis, hip, femoral, or tibial fractures	New vertebral fractures	1. BMD of lumbar, spine, hip, and femoral neck 2. Non-vertebral fractures 3. Hypercalcemic events
ACTIVExtend	1200	18 mon of abaloparatide or placebo followed by 6 mon of alendronate	Subjects enrolled, randomized to either abaloparatide or placebo arm, and successfully completed the ACTIVE trial	Safety (6 mon)	1. Vertebral fracture incidence 2. Non-vertebral fracture incidence
FRAME	7180	A – AMG 785 x 12 mon, then Prolia x 24 mon B – placebo x 12 mon, then Prolia x 24 mon	Postmenopausal women with osteoporosis Exclude severe osteoporosis	Vertebral fracture (12 and 24 mon)	1. Fracture incidence 2. BMD change (12 and 24 mon)
STRUCTURE	436	A – AMG 785 x 12 mon B – Forteo x 12 mon	Postmenopausal severe osteoporosis patients 1. BMD ≤ -2.5 at lumbar, hip or femoral neck 2. hx of fracture	1. BMD change at hip in 12 mon	Percent change from baseline in BMD, cortical BMD, and integral BMD in total hip @ 6 and 12 mon
ARCH	4000	A – AMG 785 x 12 mon, then alendronate x 12 mon B – AMG785 + alendronate x 12 mon, then alendronate x 12 mon	Postmenopausal severe osteoporosis patients BMD ≤ -2.5 and vertebral or BMD ≤ -2.5 and recent hip fracture or vertebral fracture	1. Incidence of clinical fracture @ 24 mon 2. Incidence of new vertebral fracture	1. Incidence of fracture (12 mon) 2. BMD change (12, 24, and 36 mon) 3. Incidence of fracture (24 mon)

Source: Clinicaltrials.gov

Correlation between BMD and fracture risk reduction variable

Prior studies in postmenopausal women have shown a variable correlation between increasing bone mineral density (BMD) and reducing fracture rates. In accordance with the thought process by Cefalu and colleagues, we believe BMD is only one of many contributors to bone strength and fracture risk reduction, along with bone quality, density, and turnover (Cefalu C et al. *Curr Med Res Opin*. 2004). Although studies have proven that decreasing BMD can increase the risk of fracture, the inverse relationship is not as clear (Marshall D et al. *BMJ*. 1996).

The table below shows that change in spinal bone mineral density as well as fracture risks in major postmenopausal osteoporosis trials with various agents. Risedronate and alendronate reduced vertebral fracture risks significantly, with 41-49% fracture risk reduction in the vertebral site and 33-39% in the non-vertebral sites, despite only slightly greater increases in spine BMD. In contrast, the FIT-absent trial with Aldendronate demonstrated the highest spine BMD increase of 6.8%, but only achieved a moderate 44% vertebral and a 20% non-vertebral fracture reduction.

Additionally, the correlation between the size of BMD increase and the reduction of fracture risk is also not well substantiated, as small increases in BMD led to significant radiographic reductions in fracture rates in the FIT trial (Black DM. *Lancet.* 1996). In this trial, the changes in BMD from alendronate therapy in the spine, hip, and forearm was marginal at best, but the observed reductions in fracture rates were 55%, 51%, and 48%, respectively, which we believe is very significant and not justified by BMD changes alone. Also, changes in BMD and timing of fracture risk reduction are not coincided, as demonstrated by the VERT-NA trial. In this trial, risedronate demonstrated a rapid increase in BMD (~3% increase from baseline) and a significant decrease in vertebral fracture risk (~65%), but this correlation stopped after 1 year despite continued increase in BMD (Harris ST et al. *JAMA*. 1992).

We believe the correlation between fracture risk and BMD increase is variable and expect other elements, including bone integrity, turnover, and density to also play a role. Therefore, we do not suggest investors give significant weight to the higher BMD increase seen in Amgen's AMG 785 as a sign of superiority over Abaloparatide. In our opinion, investors should wait for Amgen to present Phase 3 Romosozumab's vertebral and non-vertebral fracture data in severe osteoporosis patients in order to gauge commercial positioning of abaloparatide.

Figure 8: Change in spinal BMD and fracture risks in major osteoporosis trials

Study (duration)	Drug	Outcomes		
		Spine BMD increase	Fracture risk reductions	
			Vertebral	Non-vertebral
VERT-NA (3 yrs)	Risedronate	4.3%	41% (P – 0.003)	39% (P – 0.02)
VERT-MN (3 yrs)	Risedronate	5.9%	49% (P < 0.001)	33% (P – 0.06)
FIT-prevalent (3 yrs)	Alendronate	6.2%	47% (P < 0.001)	12% (P – 0.13)
FIT-absent (4 yrs)	Aldendronate	6.8%	44% (P – 0.002)	20% (P – 0.06)
MORE (3 yrs)	Raloxifene	2.6%	50% (P < 0.05)	10% (P – 0.24)
PROOF (5 yrs)	Salmon calcitonin	0.6%	33% (P – 0.03)	12% (NS)

Source: Cefalu C et al. *Curr Med Res Opin*. 2004

Figure 9: RDUS income statement

Revenues	2013A	1Q14A	2Q14A	3Q14A	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
abaloparatide - US								82,120	239,867	357,419	465,944	583,042
abaloparatide - Ex-US								-	90,548	204,751	251,503	298,717
Total								**82,120**	**330,415**	**562,170**	**717,447**	**881,759**
Income Statement	**2013A**	**1Q14A**	**2Q14A**	**3Q14A**	**4Q14E**	**2014E**	**2015E**	**2016E**	**2017E**	**2018E**	**2019E**	**2020E**
Total Revenue	-	-	-	-	-	-	-	82,120	264,315	457,747	594,210	738,375
COGS	-	-	-	-	-	-	-	16,424	52,863	91,549	118,842	147,675
Gross Profit	-	-	-	-	-	-	-	65,696	211,452	366,198	475,368	590,700
Operating Expenses												
Research and development	60,536	9,717	10,618	13,817	14,926	49,078	74,464	59,354	55,796	65,122	84,196	117,620
abaloparatide-SC	45,977	8,107	9,728	10,132	12,158	40,126	27,052	18,937	13,256	13,256	13,256	13,256
abaloparatide-TD	11,459	185	278	523	785	1,770	31,380	21,966	15,376	10,763	7,534	5,274
RAD1901	-	-		1,027	1,000	2,027	12,100	14,520	23,232	37,171	59,474	95,158
RAD140	-	-				-	-					
other	3,100	1,425	1,710	819	983	4,937	3,932	3,932	3,932	3,932	3,932	3,932
General and administrative	6,829	2,139	3,070	2,836	2,700	10,745	13,200	57,484	85,902	102,993	133,697	166,134
Total Operating Expense	67,365	11,856	13,688	16,653	17,626	59,823	87,664	116,838	141,698	168,115	217,893	283,754
EBITDA												
Operating income	(67,365)	(11,856)	(13,688)	(16,653)	(17,626)	(59,823)	(87,664)	(51,142)	69,754	198,083	257,475	306,946
Other income (expense), net	9,085	(2,233)	1,727	(802)	(802)	(2,110)	(5,824)	(2,110)	(5,824)	(2,110)	(5,824)	(2,110)
Loss on retirement of note payable			(203)									
Interest (expense) income, net	(2,410)	(399)	(445)	24	24	(796)	(1,544)	(796)	(1,544)	(796)	(1,544)	(796)
Accretion of preferred stock		(4,969)	(4,031)									
Pre-tax income (GAAP)	(60,690)	(19,457)	(16,640)	(17,431)	(18,404)	(71,932)	(95,032)	(54,048)	62,386	195,177	250,107	304,040
Pre-tax income (non-GAAP)												
Taxes (GAAP)	-	-	-	-	-	-	-	-	23,083	72,215	92,540	112,495
Tax rate (GAAP)	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%
Net Income (GAAP)	(60,690)	(19,457)	(16,640)	(17,431)	(18,404)	(71,932)	(95,032)	(54,048)	39,303	122,961	157,568	191,545
GAAP EPS (diluted)	**($3.97)**	**($50.45)**	**($2.22)**	**($0.59)**	**($0.79)**	**($54.05)**	**($3.06)**	**($1.52)**	**$1.05**	**$3.14**	**$3.83**	**$4.43**
Diluted shares outstanding	15,278	386	7,500	29,746	23,200	15,208	31,539	35,562	37,340	39,207	41,167	43,226

Source: Canaccord Genuity Estimates

Figure 10: RDUS valuation

Product	Peak Sales ($MM)	Year	NPV at launch	Estimated launch	Time to launch	Probability Adjustment	Current Value ($MM)	Scenario probability	Value / Share (NPV)	Value / Share (EV/Sales)
abaloparatide										
US	$822	2022	$1,364	6/1/2016	1.3	85%	$955	100%	$33	$47
Ex-US - co-promote	$346	2021	$429	1/1/2017	1.9	85%	$268	50%	$5	$11
Ex-US - royalty	$346	2021	$201	1/1/2017	1.9	85%	$138	50%	$2	$11
Total abaloparatide							**$1,224**		**$40**	**$69**
RAD-1901										
US	$467	2023	$670			35%	$234		$8	$10
Ex-US	$427	2023	$188			35%	$66		$0	$9
Total RAD-1901							**$300**		**$8**	**$19**
Total Product Value							$1,224		$48	$87
Cash							70		$2	$2
Total Equity Value							**1,294**		**$50**	**$90**
Shares Outstanding (MM)							29			
									Average	$70

Risk-Free Rate	3.0%
Beta	1.8
Risk Premium	5%
Discount Rate	12%
EV/Sales	4.25

Source: Canaccord Genuity Estimates

Appendix: Important Disclosures

Analyst Certification

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Target Price / Valuation Methodology:

Radius Health - RDUS

Our $70 price target is based on the average of our probability adjusted NPV and EV/S methodologies.

Risks to achieving Target Price / Valuation:

Radius Health - RDUS

Risks to our outlook and price target include the following: the Phase 3 study for abaloparatide in osteoporosis may be negative, or fail to meet investor expectations, resulting in downside to shares and our price target. Also, Phase 3 data may be positive in terms of efficacy, but show an unexpected safety signal, also resulting in downside to our price target. Antibody formation was been seen in Phase 2 studies, with one patient showing potential evidence of neutralizing antibodies. Even assuming positive Phase 3 data for subcutaneous abaloparatide in osteoporosis, FDA approval may be delayed or may not occur at all, also resulting in downside to shares and our price target. FDA may also grant approval, but require large, lengthy and expensive post-approval studies, which could also result in downside to shares and our price target. Clinical data from other osteoporosis products including anti-sclerostin antibodies from Amgen, Merck, Eli Lilly and Novartis could be viewed as superior to abaloparatide, pressuring shares. Competition from existing and new osteoporosis products could also result in lower revenues that expected, leading to downside to our estimates and the share price. Although unlikely, a paragraph 4 challenge could be filed against Lilly's Forteo, a molecule closely related to abaloparatide, which investors may interpret as increasing risk for abaloparatide, and pressuring Radius shares. Forteo was approved as an NDA, where the ANDA pathway is well established. Even though Forteo is essentially a biologic, since it is a peptide, it is feasible although unlikely that a generic challenger could emerge. FDA has approved a generic version of Lovenox, a biologic approved via the NDA pathway, although the process took many years. If a generic version of Forteo were to reach the market, usage of abaloparatide could decline, resulting in downside to our estimates and price target. Also, if FDA were to approve a generic version of Copaxone, a peptide used to treat multiple sclerosis, investors may see increased risk of a generic challenge and approval for abaloparatide, as both products are classified as NDA filings for biologic peptides. A transdermal microneedle formulation for abaloparatide may not be feasible, which investors may view as negative for life cycle management and commercial competitive positioning for Radius, pressuring shares. Even if a microneedle formulation can be developed to show equal efficacy to the subcutaneous formulation, FDA may require a full clinical study versus a bridging study, which would require additional funding and time to approval.

Distribution of Ratings:

Global Stock Ratings (as of 01/27/15)

Rating	Coverage Universe		IB Clients
	#	%	%
Buy	632	58.30%	31.17%
Hold	353	32.56%	13.60%
Sell	51	4.70%	1.96%
Speculative Buy	48	4.43%	60.42%
	1084*	100.0%	

*Total includes stocks that are Under Review

Canaccord Genuity Ratings System

BUY: The stock is expected to generate risk-adjusted returns of over 10% during the next 12 months.

HOLD: The stock is expected to generate risk-adjusted returns of 0-10% during the next 12 months.

SELL: The stock is expected to generate negative risk-adjusted returns during the next 12 months.

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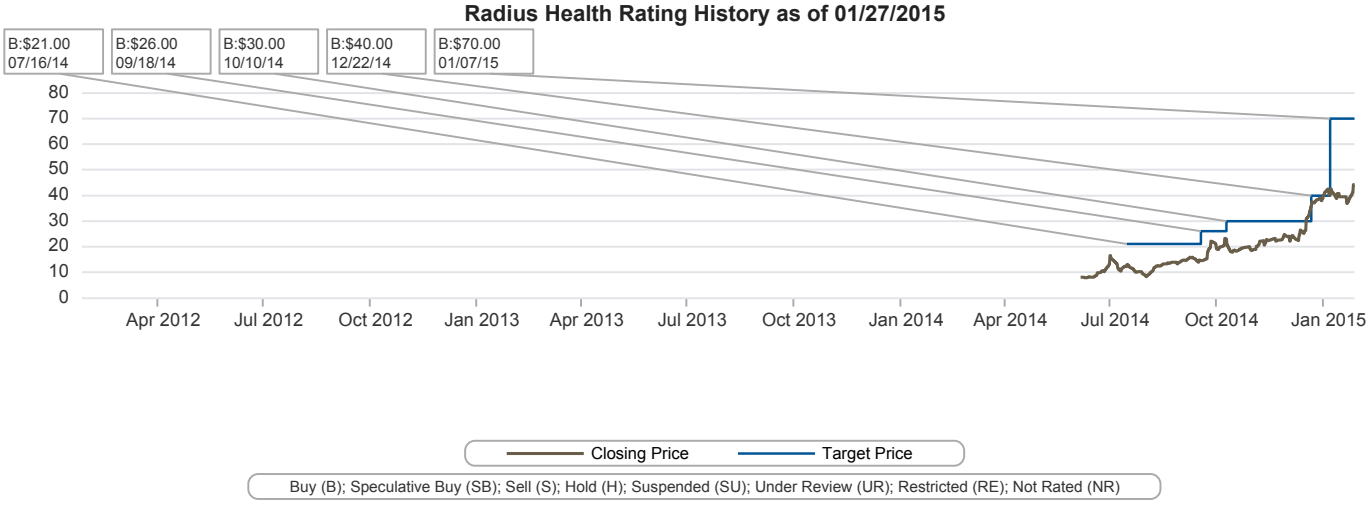
Radius Health Rating History as of 01/27/2015



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