

Reason for report:

## EARNINGS

## ALDER BIOPHARMACEUTICALS, INC.

## Updating Our Model for 1Q14 EPS; ALD403 On Track

• **Bottom Line:** We are updating our model to reflect reported 1Q14 results. ALDR's revenue of \$4.8MM and net loss of (\$5.4MM) were in-line with our expectations; EPS of (\$5.38) differed from our estimate of (\$0.25) due to the effective number of shares outstanding in 1Q14 when ALDR was a private company. ALDR's lead program ALD403, which we believe is a game-changer in migraine prophylaxis remains on track to enter Phase IIb in 2H14. **Reiterate OP and \$26 PT in 12 Months.**

• **Entering a Phase IIb in 2H14, ALD403 has the potential to transform the migraine prevention treatment paradigm, in our view.** ALD403 is a MAb with specificity to Calcitonin-Receptor-Like Receptor 1 (CGRP), a validated target involved in migraine pathogenesis. Currently available abortive and prophylactic migraine treatments are poorly tolerated in some and fall short of controlling headaches in most chronic/episodic migraine patients, according to MEDACorp KOLs. In any given month during the ALD403 Ph. IIa, ~75-77%, 45-53% and 27-40% of treated-patients showed a 50%, 75% and 100% reduction in migraine days respectively, when compared to the untreated baseline period.

• **In our recent survey of 51 neurologists (LINK), we were surprised that physicians painted an incrementally more positive picture of '403 than LLY's (OP) anti-CGRP product LY295.** Physicians ranked ALD403 as slightly better than LY295 on dosing frequency, safety and efficacy, and ranked the drugs as nearly equally attractive on route of administration. 1 year, 2 years, and 3 years after approval, physicians project that, of their patients who are candidates for migraine prophylaxis, ~12%, ~16%, and ~21% will be receiving ALD403 with like percentages for LY295. We expect that the ability to obtain reimbursement is likely to be the gating factor as to whether or not these penetration estimates are achieved, although we view the pharmacoeconomics of migraine as conducive to strong uptake with anti-CGRP pricing on par with MAb's such as Eylea and Lucentis (wet AMD).

• **Clazakizumab Psoriatic Arthritis data expected in 2H14, while results from a second Phase IIb in Rheumatoid Arthritis (RA) are now expected in 1H15** (from by YE14 previously). ALDR stands to earn a \$40MM milestone from BMY (OP) if/when Clazakizumab is advanced into Phase III. In a previous, successful Phase IIb, ALDR/BMY's Clazakizumab demonstrated comparable efficacy to ABBV's Humira on the ACR20 and numerical superiority on the das28 remission scale, the latter of which MEDACorp KOLs believe is a more clinically relevant measure of RA disease control. This trial compared Clazakizumab every 4 weeks versus Humira every 2 weeks, showing that Claza administered half as often is on par with the RA standard-of-care. Clazakizumab Phase II studies have yet to show a linear dose response relationship, however; so BMY is currently running an additional low dose ranging Phase IIb.

## Key Stats:

(NASDAQ:ALDR)

<b>S&amp;P 600 Health Care Index:</b>	<b>1,308.41</b>
<b>Price:</b>	<b>\$17.68</b>
Price Target:	\$26.00
Methodology:	Sum-of-the-parts DCF analysis, 12% discount rate, 2.5% terminal growth
52 Week High:	\$22.95
52 Week Low:	\$9.50
Shares Outstanding (mil):	34.2
Market Capitalization (mil):	\$604.7
Cash Per Share:	\$2.40
Dividend (ann):	\$0.00
Dividend Yield:	0.0%
Est LT EPS Growth:	NA



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	P/E
2013A	--	--	--	--	18.8	--	--	--	--	( 3.84)	NM
2014E - New	4.8A	4.8	4.8	4.8	19.0	( 5.38)A	( 0.19)	( 0.23)	( 0.29)	( 1.17)	NM
2014E - Old	4.8A	4.8	4.8	4.8	19.0	( 0.25)	( 0.22)	( 0.23)	( 0.29)	( 0.99)	NM
2015E	3.0	3.0	5.0	5.0	16.0	( 0.46)	( 0.54)	( 0.52)	( 0.57)	( 2.09)	NM

Source: Company Information and Leerink Partners LLC Research

Revenues in \$MM; GAAP EPS presented; EPS estimates reflect the ALDR 5.7.14 IPO.

## INVESTMENT THESIS

We Rate ALDR Share Outperform. Alder Biopharmaceuticals is developing two proprietary monoclonal antibodies ALD403 and Clazakizumab with affinity to validated targets for migraine prophylaxis (anti-Calcitonin Gene Related Peptide [CGRP]) and rheumatoid arthritis (anti-Interleukin-6 [IL-6]). ALDR's discovery platform is differentiated by its unique yeast-based manufacturing technology MabXpress, which we believe could enable a more efficient generation of monoclonal antibody therapeutics, potentially leading to higher yields, economies of scale and therefore pricing flexibility and/or a lower COGS margin. The commercial potential of ALDR's approach has been validated by Bristol-Myers Squibb, who has agreed to financially support the development of Clazakizumab and pay ALDR up to ~\$1.3B in milestones and royalties up to 20% on product sales. Lead product ALD403 recently produced "Breakthrough Therapy-like" Phase IIa data in high frequency migraine patients, where just a single dose of '403 precipitated a 75% reduction in migraine days in 32% of patients and an 100% reduction in migraine days in 16% of patients over the course of a 12-week study. ALD403 is now moving into a dose-ranging Phase IIb trial which we expect will support the advancement into two pivotal Phase IIIs. Data from a second Clazakizumab Phase IIb study is anticipated at the American College of Rheumatology (11/14-19), and a first Phase IIb dose ranging study showed comparable efficacy to blockbuster anti-TNF Humira on the ACR20/50/70 and a numerical trend towards superiority on the das28 remission score, which MEDACorp KOLs, with whom we spoke, view as most clinically significant. We expect ALDR shares to appreciate as both clinical and regulatory catalysts are realized for Clazakizumab and '403, and expect ALDR to move at least 1 new monoclonal antibody into the clinic in 2015, which currently presents upside to our valuation.

## VALUATION

We derive a \$26 price target for ALDR shares in 12 months, which assigns ~\$14/share to ALD403, ~\$8/share to Clazakizumab, ~\$1/share to the pipeline and the rest to net cash. We model peak gross ALD403 US revenues of \$1.25bn (~\$750MM risk adjusted, using a 60% probability of approval) in 2025. We assume peak ex-US risk-adjusted sales of ~\$340MM (2025), on which ALDR gets ~\$50MM in royalties. We model peak gross WW Clazakizumab revenues of ~\$550MM (~\$275MM risk adjusted, using a 50% probability of approval) in 2023, translating into ~\$46MM in royalties to ALDR. Based on a 60% approval probability for ALD403 and 50% for Clazakizumab and using a discount rate of 12% and a terminal growth rate of 2.5%, both of which we believe our conservative relative to ALDR's biotechnology peers, we derive an ALDR NPV of ~\$880M for ALDR.

## RISKS TO VALUATION

Risks to our valuation include delays in the clinical trial and approval process for either ALD403 or Clazakizumab. Delays in the approval process could generate increased competition from agents which benefit from the first mover advantage. ALDR is eligible to receive milestone payments of \$1.3B in the future of which we project \$40MM will be received in 2015. We, however, also anticipate the need for outside financing in the future which could present a risk to our price target.

Alder P&L (\$MM except EPS)	2012	2013	1Q14	2Q14E	3Q14E	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	2016E	2017E
ALD403 US Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALD403 Ex-US Royalties/Miles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Clazakizumab Royalties	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Clazakizumab Milestones	20.1	18.8	4.8	4.8	4.8	4.8	19.0	3.0	3.0	5.0	5.0	16.0	30.0	20.0
Other Collaborations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipeline	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Revenues</b>	<b>20.1</b>	<b>18.8</b>	<b>4.8</b>	<b>4.8</b>	<b>4.8</b>	<b>4.8</b>	<b>19.0</b>	<b>3.0</b>	<b>3.0</b>	<b>5.0</b>	<b>5.0</b>	<b>16.0</b>	<b>30.0</b>	<b>20.0</b>
Cost of Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Profit	20.1	18.8	4.8	4.8	4.8	4.8	19.0	3.0	3.0	5.0	5.0	16.0	30.0	20.0
R&D	30.7	31.9	7.0	8.0	9.5	11.0	35.5	14.0	16.0	17.0	18.0	65.0	74.8	86.0
SG&A	7.2	7.7	3.2	3.0	2.8	3.0	12.0	4.0	4.5	5.0	5.5	19.0	25.0	45.0
Operating Expenses	37.9	39.6	10.2	11.0	12.3	14.0	47.5	18.0	20.5	22.0	23.5	84.0	99.8	131.0
Operating Income	(17.8)	(20.8)	(5.5)	(6.3)	(7.6)	(9.3)	(28.5)	(15.0)	(17.5)	(17.0)	(18.5)	(68.0)	(69.8)	(111.0)
Interest income (expense)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.4)	0.3
Other Income (expense)	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-
EBT	(17.8)	(20.6)	(5.4)	(6.2)	(7.5)	(9.2)	(28.5)	(15.0)	(17.5)	(17.0)	(18.5)	(68.0)	(70.2)	(110.7)
Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Income</b>	<b>(17.8)</b>	<b>(20.6)</b>	<b>(5.4)</b>	<b>(6.2)</b>	<b>(7.5)</b>	<b>(9.2)</b>	<b>(28.5)</b>	<b>(15.0)</b>	<b>(17.5)</b>	<b>(17.0)</b>	<b>(18.5)</b>	<b>(68.0)</b>	<b>(70.2)</b>	<b>(110.7)</b>
Basic EPS	(3.55)	(3.84)	(5.38)	(0.19)	(0.23)	(0.29)	(1.17)	(0.46)	(0.54)	(0.52)	(0.57)	(2.09)	(1.87)	(2.80)
Diluted EPS	(3.55)	(3.84)	(5.38)	(0.19)	(0.23)	(0.29)	(1.17)	(0.46)	(0.54)	(0.52)	(0.57)	(2.09)	(1.87)	(2.80)
Basic Shares Outstanding	5.0	5.4	1.0	32.1	32.2	32.3	24.4	32.4	32.5	32.6	32.7	32.5	37.5	39.5
Diluted Shares Outstanding	5.0	5.4	1.0	34.2	34.3	34.4	26.0	34.5	34.6	34.7	34.8	34.6	39.6	41.6

Alder BS and CFS (\$MM)	2012	2013	1Q14	2Q14E	3Q14E	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	2016E	2017E
<b>Change in Cash</b>	<b>6.4</b>	<b>(30.5)</b>	<b>(10.3)</b>	<b>69.3</b>	<b>(12.1)</b>	<b>(13.7)</b>	<b>33.3</b>	<b>(16.4)</b>	<b>(18.7)</b>	<b>20.0</b>	<b>(21.4)</b>	<b>(36.4)</b>	<b>56.8</b>	<b>(19.6)</b>
<b>Net Cash</b>	<b>59.4</b>	<b>23.2</b>	<b>12.9</b>	<b>82.2</b>	<b>70.2</b>	<b>56.5</b>	<b>56.5</b>	<b>40.1</b>	<b>21.4</b>	<b>41.4</b>	<b>20.1</b>	<b>20.1</b>	<b>76.9</b>	<b>57.3</b>
Cash & Cash Equivalents	59.4	23.2	12.9	82.2	70.2	56.5	56.5	40.1	21.4	41.4	20.1	20.1	76.9	57.3
Debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Operating Cash Flow</b>	<b>(29.9)</b>	<b>(36.1)</b>	<b>(9.8)</b>	<b>(10.3)</b>	<b>(11.6)</b>	<b>(13.2)</b>	<b>(44.8)</b>	<b>(15.4)</b>	<b>(17.7)</b>	<b>21.0</b>	<b>(20.4)</b>	<b>(32.4)</b>	<b>(56.2)</b>	<b>(99.6)</b>
Net Income	(17.8)	(20.6)	(5.4)	(6.2)	(7.5)	(9.2)	(28.5)	(15.0)	(17.5)	(17.0)	(18.5)	(68.0)	(70.2)	(110.7)
SOE	0.5	0.6	0.6	0.7	0.7	0.8	2.9	1.8	2.1	2.2	2.4	8.4	10.0	13.1
Milestone Cash/Amort Adj	-	-	(4.8)	(4.8)	(4.8)	(4.8)	(19.0)	(3.0)	(3.0)	35.0	(5.0)	24.0	(5.0)	(20.0)
Other	(12.8)	(16.3)	(0.2)	-	-	-	(0.2)	-	-	-	-	-	-	-
D&A	0.2	0.2	0.4	0.4	0.4	0.4	1.6	0.8	0.8	0.8	0.8	3.2	9.0	18.0
<b>Investing Cash Flow</b>	<b>(1.6)</b>	<b>5.5</b>	<b>(0.5)</b>	<b>(0.5)</b>	<b>(0.5)</b>	<b>(0.5)</b>	<b>(2.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(4.0)</b>	<b>(12.0)</b>	<b>(20.0)</b>
CapEx	(1.2)	(1.2)	(0.5)	(0.5)	(0.5)	(0.5)	(2.0)	(1.0)	(1.0)	(1.0)	(1.0)	(4.0)	(12.0)	(20.0)
Other	(0.4)	6.7	-	-	-	-	-	-	-	-	-	-	-	-
<b>Financing Cash Flow</b>	<b>37.9</b>	<b>0.0</b>	<b>-</b>	<b>80.1</b>	<b>-</b>	<b>-</b>	<b>80.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>125.0</b>	<b>100.0</b>
Equity Raise (Buyback)	37.9	0.0	-	80.1	-	-	80.1	-	-	-	-	-	125.0	100.0
Debt Issue (Retirement)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: SEC Filings and Leerink Partners Research

## Discounted Cash Flow

Diluted Shares Outstanding	34.2	ALDR Valuation	Per/Share	Val (\$MM)	% Total
Discount Rate	12%	Total	\$ 25.66	\$ 877	100%
Terminal Growth Rate	2.5%	ALD403	\$ 13.96	\$ 477	54%
		Ciazakizumab	\$ 7.96	\$ 272	31%
ALD403 Approval Probability	60%	Pipeline	\$ 1.33	\$ 46	5%
Ciazakizumab Approval Probability	50%	Net Cash 2Q14E	\$ 2.40	\$ 82	9%

ALD403	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
US Sales (\$MM)	-	-	-	-	-	-	73.3	176.0	323.1	498.1	670.1	716.7	750.4	638.8	500.1	403.6	271.5	102.7	
Ex US Royalties/Milestones (\$MM)	-	-	-	-	-	-	-	2.6	12.1	26.1	45.2	48.4	50.7	43.1	33.8	27.2	18.3	6.9	
COGS	-	-	-	-	-	-	11.0	26.4	48.5	74.7	100.5	95.2	91.7	70.8	48.3	33.3	17.9	3.4	
R&D	27.1	30.2	52.0	59.8	68.8	66.2	52.0	45.8	36.0	25.2	26.5	27.8	21.9	23.0	24.1	25.4	26.6	27.0	
SG&A	7.1	11.2	17.7	23.8	42.8	59.9	83.8	117.3	98.1	114.6	154.1	187.7	214.5	193.4	168.8	141.9	62.4	20.9	
Other Income (Expense)	-	-	-	-	-	-	0.5	0.6	1.1	2.1	3.5	4.7	6.0	6.8	7.0	6.8	6.0	3.2	
EBT	(34.2)	(41.3)	(69.7)	(83.6)	(111.5)	(126.0)	(73.0)	(10.3)	153.7	311.9	437.7	459.1	478.9	401.4	299.5	237.2	188.9	61.6	
Tax	-	-	-	-	-	-	-	-	10.7	58.4	102.6	118.5	128.3	108.0	82.4	65.6	41.2	13.6	
Net Income	(34.2)	(41.3)	(69.7)	(83.6)	(111.5)	(126.0)	(73.0)	(10.3)	143.1	253.4	335.1	340.6	350.7	293.4	217.1	171.6	147.8	48.0	
SOE+CapEx+Non Cash Adj.	-	-	-	-	-	-	1.3	6.1	6.0	10.1	12.2	13.6	15.8	13.2	12.7	13.2	12.2	8.2	
Free Cash Flow	(34.2)	(41.3)	(69.7)	(83.6)	(111.5)	(126.0)	(71.7)	(4.2)	149.1	263.6	347.4	354.2	366.5	306.7	229.8	184.8	160.0	56.2	
Discount Periods	-	-	0.8	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	9.8	10.8	11.8	12.8	13.8	14.8	15.8	
NPV FCF	-	(31.0)	(64.0)	(68.5)	(81.7)	(82.4)	(41.8)	(2.2)	69.4	109.5	128.9	117.3	108.4	81.0	54.2	38.9	30.1	9.4	101.8
ALD403 Valuation	\$	477																	

Ciazakizumab	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
Milestones from BMS (\$MM)	-	-	40.0	25.0	-	100.0	25.0	5.0	12.5	5.0	12.5	-	-	-	-	-	-	-	
Royalties from BMS (\$MM)	-	-	-	-	-	9.8	23.3	38.9	43.0	44.8	46.5	45.5	44.4	40.2	33.9	30.0	22.3	9.8	
COGS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SG&A	0.5	0.8	1.3	1.3	2.3	3.2	4.4	6.2	5.3	6.2	8.4	10.2	11.7	11.0	9.9	9.5	8.0	6.2	
Other Income (Expense)	-	0.0	0.0	(0.4)	0.3	0.1	0.3	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.3	
EBT	(0.5)	(0.8)	38.7	23.4	(2.0)	106.8	44.2	37.8	50.4	43.7	50.9	35.6	33.0	29.6	24.4	21.0	14.7	4.0	
Tax	-	-	-	-	-	-	-	-	1.8	5.5	8.5	7.1	7.1	6.4	5.2	4.6	3.2	1.2	
Net Income	(0.5)	(0.8)	38.7	23.4	(2.0)	106.8	44.2	37.8	48.6	38.2	42.4	28.5	25.9	23.2	19.1	16.4	11.5	2.7	
SOE+CapEx+Non Cash Adj.	-	(0.4)	2.5	1.6	1.9	2.0	0.9	1.5	1.0	1.0	1.0	0.8	0.9	0.8	0.8	0.9	0.9	0.7	
Free Cash Flow	(0.5)	(1.2)	41.2	25.0	(0.1)	108.8	45.0	39.3	49.6	39.1	43.4	29.4	26.8	24.0	19.9	17.3	12.5	3.5	
Discount Periods	-	-	0.8	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	9.8	10.8	11.8	12.8	13.8	14.8	15.8	
NPV FCF	-	(0.9)	37.8	20.5	(0.1)	71.1	26.3	20.5	23.1	16.3	16.1	9.7	7.9	6.3	4.7	3.6	2.3	0.6	6.3
Ciazakizumab Valuation	\$	272																	

Pipeline/Platform	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
Sales	-	-	-	-	-	-	-	-	-	-	-	99.3	182.0	240.3	294.3	353.2	370.9	389.4	
R&D Multiple	-	-	-	-	-	-	-	-	-	-	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
COGS	-	-	-	-	-	-	-	-	-	-	-	12.3	20.8	25.0	26.7	27.3	22.9	12.0	
R&D	4.8	5.3	13.0	15.0	17.2	28.4	52.0	68.6	84.1	100.9	106.0	111.3	124.1	130.3	136.8	143.7	150.9	153.0	
SG&A	-	-	-	-	-	-	-	-	3.2	3.7	5.0	6.1	7.0	15.4	19.9	37.8	90.1	96.0	
Other Income (Expense)	-	-	-	-	-	-	-	-	-	-	-	0.6	1.4	2.4	3.9	5.6	7.7	11.5	
EBT	(4.8)	(5.3)	(13.0)	(15.0)	(17.2)	(28.4)	(52.0)	(68.6)	(87.3)	(104.7)	(111.0)	(29.8)	31.4	72.0	114.8	150.0	114.7	139.9	
Tax	-	-	-	-	-	-	-	-	-	-	-	-	29.1	38.1	45.5	53.8	52.7	48.3	
Net Income	(4.8)	(5.3)	(13.0)	(15.0)	(17.2)	(28.4)	(52.0)	(68.6)	(87.3)	(104.7)	(111.0)	(29.8)	2.3	33.9	69.4	96.2	62.0	91.6	
SOE+CapEx+Non Cash Adj.	-	-	-	-	-	-	-	-	-	-	-	1.8	3.6	4.7	7.0	10.8	15.6	29.0	
Free Cash Flow	(4.8)	(5.3)	(13.0)	(15.0)	(17.2)	(28.4)	(52.0)	(68.6)	(87.3)	(104.7)	(111.0)	(28.1)	5.9	38.6	76.4	107.1	77.7	120.6	
Discount Periods	-	-	0.8	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	9.8	10.8	11.8	12.8	13.8	14.8	15.8	
NPV FCF	-	(4.0)	(11.9)	(12.3)	(12.6)	(18.5)	(30.4)	(35.8)	(40.6)	(43.5)	(41.2)	(9.3)	1.7	10.2	18.0	22.5	14.6	20.2	218.3
Pipeline/Platform Valuation	\$	46																	

Source: Leerink Partners Research; values in (\$MM) except per/share numbers

ALD403 US Revenue Model (\$MM)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Patients Suffering from Migraine (MM)	36.0	36.3	36.7	37.0	37.3	37.6	38.0	38.3	38.7	39.0	39.4	39.7	40.1	40.4	40.8	41.2	41.5
% diagnosed	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%
Diagnosed Migraine Patients (MM)	22.3	22.5	22.7	22.9	23.1	23.3	23.5	23.7	24.0	24.2	24.4	24.6	24.8	25.1	25.3	25.5	25.7
% candidates for prophylaxis	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%
Diagnosed Migraine Patients - Prophylaxis Candidates	12.5	12.6	12.7	12.8	12.9	13.1	13.2	13.3	13.4	13.5	13.7	13.8	13.9	14.0	14.2	14.3	14.4
% receiving prophylaxis	50%	50%	50%	50%	50%	52%	53%	54%	55%	55%	55%	55%	55%	55%	55%	55%	55%
Diagnosed Migraine Patients Receiving Prophylaxis	6.2	6.3	6.4	6.4	6.5	6.8	7.0	7.2	7.4	7.4	7.5	7.6	7.6	7.7	7.8	7.9	7.9
% treated with anti-CGRP therapy	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.0%	2.5%	3.8%	5.0%	5.3%	5.5%	5.8%	6.0%	6.0%	6.0%	6.0%
Migraine Patients Receiving anti-CGRP	-	-	-	-	-	20,374	69,842	179,500	276,704	372,260	398,147	416,890	443,586	463,012	467,179	471,383	475,626
ALD403 Market Share	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	35.0%	25.0%	25.0%	25.0%	25.0%	25.0%	20.0%	15.0%	12.0%	8.0%	3.0%
Patients Receiving ALD403	-	-	-	-	-	10,187	24,445	44,875	69,176	93,065	99,537	104,222	88,717	69,452	56,061	37,711	14,269
Annual Cost	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
Gross Revenue (\$MM)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 122	\$ 293	\$ 539	\$ 830	\$ 1,117	\$ 1,194	\$ 1,251	\$ 1,065	\$ 833	\$ 673	\$ 453	\$ 171
Approval Probability	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
Risk-Adjusted Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73	\$ 176	\$ 323	\$ 498	\$ 670	\$ 717	\$ 750	\$ 639	\$ 500	\$ 404	\$ 272	\$ 103
Approval Probability	60%																
Cost of Therapy	\$12,000																
ROW Sales (probability-weighted)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18	\$ 81	\$ 174	\$ 302	\$ 322	\$ 338	\$ 287	\$ 225	\$ 182	\$ 122	\$ 46
% of US	0%	0%	0%	0%	0%	0%	10%	25%	35%	45%	45%	45%	45%	45%	45%	45%	45%
ALDR Royalty Rate	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Royalties to ALDR (probability-weighted)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3	\$ 12	\$ 26	\$ 45	\$ 48	\$ 51	\$ 43	\$ 34	\$ 27	\$ 18	\$ 7

Source: SEC Filings and Leerink Partners Research

WW Rheumatoid Arthritis Market Model (\$MM)	2013A	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
WW RA Therapy Revenues (MM)	\$12,300	\$13,200	\$14,100	\$15,000	\$15,750	\$16,500	\$17,250	\$18,000	\$18,750	\$19,500	\$20,250	\$21,000	\$21,750	\$22,500	\$23,250	\$24,000	\$24,750	\$25,500
yoy growth		7%	7%	6%	5%	5%	5%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%
Branded TNF Inhibitors																		
Sales (MM)	\$9,000	\$9,372	\$9,870	\$10,200	\$10,395	\$9,900	\$10,005	\$10,080	\$10,125	\$10,335	\$10,530	\$10,710	\$10,875	\$11,250	\$11,625	\$12,000	\$12,375	\$12,750
Market Share	73%	71%	70%	68%	66%	60%	58%	56%	54%	53%	52%	51%	50%	50%	50%	50%	50%	50%
anti-IL6/IL6-R																		
Sales (MM)	\$1,115	\$1,452	\$1,692	\$1,950	\$2,205	\$2,805	\$3,105	\$3,240	\$3,375	\$3,510	\$3,645	\$3,570	\$3,480	\$3,375	\$3,255	\$3,120	\$2,970	\$2,805
Market Share	9%	11%	12%	13%	14%	17%	18%	18%	18%	18%	18%	17%	16%	15%	14%	13%	12%	11%
Clazakizumab Share of IL-6						5%	10%	15%	15%	15%	15%	15%	15%	14%	13%	12%	10%	5%
Clazakizumab Gross Revenues						\$140	\$311	\$486	\$506	\$527	\$547	\$536	\$522	\$473	\$423	\$374	\$297	\$140
Approval Probability		50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
P(w) Revenues						\$70	\$155	\$243	\$253	\$263	\$273	\$268	\$261	\$236	\$212	\$187	\$149	\$70
Royalty Rate						14%	15%	16%	17%	17%	17%	17%	17%	17%	16%	16%	15%	14%
P(w) Royalties to ALDR						\$10	\$23	\$39	\$43	\$45	\$46	\$46	\$44	\$40	\$34	\$30	\$22	\$10
Gross Milestones		\$0	\$40	\$50	\$0	\$200	\$50	\$10	\$25	\$10	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P(w) Milestones to ALDR		\$0	\$40	\$25	\$0	\$100	\$25	\$5	\$13	\$5	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Biologics/Biosimilars																		
Sales (MM)	\$2,185	\$2,376	\$2,538	\$2,850	\$3,150	\$3,795	\$4,140	\$4,680	\$5,250	\$5,655	\$6,075	\$6,720	\$7,395	\$7,875	\$8,370	\$8,880	\$9,405	\$9,945
Market Share	18%	18%	18%	19%	20%	23%	24%	26%	28%	29%	30%	32%	34%	35%	36%	37%	38%	39%
Clazikizumab Approval Probability	50%																	

Source: Company Filings and Leerink Partners Research

***Alder Biopharma Milestones***

<b>Product</b>	<b>Catalyst</b>	<b>Timing</b>
Clazakizumab	Phase II Psoriatic Arthritis Data	2H14 - ACR
ALD403	Phase IIb Initiation	2H14
Clazakizumab	Phase IIb Rheumatoid Arthritis Data	1H15
New Product	First in Man Study Initiation	1H15
ALD403	Phase IIb Data	2H15
Clazakizumab	Phase III Initiation	2H15
ALD403	Phase III Initiation	1H16
Clazakizumab	FDA/EMA Approval	2018
ALD403	FDA/EMA Approval	2019

*Source: SEC Filings and Leerink Partners Research*

## Disclosures Appendix

### Analyst Certification

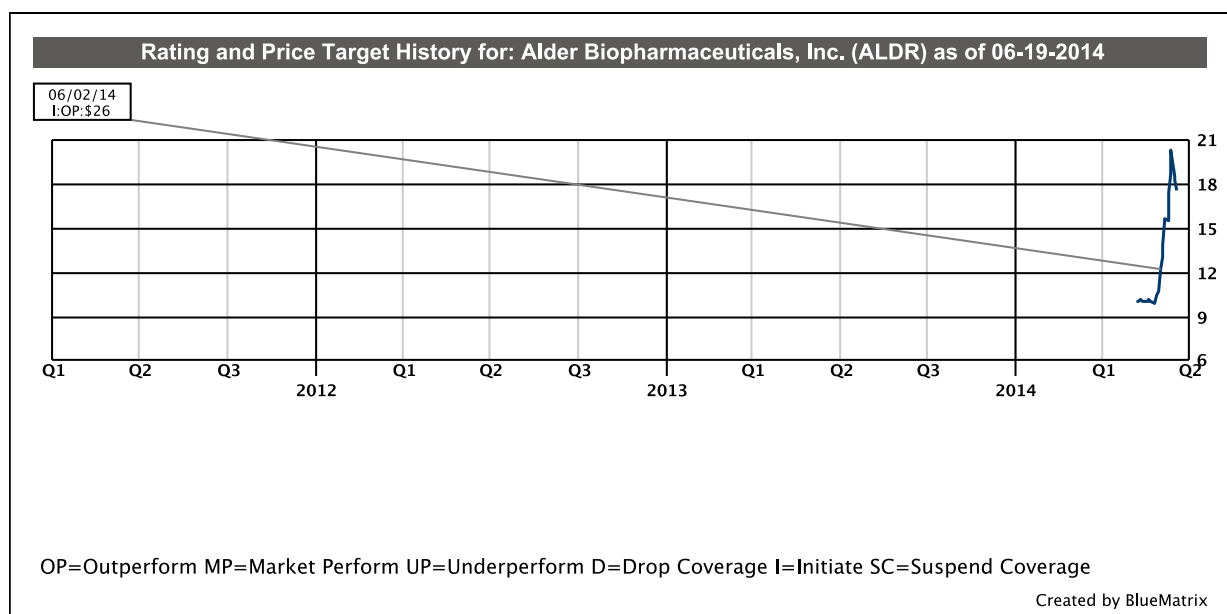
I, Joseph P. Schwartz, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

### Valuation

We derive a \$26 price target for ALDR shares in 12 months, which assigns ~\$14/share to ALD403, ~\$8/share to Clazakizumab, ~\$1/share to the pipeline and the rest to net cash. We model peak gross ALD403 US revenues of \$1.25bn (~\$750MM risk adjusted, using a 60% probability of approval) in 2025. We assume peak ex-US risk-adjusted sales of ~\$340MM (2025), on which ALDR gets ~\$50MM in royalties. We model peak gross WW Clazakizumab revenues of ~\$550MM (~\$275MM risk adjusted, using a 50% probability of approval) in 2023, translating into ~\$46MM in royalties to ALDR. Based on a 60% approval probability for ALD403 and 50% for Clazakizumab and using a discount rate of 12% and a terminal growth rate of 2.5%, both of which we believe our conservative relative to ALDR's biotechnology peers, we derive an ALDR NPV of ~\$880M for ALDR.

### Risks to Valuation

Risks to our valuation include delays in the clinical trial and approval process for either ALD403 or Clazakizumab. Delays in the approval process could generate increased competition from agents which benefit from the first mover advantage. ALDR is eligible to receive milestone payments of \$1.3B in the future of which we project \$40MM will be received in 2015. We, however, also anticipate the need for outside financing in the future which could present a risk to our price target.





### Rating and Price Target History for: Bristol-Myers Squibb (BMY) as of 06-19-2014

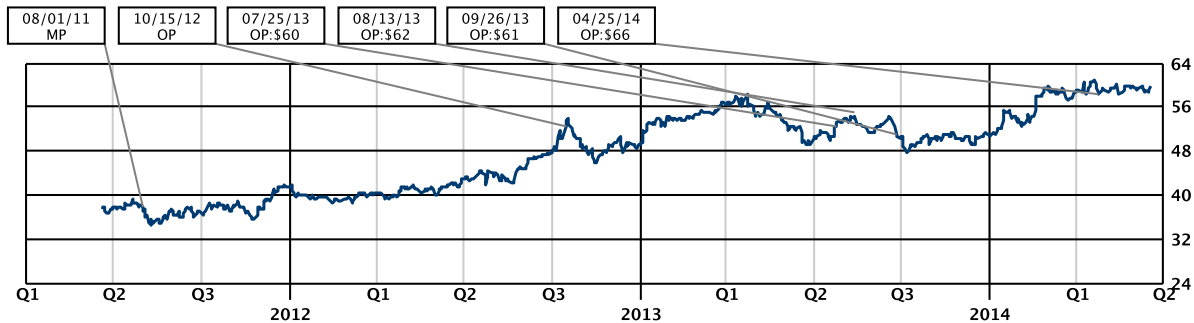


Leerink Swann placed an Outperform rating on BMY on June 11, 2010. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

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### Rating and Price Target History for: Eli Lilly & Company (LLY) as of 06-19-2014



Leerink Swann placed an Underperform rating on LLY on April 7, 2009. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

Created by BlueMatrix

Distribution of Ratings/Investment Banking Services (IB) as of 03/31/14				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	131	68.23	46	35.11
HOLD [MP]	61	31.77	3	4.92
SELL [UP]	0	0.00	0	0.00

## Explanation of Ratings

**Outperform (Buy):** We expect this stock to outperform its benchmark over the next 12 months.

**Market Perform (Hold/Neutral):** We expect this stock to perform in line with its benchmark over the next 12 months.

**Underperform (Sell):** We expect this stock to underperform its benchmark over the next 12 months. The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

## Important Disclosures

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MEDACorp is a network of healthcare professionals, attorneys, physicians, key opinion leaders and other specialists accessed by Leerink and it provides information used by its analysts in preparing research.

**In the past 12 months, the Firm has received compensation for providing investment banking services to Alder Biopharmaceuticals, Inc. .**

**Leerink Partners LLC makes a market in Alder Biopharmaceuticals, Inc.**

**Leerink Partners LLC is willing to sell to, or buy from, clients the common stock of Bristol-Myers Squibb and Eli Lilly & Company on a principal basis.**

**Leerink Partners LLC has acted as the manager for a public offering of Alder Biopharmaceuticals, Inc. in the past 12 months.**

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