June 9, 2014

OUTPERFORM

Reason for report:

PROPRIETARY - SURVEY

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ALDER BIOPHARMACEUTICALS, INC.

Migraine Survey Highlights High Demand for New Prophy Therapies, ALD403

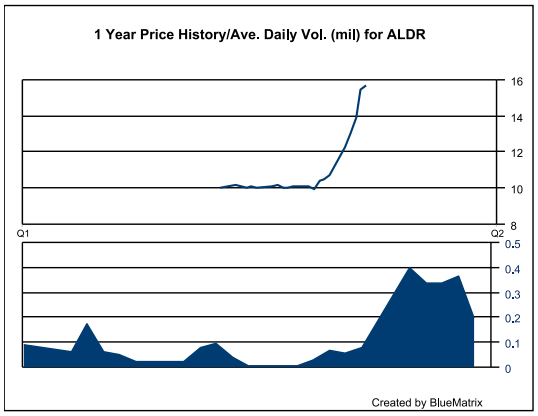
• **Bottom Line:** A survey of 51 neurologists shows significant pent-up demand for new therapies for migraine prevention, and implies that the market for anti-CGRP therapies could present considerable upside to our peak ALD403 risk-adjusted sales estimate of $750MM in 2025. In the aggregate, surveyed physicians treat almost 19,000 migraine patients, 76% of which have tried some form of prophylactic therapy in the past 12 months. Of these individuals, physicians envision that ~40% could be treated with an anti-CGRP 3 years after approval, whereas we currently only assume that ALD403, LY295, AMG334 and LB101 combined treat ~6% of prophy-receiving migraine patients in 2025. Reiterate OP on ALDR and $26 PT in 12 Months.

• **We were positively surprised that over 3/4 of patients have received migraine prophylaxis in the past 12 months,** which is well above our revenue model estimate that ~50% of diagnosed migraine patients are candidates for prevention therapy, from which we generate our projections for anti-CGRP sales. Of the 18,655 patients under surveyed physicians' care, 31%, 41% and 28% respectively suffer from infrequent (1-4 migraines/mo), episodic (5-14 migraines/mo) and chronic migraine (>15 migraines/mo); physicians view ~5%, ~32% and 42% of migraine patients in these categories as reasonably likely to receive ALD403 if it is FDA approved. At this stage, only 57% and 51% of physicians had heard of '403 and LY295 before our survey, so it is possible that physician's penetration estimates could increase if these products produce similarly impressive data in phase III trials.

• **Following positive proof-of-concept data at American Academy of Neurology, physician responses paint an incrementally more positive picture of ALD403 than of LY295.** Physicians ranked ALD403 as slightly better than LY295 on dosing frequency, safety and efficacy, and ranked the drugs as relatively equally attractive on route of administration. However, physicians project roughly equal patient uptake for each product, suggesting that they view the differences in clinical profiles as largely incremental, which is consistent with our model in which we assume that '403 and '295 (along with other anti-CGRP competitors) split the market. 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 acheived, although we view the pharmacoeconomics of migraine as conducive to strong uptake with anti-CGRP pricing on par with MAbs such as Eylea and Lucentis (wet AMD).

• **Next up:** ALDR plans to initiate a multi-dose, dose ranging ALD403 Ph. IIb trial in 2H14, which is likely to produce data in 2H15, and Clazakizumab Psoriatic and Rheumatoid Arthritis Ph IIb data are expected in 4Q14.

Key Stats:	**(NASDAQ:ALDR)**
S&P 600 Health Care Index:	**1,309.26**
Price:	**$15.50**
Price Target:	$26.00
Methodology:	Sum-of-the-parts DCF analysis, 12% discount rate, 2.5% terminal growth
52 Week High:	$16.07
52 Week Low:	$9.50
Shares Outstanding (mil):	34.2
Market Capitalization (mil):	$530.1
Cash Per Share:	$2.51
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	4.8	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.

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Migraine Survey Highlights Demand for New Prophylaxis Therapies, ALD403

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Alder Biopharmaceuticals 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.

Survey Background: 51 Neurologists Treat 18,655 Patients

Inclusion Criteria

S1. What is your current specialty?

100.0%	Neurology
0.0%	Other

S2. How many patients do you currently treat for migraine that you see at least once a year? Please include only those patients that you *personally* treat.

	Mean	Median	Sum
Number of migraine patients who are seen at least once every 12 months	365.8	250	18,655

Practice Demographics

1. How would you describe the setting where you see most of your migraine patients?

27.5%	Academic center
9.8%	Community hospital
56.9%	Private practice
5.9%	Other: *military (1x); out-patient clinic (1x); VA (1x)*

Source: MEDACorp Surveys, "Trends in the Treatment of Migraines", May 2014

Over ¾ of Migraine Patients Have Received Prevention Therapy in the Past 12 Months

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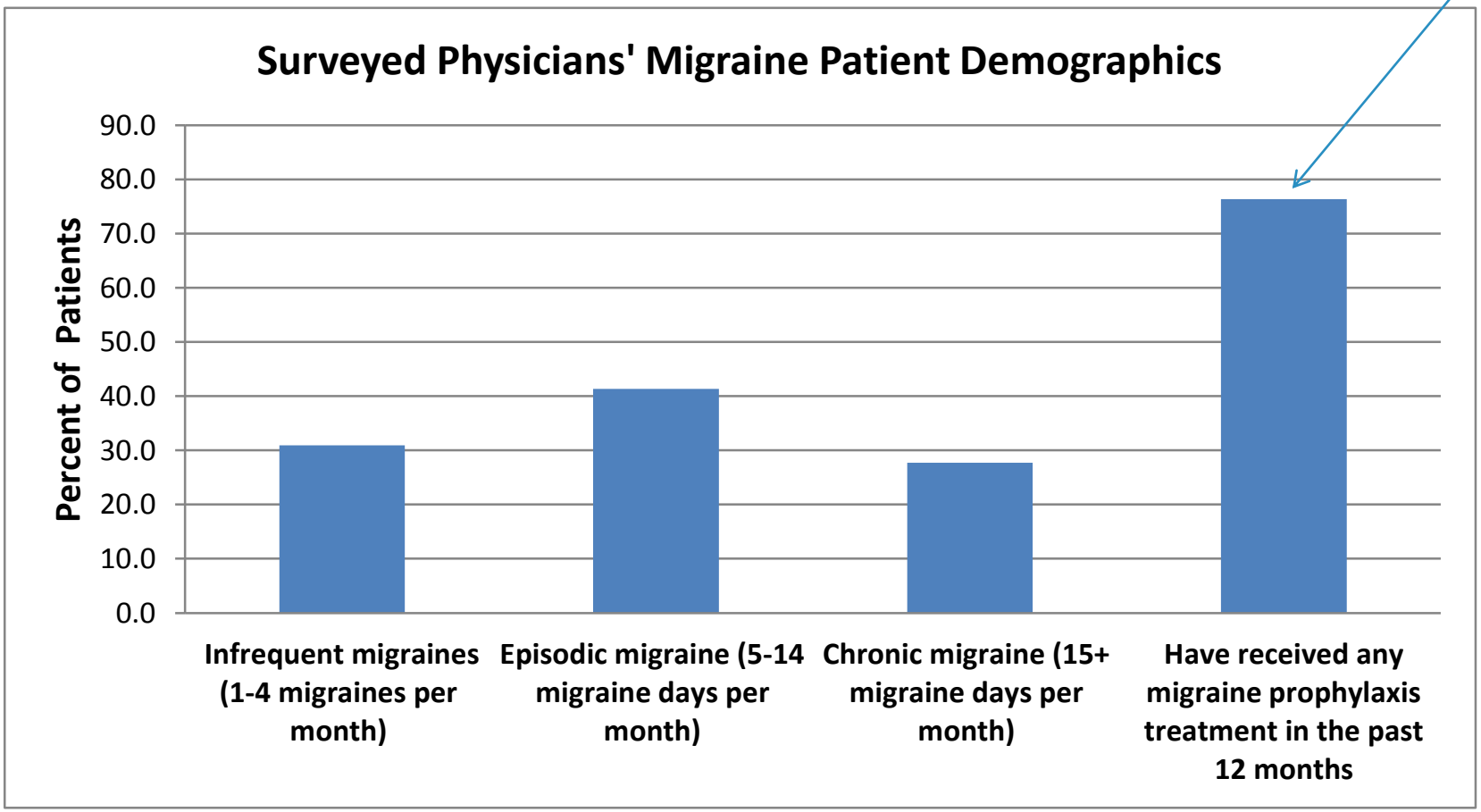
Well above our revenue model estimate that ~50% of diagnosed migraine patients are candidates for prevention therapy. In our model, this estimate drives our revenue projections for the anti-CGRP class and ALD403.



Source: MEDACorp Surveys, "Trends in the Treatment of Migraines", May 2014 and Leerink Partners Research

After Reviewing the Data, Physicians Estimate that Similar Proportions of their Patients will Receive ALD403 and LY295, if Approved

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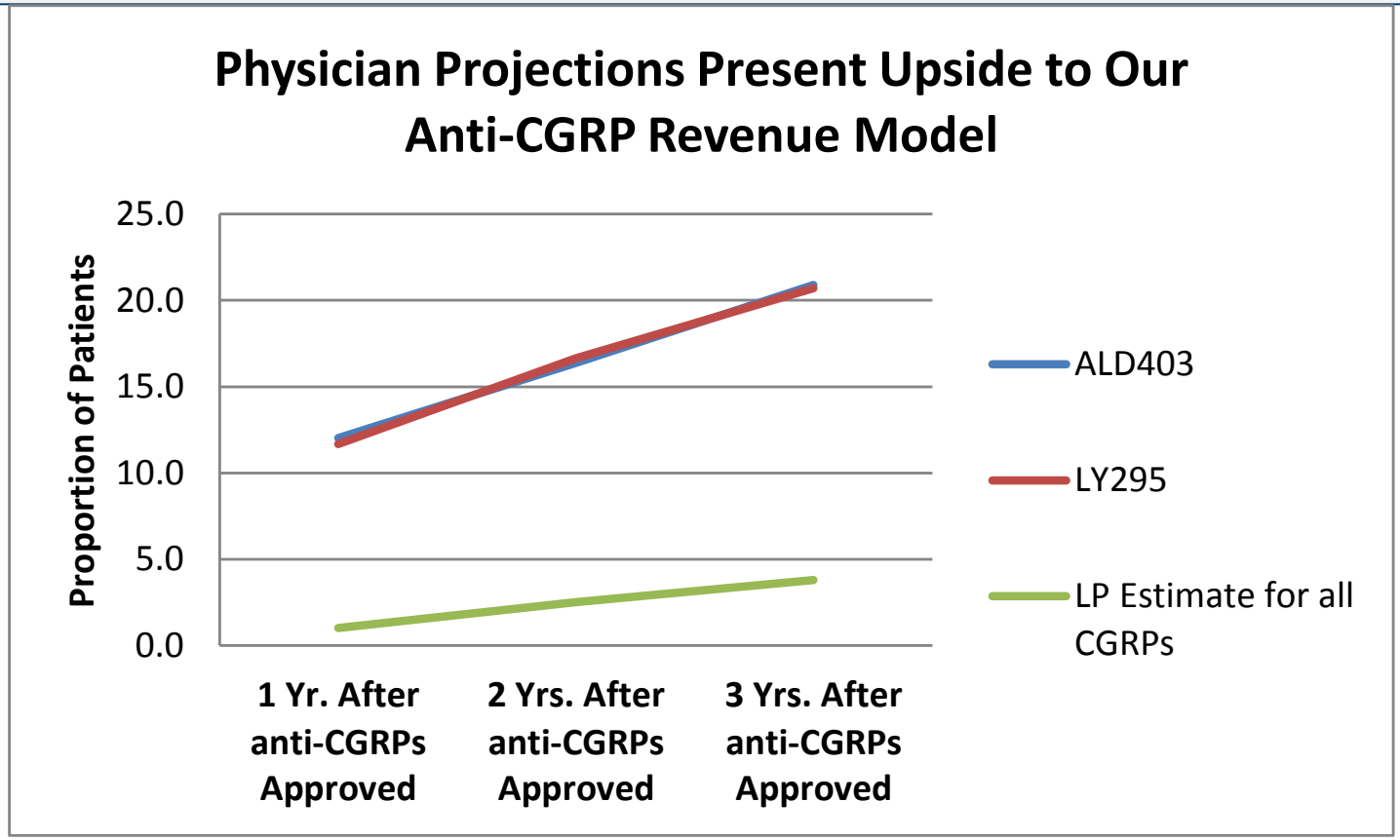
In a scenario in which both ALD403 and LY295 are approved, physicians estimate that that 11-12%, 16-17% ~21% of their patients who are candidates for migraine prophylaxis will be receiving each of ALD403 and LY295 1-year, 2-years and 3-years after approval. Such projections for the anti-CGRP class present considerable upside to our model in which we estimate that ~5.5% of diagnosed migraine patients receiving prophylaxis receive an anti-CGRP in 2025. We currently Assume that ALD403 obtains 25% market share (equally splitting the market with LLY, AMGN (MP), and Labrys (recently acquired by TEVA), which could be conservative given that AMGN and Labrys/TEVA (OP) have not yet announced data for their anti-CGRP products.



Source: MEDACorp Surveys, "Trends in the Treatment of Migraines", May 2014 and Leerink Partners Research

The Clinical Profile of ALD403, however, is Viewed Slightly More Favorably than that of LY295

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With limited data, physicians already view the efficacy profile of ALD403 as on par with Botox and better than all migraine Therapies except anticonvulsants, the latter of which are most effective in the acute (non-prophylaxis) setting. As we expected, Botox, ALD403 and LY295 were all ranked below oral acute migraine therapies on route-of-administration, and with no direct experience with either product surveyed physicians ranked ALD403 and LY295 last on safety (though at this point we have not seen any safety differences between ALD403 and placebo in clinical trails. Of note however, physicians ranked ALD403 as better than LY295 on all categories including efficacy, safety, route-of-administration and dosing frequency. Physicians were asked to review short paragraphs on the Phase II data for '403 and '295 before answering the question.

Based on the data generated to date, please rank the efficacy, safety, route of administration (IV vs. SQ), dosing frequency of the following agents on a scale of 1-6 where 1=best and 6=worst.

Efficacy	Safety	Route of Administration	Dosing Frequency	
4.3	3.1	2.2	4.2	Beta blockers (e.g., Propanolol)
2.5	3.3	2.5	4.2	Anticonvulsants (e.g., Divalproex, topiramate)
3.8	3.3	2.8	3.8	Antidepressants (e.g., SSRIs, tricyclic antidepressants)
3.3	3.1	4.8	2.6	Botulinum toxins (e.g., Botox)
3.3	3.8	4.3	2.6	ALD403
3.7	4.4	4.5	3.5	LY2951742

Source: MEDACorp Surveys, "Trends in the Treatment of Migraines", May 2014 and Leerink Partners Research

Physicians See Most '403 and '295 Uptake Coming from Episodic and Chronic Migraine Patients

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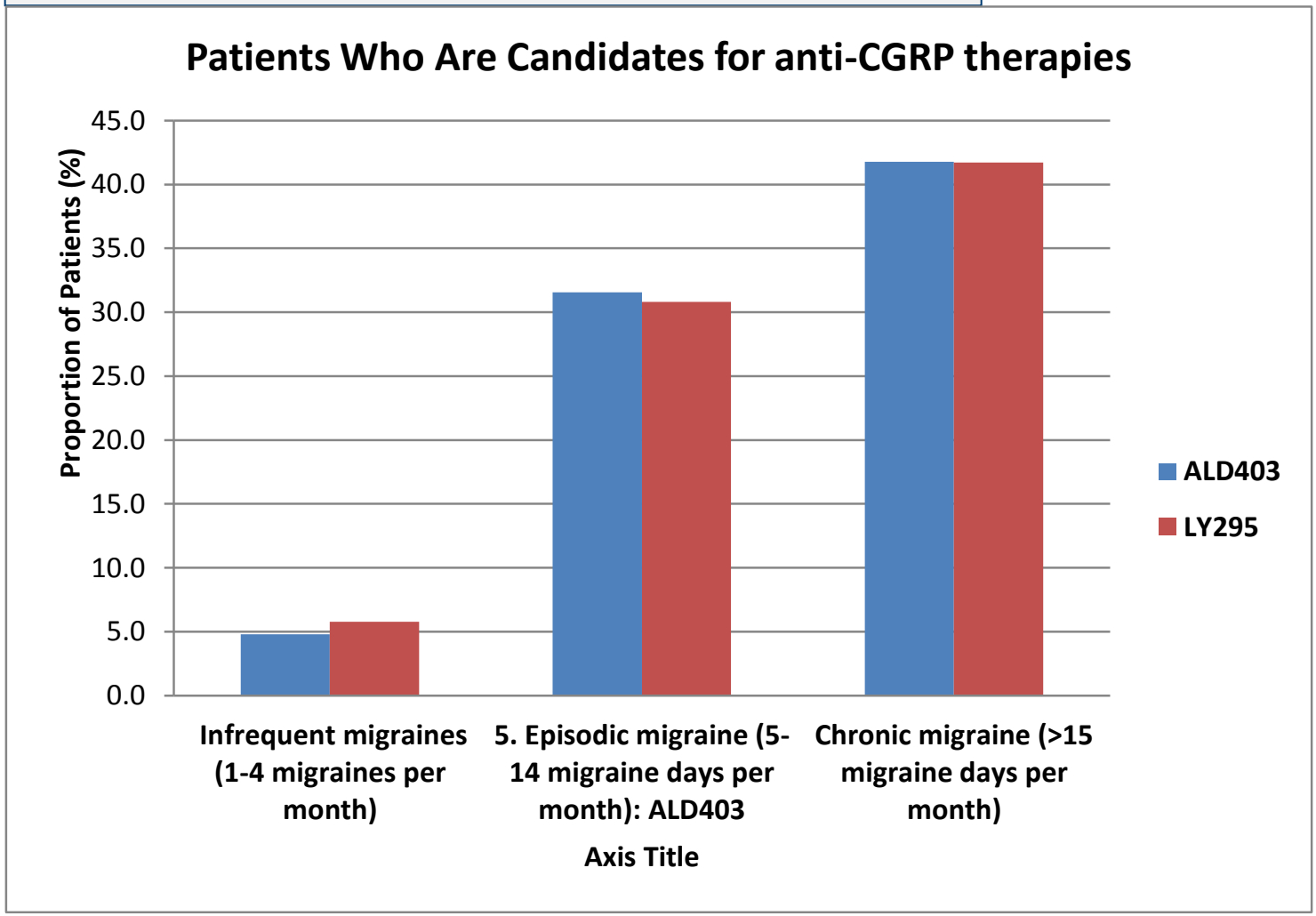
In our model we only project ALD403 and LY295 uptake in the chronic and episodic settings, rendering usage in patients with 1-4 migraines/month upside to our current estimates



Source: MEDACorp Surveys, "Trends in the Treatment of Migraines", May 2014 and Leerink Partners Research

An Increase in Physician Awareness Could Increase Penetration Estimates over Time, in our View

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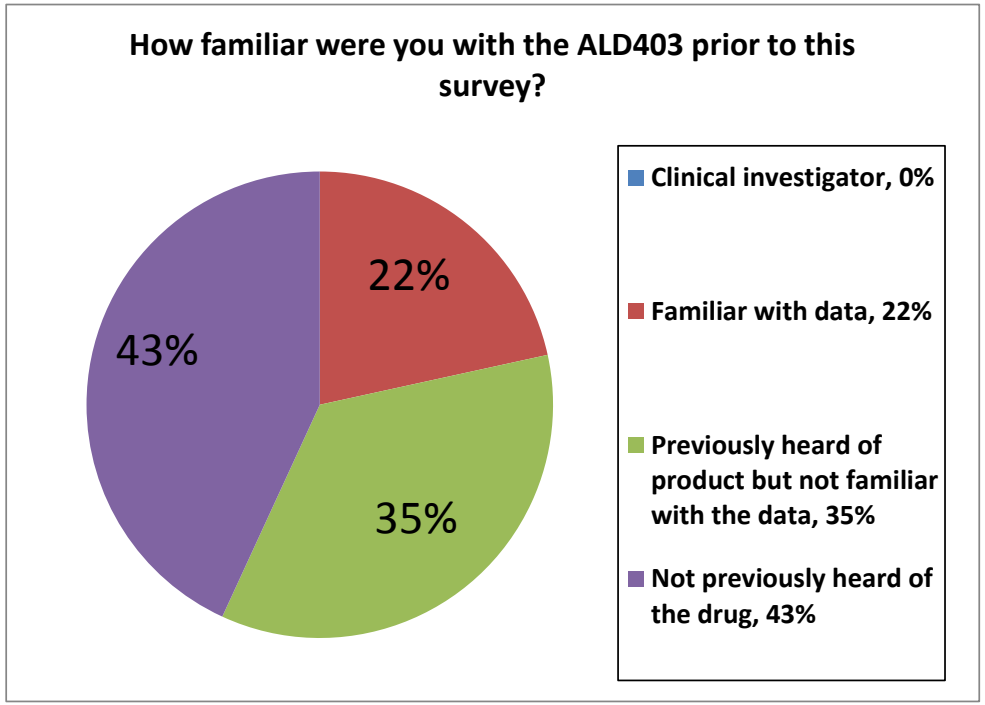
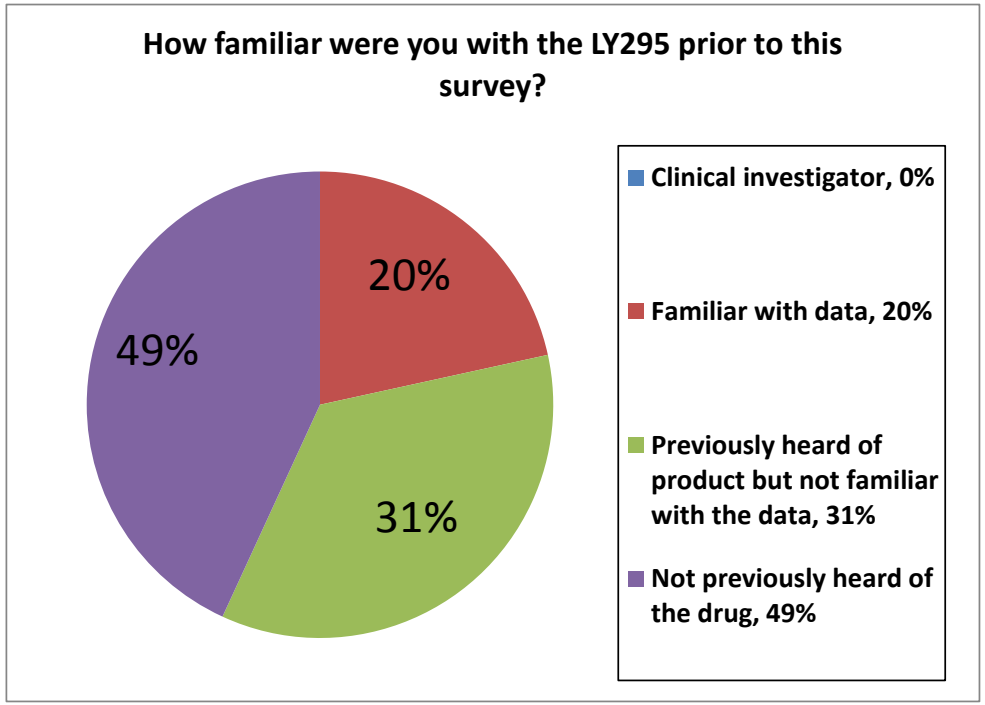
At this juncture, only 57% and 51% of physicians had heard of ALD403 and LY295 before our survey





Source: MEDACorp Surveys, "Trends in the Treatment of Migraines", May 2014 and Leerink Partners Research

ALD403 Background: A Potential Game-Changer for Migraine Prophylaxis

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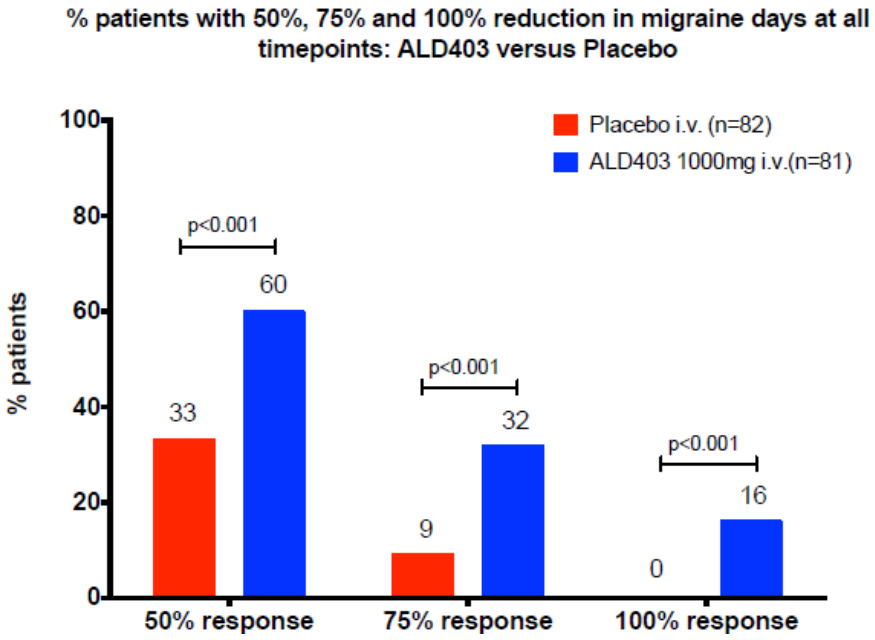
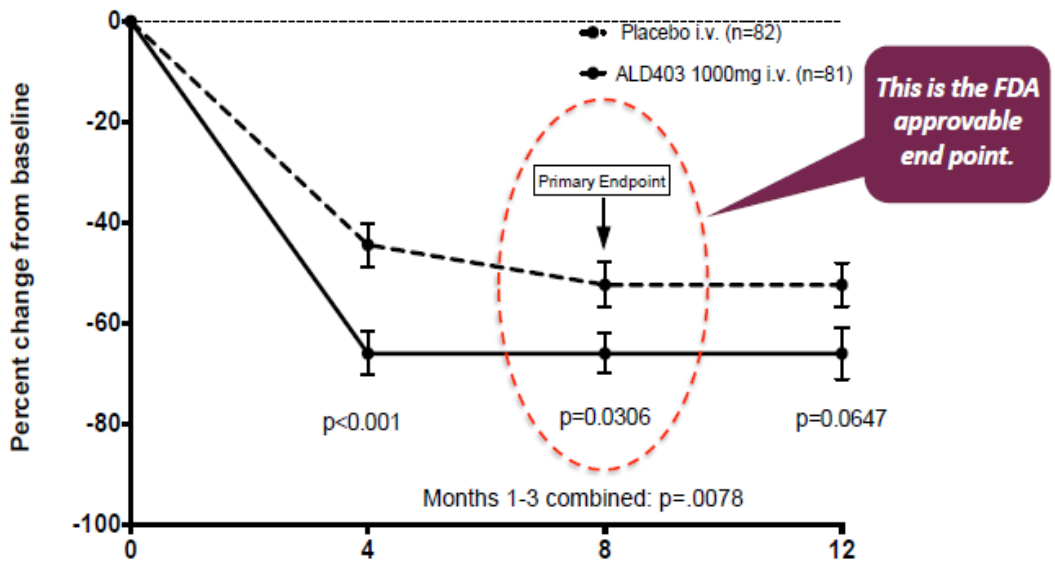
ALD403: A Potential Game-Changer for Migraine Prevention

- In Phase IIa (shown in the chart below on the left), *a single dose of ALD403* precipitated a 50% reduction in migraine days in 60% of patients, a 75% reduction in 32% of patients, and an 100% reduction in 16% of patients
- The study met its primary endpoint (which enabled the registration of Botox/Topomax) of the change in mean migraine days per month from weeks 5-8 when compared to baseline
- Next up: ALDR plans to initiate a Phase IIb dose ranging study in 2H14 in a similar migraine patient population. ALDR will then select an appropriate IV dose to advance to Phase III, and will also select an ALD403 dose to advance into a subcutaneous trial
- ALDR plans to run Phase III studies in both high frequency (5-14 migraine days/month) and chronic migraine (>15 migraine days/month)





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Source: SEC Filings

ALDR and LLY are Competing to Get the First anti-CGRP on the Market

- **At the American Academy of Neurology, LLY also presented positive proof-of-concept data from its anti-CGRP MAb** in frequent episodic migraine. LLY2951742 is given subcutaneously 2x per week, vs 1x every 3 mos. IV for ALD403. The primary endpoint of the LLY study was the mean number of migraine headache days per 28-day period, assessed at 12 weeks. LLY2951742 showed a mean decrease of 62.5% in migraine headache drug vs. 42.3% for placebo (p<.003).
- **At this stage, we believe the efficacy for the 2 products looks relatively comparable,** considering that cross study comparisons present limitations**.** LLY295 showed greater separation on the 50% responder analysis at week 12, while ALD403 was able to generate more 100% responses. In addition, ALD403 was able to eliminate migraines in 16% of patients during the entire 12 week study, but these data were not presented for '295.
- **ALD403 may have better safety/tolerability.** There were no significant differences between ALD403 and placebo, while LLY2951742-treated patients experienced more injection site reactions (ISRs), upper respiratory tract infections and abdominal pain. Although it is difficult to compare ISRs, since ALD403 has only been given IV, so far its SQ antibody may have formulation advantages to LLY2951742 since it shares a similar immunoglobulin G (IGG) framework to Clazakizumab, which has been well tolerated via SQ.

Comparison of ALD403 and LY2951742 - Data Presented at the American Academy of Neurology		
	ALDR's ALD403	**LLY's LY2951742**
Patient Population	High Frequency, 8 migraine days/mo, mean age=39, 83% females	High Frequency, 7 migraine days/mo, mean age=40, 82% females
Dosing	IV, once every 3 months	every other week subcutaneous
Study size	163 patients	217 patients
50% Responder Analysis: 28 Days at Wk 12	***75% on ALD403 vs 67% placebo***	***70% on LY295 vs. 45% placebo***
Complete Responder Analysis: 28 Days at Wk 12	***41% on ALD403 vs. 17% placebo***	***33% on LY295 vs. 17% placebo***
Complete Responder Analysis: All 12 Weeks	***16% on ALD403 vs. 0% placebo***	***not presented***
Safety	No significant differences in Adverse events between ALD403 and placebo; complete lack of LFT signal, no diff. in blood pressure/heart rate	Adverse events seen more frequently in LY295 dosing arm included injection site pain, upper respiratory tract infections and abdominal pain

Discussed in more detail within, Labrys and AMGN (MP) are also developing anti-CGRP products for migraine, though data from their drugs has not yet been announced

Source: SEC Filings, American Academy of Neurology Abstracts, note LFT=liver function test

ALD403 Data Compares Nicely to that Generated by Botox, Topirimate

- While cross study comparisons present intrinsic limitations because of differences in the patient populations recruited into each trial, we believe that the recent ALD403 data supports our view that it is likely to present a vast improvement over the current migraine prophylaxis standard-of-care
- Notably, ALDR has generated efficacy data in only 163 patients to date (versus >~1400 for Botox and >900 for Topomax, so early effects need to be confirmed in larger studies'
- In addition to its potential efficacy advantages, we believe that ALD403 could also prove superior to current treatments via a better safety profile (especially over topirimate) and a more attractive dosing profile when compared to Botox which requires ~32 subcutaneous injections administered by a physician

	ALDR's ALD403	AGN's Botox	JNJ's Topirimate (g-Topomax avail.)
Patient Population	High Frequency/Chronic; Data only in 4-15 migraines/mo (HF)	Chronic; >15 migraines/mo	High Frequency; patients w/ 3-12 migraines/mo
Key Studies	Phase IIa, 163 patients	PREEMPT 1 and 2; 2 double blind placebo controlled trials, total of ~1400 patients	2 double blind placebo controlled trials in US and Canada (ITT analysis), 937 patients
% Patients with 50% Reduction	***60%***	***51%***	***40-50%***
% Patients with 75% Reduction	***32%***	***25%***	***20-25%***
% Patients with 100% Reduction	***16% vs 0% placebo***	***0%***	***5.7% vs. 2.2% in placebo***
Safety Concerns	No significant differences in Adverse events between ALD403 and placebo; complete lack of LFT signal, no diff. in blood pressure/heart rate	muscle weakness, neck pain, injection site pain, "spread of toxin" effect is rare but can incur adverse events in other areas of body, such as respiratory or urinary tract	Acute myopia/glaucoma, hyperthermia, suicidal behavior, metabolic complications, cognitive/mood disturbance, fatigue

Source: Journal of American Osteopathic Association, FDA Labels, SEC Filings

Anti-CGRP Competitive Landscape: ALDR and LLY in the lead

- Other than ALDR, LLY, Labrys and AMGN are also developing migraine prophylaxis products with an affinity to CGRP
- **Thus far, only ALDR and LLY have presented positive proof-of-concept data**
- In our model we assume a lack-of-differentiation between anti-CGRP products, and project that ALDR obtains 25% share of the class at peak
- This could be conservative, however, if ALDR benefits from a first or second-mover advantage, or if other anti-CGRP products (such as AMG334, which targets CGRP receptor) for various reasons do not replicate the efficacy of '403 or '295. Of note, AMGN has recently started a second migraine program to develop a product to CGRP ligand.
- Clinicaltrials.gov suggests data from the AMGN and Labrys programs could emerge in 2H14 or 1H15

Company	Product	Status	Dosing	Migraine Type	Proof-of Concept Data	Target
ALDR	**ALD403**	**Phase IIb to begin 2H14**	**Quarterly IV, Monthly SQ**	**High Frequency/ Chronic**	**Yes; Positive**	**CGRP ligand**
Labrys	LBR101	2 Phase II Studies Ongoing	Monthly SQ	High Frequency/ Chronic	No; Primary completion dates Jan-2015 and Feb-2015	CGRP ligand
LLY	LY-2951742	Phase IIa complete, Next Studies TBA	SQ every other week	High Frequency	Yes; Positive	CGRP ligand
AMGN	AMG334	Phase I and Phase II ongoing	Monthly SQ	High Frequency/ Chronic	No; Primary completion date Aug-2014 for Phase II	CGRP receptor

Source: SEC Filings and Clinicaltrials.gov

2014 and 2015 Present Multiple Value Driving Catalysts for ALDR Shares

Alder Biopharma Milestones

Product	Catalyst	Timing
Clazakizumab	Phase II Psoriatic Arthritis Data	2H14 - ACR
ALD403	Phase IIb Initiation	2H14
Clazakizumab	Phase IIb Rheumatoid Arthritis Data	By YE14
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 Estimates

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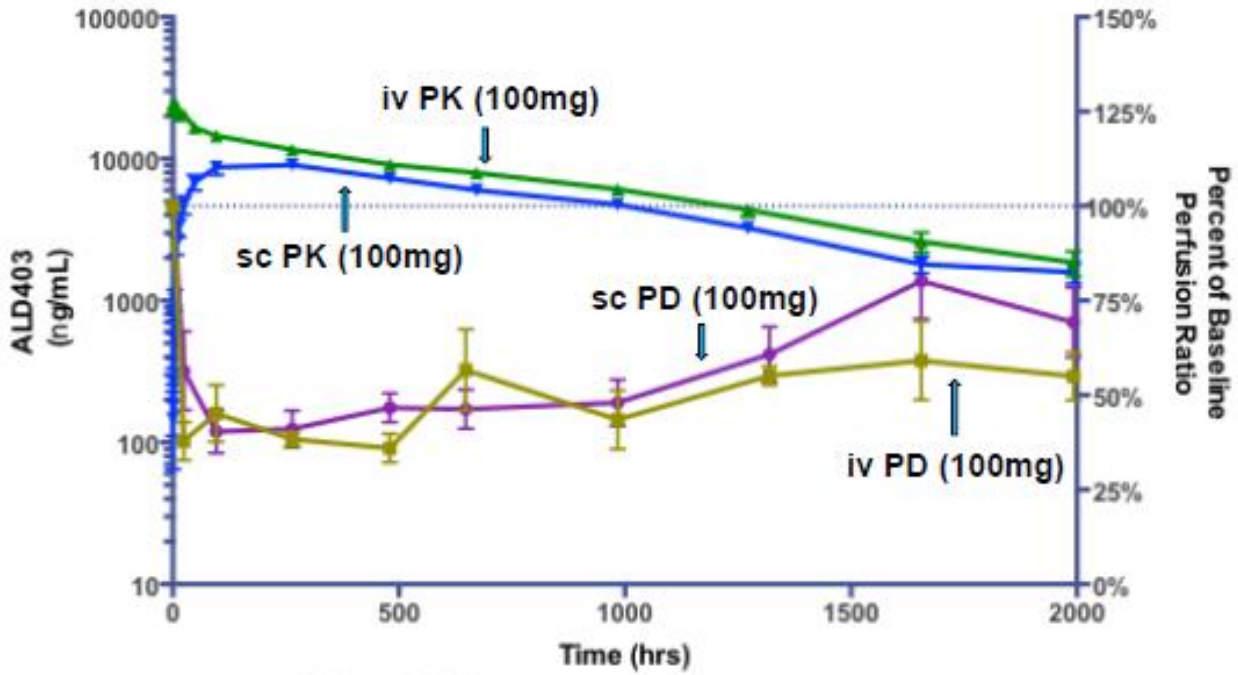
ALDR also Has Plans to Develop a SQ '403 Product with 1x/Monthly Dosing

- Using data from its soon to be commenced Phase IIb trial, ALDR plans to select an appropriate dose-level for evaluating a subcutaneous ALD403 formulation in a dose ranging study
- The main efficacy endpoints in such a study will be the responder analysis (patients achieving 50%, 75% and 100% reduction in migraine days per month) and the mean difference in migraine days per month
- In its SQ '403 program, ALDR plans to examine a 1x/month dose which we believe is supported by the below PK analysis which showed that 100mg of '403 administered subcutaneously was 70% as bioavailable as 100mg administered intravenously.
- If successful, this could differentiate ALD403 vs. LLY295, the latter of which is dosed biweekly

100mg of ALD403 SQ v. IV: Pharmacokinetic (PK) and Pharmacodynamic (PD) Comparison



Source: SEC Filings, American Academy of Neurology Abstracts

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CGRP In Migraine Has a History: MRK's Telcagepant Showed Efficacy but Drug (not target) Specific Safety Concerns

- Telcagepant (formerly MK-0974) was an investigational drug for the acute treatment and prevention of migraine, developed by MRK (MP)
- Telcagepant was found to be non-inferior and numerically superior to zolmitriptan in an acute migraine study (*Ho. Et al.*, 2008)
- However, MRK decided to discontinue the clinical development program for Telcagepant in 2011, after it was found that a number of participants taking the drug showed elevated alanine transaminase (AST) levels. Telcagepant was a small molecule with very different properties than a monoclonal antibody such as ALD403.
- **Importantly, in its Phase I and Phase IIa studies, ALDR has not found any difference in the safety profile between ALD403 and placebo.** LY295 also showed no signs of liver toxicity.

148 patients of ALD403 Data Show Clean Safety

- In ALDR's Phase IIa ALD403 single-dose study, there were no injection site reactions and no differences in type or frequency of AEs when comparing drug to placebo
- In addition, ALD403 showed no effect on liver function tests (LFTs), suggesting that the signal observed with MRK's Telcagepant was drug, not mechanism (CGRP-inhibition) specific
- While LY2951742 reported differences in adverse effects (AE) between drug and placebo, LLY also did observe any hepatotoxicity or Hy's Law Cases in the '295 arm
- **Next up**: patients in the ALD403 Phase IIa are being observed out to 6 months, and a Phase IIb trial will examine two doses of ALD403 administered quarterly

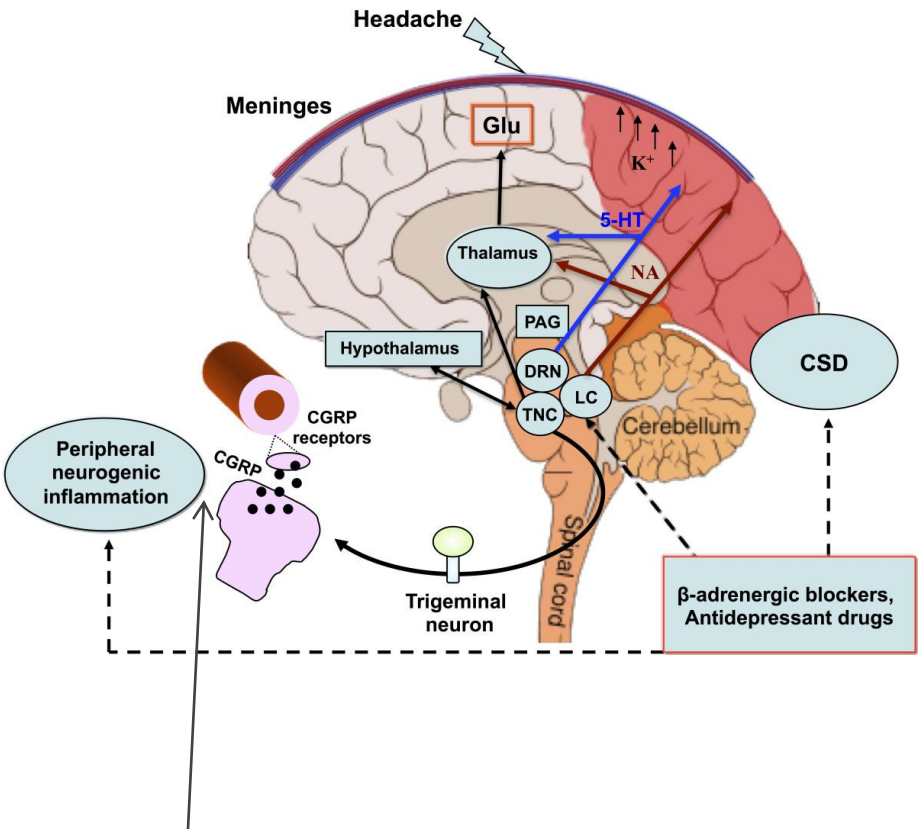
Source: SEC Filings and Clinicaltrials.gov

Migraine Background

- Migraine is a neurovascular disorder associated with dysfunction of the cerebral nerves and blood vessels
- Migraine pain is rooted in brainstem centers that are integral to the regulation of vascular tone and pain sensation
- Migraine specific triggers (which are believed to vary slightly patient-by-patient) cause primary brain dysfunction, which precipitates dilation of cranial blood vessels that are innervated by sensory nerve fibers, causing inflammation and a pain response to be conveyed to the brainstem
- During migraines, vasoactive peptides such as substance P and CGRP are released from trigeminal fibers, creating a positive feedback loop that redoubles pain impulses in the brain
- Approximately ~36MM patients are believed to be afflicted by migraine in the US, 21.2MM of which are diagnosed
- Only approximately half of diagnosed of episodic and chronic migraine patients have received prophylactic treatment in the past year, in large part due to efficacy and tolerability limitations presented by the standard-of-care, in our view

CGRP is Integral to Migraine Pathogenesis

- The neuropeptide calcitonin gene-related peptide (CGRP) has long been postulated to play an integral role in the pathophysiology of migraine
- Studies in cultured trigeminal neurons demonstrate that CGRP is released from is released from trigeminal ganglia cells and that CGRP transcription is increased under conditions mimicking neurogenic inflammation
- CGRP release is believed to augment the dilation of cerebral and dural blood cells, to lead to the release of inflammatory mediators from mast cells, and to help transmit information from intracranial blood vessels to the CNS
- Support for the importance of CGRP comes from findings showing elevated serum concentrations of CGRP during migraine attacks, as well as studies that have shown the that relief of migraine pain by triptans coincides with reduction in or normalization of CGRP concentrations in the blood



CGRP Release Incurs Vasodilation and Inflammation, Redoubling the Activity of the Migraine Feedback Loop in the CNS

Source: National Institute of Health Manuscripts, Journal of Headache, and Leerink Partners Research

Migraine Standard of Care: Acute Drugs Present Significant Limitations

- Numerous abortive medications are used for migraines, and the choice for an individual patient depends on the severity of the attacks and associated symptoms, such as the severity of pain and the incidence of nausea and/or vomiting
- Patients most commonly use a non-steroidal anti-inflammatory drug (NSAID [i.e., Advil]) or a 5-hydroxytryptamine-1 agonist (triptans)
- Triptans are most effective when taken early during a migraine, but have only a 30-50% success rate and present various other limitations
- Triptans may be repeated in two hours after a first dose, but can only be taken twice daily
- Additionally, triptans are not recommended for use more than three days a week because overuse can lead to *increased* frequency of migraines. Triptans are also limited to no more than 10 doses in any one month, which may be insufficient to treat patients with high frequency (5-14 migraine days/month) or chronic migraines(>15 migraine days/month)
- Triptans are also contraindicated in patients with existing, or at risk of, coronary artery disease

Migraine Standard of Care: Preventative Drugs Present Significant Limitations

- Currently, preventative medications approved for migraine include beta blockers (propranolol, topirimate, sodium valproate) and AGN's (MP) Botox
- In patients first seeking prophylactic treatment, beta blockers, topirimate and sodium valproate are commonly used, and failure of multiple of these agents is usually required to garner reimbursement approval for Botox
- On efficacy, all of these agents lag behind what was demonstrated by ALD403 in its Phase IIa study: in clinical trials, a 100% reduction in migraine days or episodes with topirimate occurred in less than 6% of patients. In Phase III trials, Botox did not report any complete responses.
- Tolerability also presents a significant limitation for existing agents: the Topamax label includes a long list of adverse events, acute myopia/glaucoma, hyperthermia, suicidal behavior, metabolic complications, cognitive/mood disturbance, and fatigue. Additionally, the Botox label warns against the possibility of muscle weakness, neck pain, injection site pain, and the "spread of toxin" effect which is rare but can incur adverse events in other areas of body such as the respiratory and urinary tracts.

ALD403 Assumptions: Pricing and Probability of Success

- For ALD403, we assume a 60% probability of approval and an annual cost of $12,000/year
- We believe our likelihood of success assumption could be conservative (given ALD403's strong efficacy and favorable safety profile in Phase IIa), though our 60% approval probability assumption reflects the fact that ALDR will likely need ~1000 patients exposed (like Botox and Topirimate) in order to garner FDA/EMA approval
- Our cost assumption of ~$12K/year would render ALD403 cheaper than antibodies/biologics for RA, and priced comparably to Lucentis/Eylea for macular degeneration
- While ~$12K/year represents a premium to Botox, which costs somewhere between ~$3K to ~$6K per year depending on the number of treatments a patient receives, we believe that Botox is priced more conservatively due to its first presence in the cosmetics market, where payor reimbursement is minimal. Botox efficacy is also less impressive than ALD403, the latter of which has a very low number needed to treat of 6 in order to generate a 100% complete responder.
- We believe that ALDR can make strong pharmacoeconomic arguments to payors who may appreciate that migraine-related disability is a leading factor for ER visits, time with physicians, employee absenteeism and productivity.

Migraine Pharmacoeconomics Supportive of Premium Pricing for '403

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- In addition to its clinical benefits to patients, we believe that ALD403 could also present a compelling value proposition to payors

- According to a 2012 report by the US Agency for Healthcare Research and Quality, **headaches accounted for 2.1MM visits to the ER in 2012**

- In addition, the Migraine Research Foundation estimates that **US employers lose more than $13B each year as a result of 113 million lost work days due to migraine**

- Thus, if ALD403 is able to reduce migraines by at least 50% in most treated patients, we believe that health plans are likely to cover anti-CGRP prophylaxis therapy in serious migraine patients. Our revenue model assumes that anti-CGRP MAbs are utilized in just 5.5% of diagnosed chronic/episodic migraine patients in 2025 (our ALD403 peak sales year)

Migraine Market Dynamics are Well Suited to an ALDR Supported Launch in the US

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- In the US, most patients with high frequency or chronic migraine seek preventative treatment from neurologists and pain specialists
- By the time a high frequency or chronic migraine patient begins prevention therapy, the patient is likely to have experienced non-response to abortive therapy
- Neurologists disproportionately prescribe prophylactic treatments: despite representing only 9% of anti-migraine prescribers, neurologists are responsible for ~50% of topirimate TRx
- Thus, if ALD403 is approved, ALDR plan to build a 75-100 person sales force targeting the high-prescribing neurologists and headache centers in the US
- Additionally, we believe that ALDR could benefit from the detailing and marketing efforts of well-resourced competitors such as AMGN and LLY, also in Phase II development for their anti-CGRP therapeutics

ALDR Revenue Model: We only Assume Peak ALD403 anti-CGRP Market Share of 25%.....

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- …..which for a variety of reasons we believe holds the potential to prove conservative

- At this stage, ALD403 and LLY295 are the only companies that have announced positive proof-of-concept data for their anti-CGRPs. However, we acknowledge that with most classes of antibodies to the same target (i.e., Lucentis and Eylea or the burgeoning PCSK9 class), efficacy and safety profiles usually prove relatively undifferentiated.

- However, our model assumes that all of Alder, LLY, AMGN and Labrys get their products to market, and does not provide ALDR with a potential first or second-mover advantage.

- ALDR could also benefit from having both IV and SQ offerings, the former of which has shown efficacy with quarterly dosing and the latter of which is planned to offer a dosing frequency that is ½ as often as LLY295.

ALD403 Revenue Model Assumptions

- We assume 36MM migraine patients in the US, 62% of which (22MM) are diagnosed
- Based on the patient populations ALDR is pursuing in clinical trials (patients with >5 migraine days/month), we assume that 56% of these individuals are candidates for prophylaxis
- Based on our conversations with MEDACorp KOLs and Leerink survey research on AGN's Botox, we assume that approximately half of these diagnosed candidates for prophylaxis are receiving or have received preventative treatment for their migraines in the past year; we assume this treatment rate increases to 55% ~3 years after the first anti-CGRP product is approved
- We then penetrate the CGRP class into this patient population – we assume that 5.5% of these patients treated with prophylaxis are receiving a CGRP by 2025
- **For ALD403: we assume that it enters the market with 50% share of CGRP prescriptions (split with LLY who is also in the lead), which decreases to 25% in 2021 with the emergence of AMGN and Labrys**

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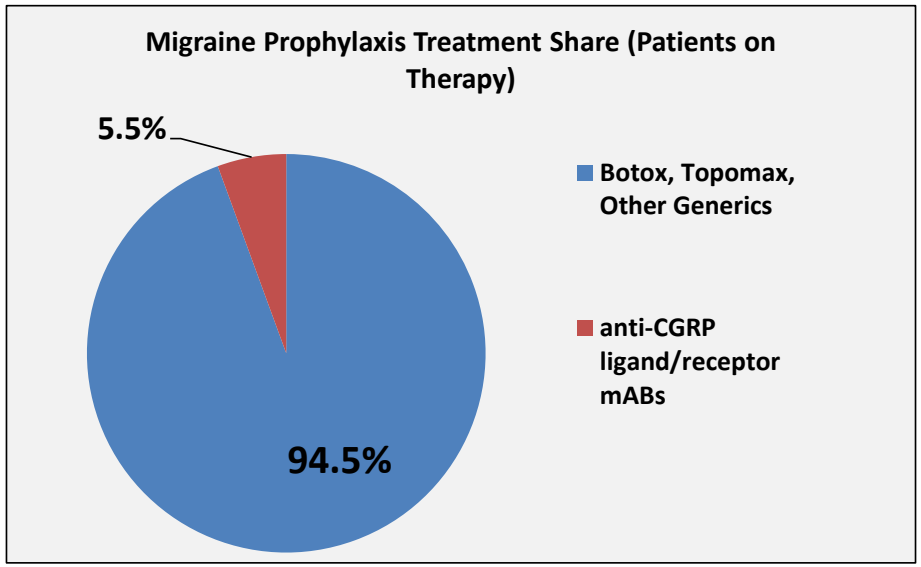
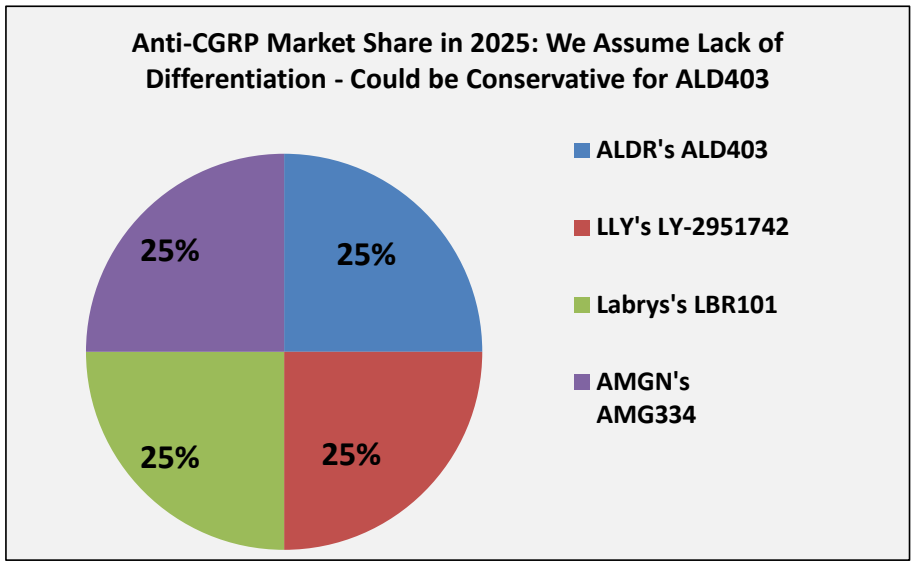
ALD403 as a Proportion of the Migraine Prevention Market, 2025E

- **We assume 7.6MM of our estimated 24.6MM diagnosed migraine patients seek prophylactic treatment in 2025 and that 5.5% of these patients are receiving an anti-CGRP.** Such estimates are considerably lower than what was projected for ALD403 and LY295 in our survey.





Source: Leerink Partners Research

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We Project $750MM in Risk-adjusted US ALD403 Sales in 2025

Figures in $MM

ALD403 US Revenue Model	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Patients Suffering from Migrane (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
% diagnosed	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%
Diagnosed Migrane 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
% candidates for prophylaxis	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%
Diagnosed Migraine Patients - Prophy 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
% receiving prophylaxis	50%	50%	50%	50%	50%	52%	53%	54%	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
% 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%
Migrane Patients Receiving anti-CGRP	-	-	-	-	-	20,374	69,842	179,500	276,704	372,260	398,147	416,890
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%
Patients Receiving ALD403	-	-	-	-	-	10,187	24,445	44,875	69,176	93,065	99,537	104,222
Annual Cost	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000
Gross Revenue ($MM)	$ -	$ -	$ -	$ -	$ -	$ 122	$ 293	$ 539	$ 830	$ 1,117	$ 1,194	$ 1,251
Approval Probability	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
Risk-Adjusted Revenue	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 73**	**$ 176**	**$ 323**	**$ 498**	**$ 670**	**$ 717**	**$ 750**

Source: SEC Filings and Leerink Partners Research

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We Assume ALDR Partners ALD403 in Ex-US Markets

- We expect ALDR to launch ALD403 in the US using a 75-100 rep specialty salesforce that targets high prescribing neurologists
- Ex-US, we assume that ALDR partners '403 and generates a 15% royalty on sales – we model peak ALD403 ex-US sales of ~$350MM in 2025

ALD403 ROW Revenue Model	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
ROW Sales (probability-weighted)	$ -	$ -	$ -	$ -	$ -	$ -	$ 18	$ 81	$ 174	$ 302	$ 322	$ 338
% of US	0%	0%	0%	0%	0%	0%	10%	25%	35%	45%	45%	45%
ALDR Royalty Rate	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Royalties to ALDR (probability-weighted)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3**	**$ 12**	**$ 26**	**$ 45**	**$ 48**	**$ 51**

Figures in $MM

Source: SEC Filings and Leerink Partners Research

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ALD403: Assumed Development/Approval Timeline

ALD403 Milestones

Product	Catalyst	Timing
ALD403	Full Proof-of-Concept Data	2Q14 - AAN
ALD403	Phase IIb Initiation	2H14
ALD403	Phase IIb Data	2H15
ALD403	Phase III Initiation	1H16
ALD403	FDA/EMA Approval	2019

Source: Leerink Partners Estimates, company information

Alder Biopharmaceuticals Valuation and Risks to 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) with peak ex-US risk-adjusted sales of ~$340MM in 2025, on the latter of which ALDR gets ~$50MM in royalties. For Clazakizumab, we project peak gross WW revenues of ~$550MM (~$275MM risk adjusted, using a 50% probability of approval) in 2023, translating into ~$46MM in royalties to ALDR. We use 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.
- **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.

Note: MEDACorp performed this survey on behalf of a Leerink Partners analyst. The analyst in conjunction with MEDACorp developed the questions contained in the survey.

TRENDS IN THE TREATMENT OF MIGRAINES

Respondent Distribution	
Specialty	Neurology
Trends	Migraine Treatment
Number of Respondents	51 Neurologists
Respondent Distribution	United States
Survey Date	May 2014

Geographic Distribution
Source: Google Maps

Responses represent an average of the aggregate response (n=51) unless otherwise noted.

Inclusion Criteria

S1. What is your current specialty?

100.0%	Neurology
0.0%	Other

S2. How many patients do you currently treat for migraine that you see at least once a year? Please include only those patients that you *personally* treat.

	Mean	Median	Sum
Number of migraine patients who are seen at least once every 12 months	365.8	250	18,655

Practice Demographics

1. How would you describe the setting where you see most of your migraine patients?

27.5%	Academic center
9.8%	Community hospital
56.9%	Private practice
5.9%	Other: *military (1x); out-patient clinic (1x); VA (1x)*

2. Please estimate the percentage of your total migraine patient population that suffers from:

31.0%	Infrequent migraines (1-4 migraines per month)
41.3%	Episodic migraine (5-14 migraine days per month)
27.7%	Chronic migraine (15+ migraine days per month)

Treatment of Episodic and Chronic Migraine

3. Please estimate the percentage of your patients that have received any migraine prophylaxis treatment in the past 12 months.

76.4%	Percent of patients that have received any migraine prophylaxis treatment in the past 12 months.

4. How familiar were you with the following anti-CGRP monoclonal antibodies (MAbs) prior to this survey:

ALD403	LY2951742	
0.0%	0.0%	Clinical investigator
21.6%	19.6%	Familiar with data
35.3%	31.4%	Previously heard of product but not familiar with the data
43.1%	49.0%	Not previously heard of the drug

Product Descriptions

Please review the following data for the anti-CGRP MAbs ALD403 and LY2951742 before answering the following questions.

ALD403

- Patients with 5 to 14 migraine days per month were randomized to receive a single intravenous (IV) dose of ALD403 1000 mg or placebo in a double-blind fashion. The mean change in migraine days between weeks 5-8 and baseline was -5.6 days (66% decrease) for ALD403 vs. -4.6 days (52% decrease) for placebo (one-sided p = 0.03). The proportion of patients who had a 50% or greater reduction in migraine days during the last month of the study was 75% for ALD403 vs. 68% for placebo. The proportion of patients who had a 100% reduction in migraine days during the last month of the study was 41% for ALD403 vs. 17% for placebo. The proportion of patients with a 50%, 75%, and 100% reduction in migraine days during the entire three month study for ALD403 and placebo was 60% vs 33% ($p < 0.001$); 32% vs 9% ($p < 0.001$); and 16% vs 0% ($p < 0.001$), respectively. There were no differences in the type or frequency of adverse events, vital signs, or laboratory safety data between the two treatment groups. There were no differences in the type or frequency of adverse events, vital signs, or laboratory safety data between the two treatment groups.

LY2951742

- Subjects with 4-14 migraine headache days (MHD) per month were enrolled in a double-blind, randomized, 12-week placebo-controlled trial of biweekly (every other week) subcutaneous (SQ) injections of LY2951742 (150 mg) versus placebo. The mean change in MHD at 12 weeks when compared to baseline was -4.2 (62.5% decrease) vs. -3.0 (42.3% decrease) for LY2951742 and placebo respectively ($p<0.003$). LY2951742 was superior to placebo for all secondary endpoints including headache days -4.9 vs. -3.7 ($p<0.0117$), migraine attacks -3.1 vs. -2.3 ($p<0.0051$), and responder rate 70% vs. 45% (OR 2.88 [CI 1.78 to 4.69]). An exploratory endpoint of complete responders (100% reduction in MHD during weeks 9-12) was 33.3% vs. 17.3% for LY2951742 and placebo respectively. Adverse events seen more frequently with LY2951742 than placebo included injection site pain (17% for LY2951742 vs. 6% for placebo), infections (25% for LY2951742 vs. 22% for placebo), and abdominal pain (6% for LY2951742 vs. 3% for placebo).

5. What percent of your migraine patients in each of the following categories are, in your view, candidates for ALD403 and LY2951742? Please provide a percent of each category that you see as reasonably likely to receive each drug at peak penetration of your practice.

ALD403	LY2951742	
4.8%	5.8%	Infrequent migraines (1-4 migraines per month)
31.6%	30.8%	Episodic migraine (5-14 migraine days per month)
41.8%	41.7%	Chronic migraine (>15 migraine days per month)

6. Of your patients who are eligible for any migraine prophylaxis treatment, please estimate the percent treated with each of the following medications at the following time points.

   Please note that totals may add to more than 100% due to combination therapy. Please assume that both CGRP MAbs are approved and launched at the same time.

	Currently	One year after anti-CGRP MAb approvals	2 years after anti-CGRP MAb approvals	3 years after anti-CGRP MAb approvals
Beta blockers (e.g., Propanolol)	17.4%	14.5%	13.1%	12.6%
Anticonvulsants (e.g., Divalproex, topiramate)	43.0%	36.3%	32.0%	29.7%
Antidepressants (e.g., SSRIs, tricyclic antidepressants)	27.3%	23.2%	20.4%	19.2%
Botulinum toxins (e.g. Botox)	10.9%	10.3%	9.5%	9.1%
Not treated	6.6%	5.3%	4.8%	4.7%
ALD403		12.0%	16.4%	20.9%
LY2951742		11.7%	16.6%	20.7%
Other: *Verapamil (3x); Calcium channel blockers (2x); ARB, calcium channel, ACE inhibitors (1x); muscle relaxants (1x), Petadolex (1x); Verapamil ER (1x); Other new modalities (1x)*	3.1%	2.8%	2.6%	2.5%

7. Based on the data generated to date, please rank the efficacy, safety, route of administration (IV vs. SQ), dosing frequency of the following agents on a scale of 1-6 where 1=best and 6=worst.

Efficacy	Safety	Route of Administration	Dosing Frequency	
4.3	3.1	2.2	4.2	Beta blockers (e.g., Propanolol)
2.5	3.3	2.5	4.2	Anticonvulsants (e.g., Divalproex, topiramate)
3.8	3.3	2.8	3.8	Antidepressants (e.g., SSRIs, tricyclic antidepressants)
3.3	3.1	4.8	2.6	Botulinum toxins (e.g., Botox)
3.3	3.8	4.3	2.6	ALD403
3.7	4.4	4.5	3.5	LY2951742

8. Please rank the importance of the following factors when deciding which migraine prophylaxis agent to use: efficacy, safety, route of administration (IV vs. SQ), dosing frequency from 1-4 (1=most important, 4=least important).

1.2	Efficacy
2.0	Safety
3.4	Route of Administration
3.4	Dosing Frequency

Alder P&L ($MM except EPS)	2012	2013	1Q14E	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues	**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**
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	7.2	9.0	9.5	11.0	36.7	14.0	16.0	17.0	18.0	65.0	74.8	86.0
SG&A	7.2	7.7	3.0	2.8	2.8	3.0	11.6	4.0	4.5	5.0	5.5	19.0	25.0	45.0
Operating Expenses	37.9	39.6	10.2	11.8	12.3	14.0	48.3	18.0	20.5	22.0	23.5	84.0	99.8	131.0
Operating Income	(17.8)	(20.8)	(5.5)	(7.1)	(7.6)	(9.3)	(29.3)	(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)	(7.0)	(7.5)	(9.2)	(29.3)	(15.0)	(17.5)	(17.0)	(18.5)	(68.0)	(70.2)	(110.7)
Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income	**(17.8)**	**(20.6)**	**(5.4)**	**(7.0)**	**(7.5)**	**(9.2)**	**(29.3)**	**(15.0)**	**(17.5)**	**(17.0)**	**(18.5)**	**(68.0)**	**(70.2)**	**(110.7)**
Basic EPS	(3.55)	(3.84)	(0.25)	(0.22)	(0.23)	(0.29)	(0.99)	(0.46)	(0.54)	(0.52)	(0.57)	(2.09)	(1.87)	(2.80)
Diluted EPS	(3.55)	(3.84)	(0.25)	(0.22)	(0.23)	(0.29)	(0.99)	(0.46)	(0.54)	(0.52)	(0.57)	(2.09)	(1.87)	(2.80)
Basic Shares Outstanding	5.0	5.4	21.9	32.1	32.2	32.3	29.6	32.4	32.5	32.6	32.7	32.5	37.5	39.5
Diluted Shares Outstanding	5.0	5.4	21.9	34.2	34.3	34.4	31.2	34.5	34.6	34.7	34.8	34.6	39.6	41.6

Alder BS and CFS ($MM)	2012	2013	1Q14E	2Q14E	3Q14E	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	2016E	2017E
Change in Cash	**6.4**	**(30.5)**	**(10.3)**	**73.4**	**(12.1)**	**(13.7)**	**37.4**	**(16.4)**	**(18.7)**	**20.0**	**(21.4)**	**(36.4)**	**56.8**	**(19.6)**
Net Cash	**59.4**	**23.2**	**12.9**	**86.4**	**74.3**	**60.7**	**60.7**	**44.3**	**25.6**	**45.6**	**24.2**	**24.2**	**81.1**	**61.5**
Cash & Cash Equivalents	59.4	23.2	12.9	86.4	74.3	60.7	60.7	44.3	25.6	45.6	24.2	24.2	81.1	61.5
Debt		-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Cash Flow	**(29.9)**	**(36.1)**	**(9.8)**	**(11.1)**	**(11.6)**	**(13.2)**	**(45.6)**	**(15.4)**	**(17.7)**	**21.0**	**(20.4)**	**(32.4)**	**(56.2)**	**(99.6)**
Net Income	(17.8)	(20.6)	(5.4)	(7.0)	(7.5)	(9.2)	(29.3)	(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
Investing Cash Flow	**(1.6)**	**5.5**	**(0.5)**	**(0.5)**	**(0.5)**	**(0.5)**	**(2.0)**	**(1.0)**	**(1.0)**	**(1.0)**	**(1.0)**	**(4.0)**	**(12.0)**	**(20.0)**
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	-	-	-	-	-	-	-	-	-	-	-	
Financing Cash Flow	**37.9**	**0.0**	**-**	**85.0**	**-**	**-**	**85.0**	**-**	**-**	**-**	**-**	**-**	**125.0**	**100.0**
Equity Raise (Buyback)	37.9	0.0	-	85.0	-	-	85.0	-	-	-	-	-	125.0	100.0
Debt Issue (Retirement)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: SEC Filings and Leerink Partners Research

Discounted Cash Flow

Diluted Shares Outstanding	34.2
Discount Rate	12%
Terminal Growth Rate	2.5%
ALD403 Approval Probability	60%
Clazakizumab Approval Probability	50%

ALDR Valuation	Per/Share	Val ($MM)	% Total
Total	**$ 25.76**	**$ 881**	100%
ALD403	$ 13.94	$ 477	54%
Clazakizumab	$ 7.96	$ 272	31%
Pipeline	$ 1.33	$ 45	5%
Net Cash 2Q14E	$ 2.53	$ 86	10%

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	31.2	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	10.8	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	2.2	3.5	4.7	6.0	6.8	7.0	6.8	6.0	3.2	
EBT	(34.2)	(42.0)	(69.7)	(83.6)	(111.5)	(126.0)	(73.0)	(10.3)	153.8	311.9	437.7	459.1	479.0	401.5	299.5	237.2	189.0	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)	(42.0)	(69.7)	(83.6)	(111.5)	(126.0)	(73.0)	(10.3)	143.1	253.4	335.1	340.6	350.7	293.5	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)	(42.0)	(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	**-**	**(31.5)**	**(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**																		

Clazakizumab	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	(1.9)	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	(1.9)	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	45.1	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)**	**37.9**	**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**
Clazakizumab 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	5.5	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)	(5.5)	(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)	(5.5)	(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)	(5.5)	(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	**-**	**(4.1)**	**(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	**$ 45**																		

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 - Prophy 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

Product	Catalyst	Timing
Clazakizumab	Phase II Psoriatic Arthritis Data	2H14 - ACR
ALD403	Phase IIb Initiation	2H14
Clazakizumab	Phase IIb Rheumatoid Arthritis Data	By YE14
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.

Distribution of Ratings/Investment Banking Services (IB) as of 03/31/14				
			IB Serv./Past 12 Mos.	
Rating	Count	Percent	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.

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