

## ADMA Biologics (ADMA - \$ 5.63)

### 3Q16: Continuing the Progress Toward Potential Resolution of the CRL Identified Third-Party Manufacturer Issues

ADMA reported 3Q16 results yesterday after the market close with a net loss of (\$4.3MM) vs. Laidlaw (\$4.6MM) and the Street (\$5.3MM) estimates. Net loss/share was (\$0.34) vs. (\$0.38) and (\$0.42) for Laidlaw and the Street, respectively. ADMA ended 3Q16 with cash of ~\$18.9MM, sufficient to support operations deep into 2H17, in our opinion.

- Updates on addressing RI-002 as IVIG in PIDD BLA CRL issues.** ADMA indicated the efforts for resolving issues identified by the complete response letter (CRL) related to the RI-002 as intravenous immune globulin (IVIG) in PIDD BLA are ongoing. The issues are related to the three third-party manufacturers and vendors: Biotest, Ajinomoto Althea, and an un-disclosed ex-U.S. testing laboratory. As a reminder, the FDA indicated they do not have safety and efficacy concerns about RI-002 and did not request additional clinical studies. The key issues relate to outstanding inspection issues and deficiencies at three third-party contract manufacturers. Among them, we believe at least some Biotest issues could relate to an FDA-issued warning letter dated 11/25/2014 (see our 2016-08-15 note). We believe all these companies should have a strong incentive to correct these problems given the potential damage to their current and future commercial outlook in and the possibility of operation shutdown by the FDA. Although we do not have any insights on the specific issues related to the CRL, we are cautiously optimistic that the problems can be resolved, possibly in 2017.
- Plasma center revenue higher.** The 3Q16 plasma center revenue has grown substantially both Q/Q (29%) and Y/Y (59%). Management indicated the increase is due to the expansion of the first center and greater utilization of the second center. In addition, ADMA also gained a second customer for its plasma product, and the purchase from this customer accounts for greater than 10% of the production.
- Action.** We are reiterating our Buy rating and \$15 target price to reflect that ADMA should resolve issues of the CRL, resulting in potential RI-002 approval and launch. Our target price is supported by P/E, peer comparable and risk-adjusted cash flow sum-of-the-parts analyses.

*Healthcare/Biotechnology*

Ticker: **ADMA**  
Rating: **Buy**  
Price Target: **\$ 15.00**

#### Trading Data:

Last Price (11/10/2016)	\$ 5.63
52-Week High (12/3/2015)	\$ 9.65
52-Week Low (2/26/2016)	\$ 4.15
Market Cap. (MM)	\$ 73
Shares Out. (MM)	13

#### Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
<b>FY-16E</b>	-0.43A	-0.50A	-0.34A	-0.29	-1.53	NM
<b>FY-15A</b>	-0.37	-0.44	-0.48	-0.44	-1.73	NM
<b>FY-14A</b>	-0.64	-0.43	-0.36	-0.38	-1.93	NM
<b>FY-13A</b>	-0.55	-0.83	-0.46	-0.55	-2.38	NM

#### Yale Jen, Ph.D.

Managing Director /  
Senior Biotechnology Analyst  
(212) 953-4978  
yjen@laidlawltd.com

Source: Laidlaw & Company estimates

FOR ANALYST CERTIFICATION AND DISCLOSURES, PLEASE SEE DISCLOSURES SECTION AT THE END OF THIS REPORT. This report has been prepared by Laidlaw & Co (UK), Ltd. Investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. All prices are those current at the end of the previous trading session unless otherwise indicated. Prices and consensus estimates are sourced from a reliable market source

## Anticipated milestones in 2016 and beyond

Program	Indication	Event	Timing	Importance
RI-002	RSV infection prevention in PIDD	Potential resubmit BLA	2017	*****
		Potential U.S. approval	2017	*****
		Potential U.S. product launch	2017	*****
VZIG (Varitect)	Vicella Zoster virus infection	Potential commence Phase II/III study	2017	***
BioCenters		FDA approval of 3rd BioCenter	2017	****

\*\*\*\* / \*\*\*\*\* Major catalyst event that could impact share price very significantly while \*\*\* event is more informative

Source: Laidlaw & Company estimates and company presentation.

## Major Risks

---

**Risks of clinical study failure could have a major impact on ADMA share value.** Despite a well-established path for IVIG approval, risks still exist as RI-002 might not be approved by the FDA if the pivotal study does not meet its endpoints. Given that the majority of upside for ADMA shares is currently based on the assumption that the product can be approved before its commercial potential can be realized, an unsuccessful approval application would have a significant negative impact on ADMA share value.

**Commercial success of the RI-002 in PIDD and potentially in transplantation is less predictable.** We believe that the potential product label for RI-002, if approved, would likely to indicate as a regular IVIG; and higher titer of anti-RSV antibodies could appear on the label if the pivotal study met the relevant secondary endpoint. As such, the company may not promote the product directly for the prevention or treatment of RSV infection. Instead it may be based on the understanding that receiving high titer RSV antibodies should reduce probability of RSV infection. With more limited sales and marketing tactics available, the sales ramp up could be slower than projected. There is also risk that more rapid sales expansion might only occur after the company conducts more clinical studies and demonstrates positive clinical outcomes.

**Developments by competitors may render RI-002 or relevant technologies obsolete or un-competitive.** Although the manufacturing processes of RI-002 are protected by proprietary technology, trade secrets and know-how, it is possible that other competitors develop similar processes to produce similar or even better anti-RSV IVIG. As such, the company might not enjoy the competitive edge and potentially damage RI-002's commercial outlook

**Plasma collection center operations might not perform as expected.** The company currently operates one and expects to expand into three plasma collection centers over the next 12 months. Although the plasma collection operation is a business with relatively sustainable positive cash flows, and ADMA management appears to have substantial experience; risks of mismanagement or other factors could result in sub-par business performance. Less successful performance in this area could negatively impact the expected cash flow and strategic objective of diversifying plasma sources for RI-002 production.

**Limited product diversity could increase overall risk.** Given the nascent stage of the corporate development, the majority of the product pipeline value mainly resides on RI-002. The second potential pipeline product, an anti-Vicella Zoster virus immunoglobulin, is in very early development stage with market potential possibly much smaller. As such, we believe the company at the current stage has very limited diversification potential in its product pipeline.

**Lack of cash could impede corporate development.** Despite the company's recent successful IPO, which raised \$26.5MM of cash, ADMA could potentially

need more financial resources going forward if they want to expand and further develop its pipeline. Should the product not receive FDA approval or product revenue does not reach expectations, the company might have to issue new equity to raise additional cash. Under such a scenario, the share value of existing shareholders could be diluted.

**Limited trading liquidity limits shareholder options.** Given that ADMA shares only entered the public market recently; daily trading volume and name recognition are relatively low. With relatively illiquid trading volume, shareholders wanting to increase or reduce their positions in a volatile stock market may face constraints.

## Income Statement

## ADMA Biologics – Income Statement

(\$ '000)	2013	2014	2015	1Q16	2Q16	3Q16	4Q16E	2016E	2017E	2018E	2019E	2020E
<b>Revenue</b>												
Product revenue	3,024	5,840	7,050	2,088	2,236	2,902	3,131	10,358	12,844	13,871	14,565	15,395
RI-002 revenue	-	-	-	-	-	-	-	-	7,044	70,955	130,491	170,129
License revenue	44	76	127	36	36	36	36	143	143	143	143	143
Total Revenue	3,068	5,916	7,178	2,124	2,272	2,938	3,167	10,501	20,030	84,969	145,199	185,666
Cost of product revenue	2,023	3,742	4,311	1,266	1,344	1,736	1,879	6,225	7,706	8,323	8,739	9,237
Cost of RI-002	-	-	-	-	-	-	-	-	3,522	35,477	65,246	85,064
Gross revenue (RI-002)	-	-	-	-	-	-	-	-	3,522	35,477	65,246	85,064
Gross revenue (Biocenter)	1,000	2,076	2,739	822	892	1,166	1,253	4,133	5,137	5,548	5,826	6,158
Total gross revenue	1,000	2,076	2,739	822	892	1,166	1,253	4,133	8,659	41,026	71,071	91,222
Research and development	9,303	9,517	7,016	2,028	3,400	1,677	1,493	8,598	8,942	9,389	9,858	10,351
Plasma center operating expenses	2,418	3,851	4,618	1,280	1,294	1,483	1,379	5,436	5,817	6,049	6,231	6,355
General and administrative	4,365	4,824	6,746	1,708	1,724	1,779	1,655	6,866	7,448	7,850	8,164	8,491
Marketing and sales	-	-	-	-	-	-	-	-	7,398	7,842	8,265	8,679
<b>Total Operating Expenses</b>	16,087	18,192	18,380	5,016	6,418	4,939	4,526	20,899	29,604	31,130	32,518	33,876
<b>Operating Income (loss)</b>	(15,042)	(16,019)	(15,514)	(4,159)	(5,491)	(3,737)	(3,238)	(16,624)	(20,802)	10,039	38,696	57,490
Interest income	8	14	38	14	12	12	10	47	61	74	88	97
Interest expense	(618)	(1,286)	(1,843)	(467)	(538)	(606)	(483)	(2,094)	(2,094)	(2,094)	(2,094)	(2,094)
Change in fair value of stock warrants	43	(74)	68	-	-	-	-	-	-	-	-	-
Other income	82	-	(719)	-	4	-	-	4	4	4	4	4
Total other expenses	(485)	(1,346)	(2,456)	(454)	(521)	(594)	(473)	(2,043)	(2,029)	(2,016)	(2,002)	(1,993)
Income (loss) before tax expense	(15,527)	(17,365)	(17,975)	(4,612)	(6,012)	(4,331)	(3,711)	(18,667)	(22,830)	8,023	36,694	55,497
Income tax expense-State income tax benefit	-	552	-	-	-	-	-	-	-	(2,968)	(13,577)	(20,534)
<b>Net Incomes (Losses)</b>	(15,527)	(17,917)	(17,975)	(4,612)	(6,012)	(4,331)	(3,711)	(18,667)	(22,830)	5,054	23,117	34,963
Net Earnings (Losses) Per Share—Basic	(\$2.38)	(\$1.93)	(\$1.73)	(\$0.43)	(\$0.50)	(\$0.34)	(\$0.29)	(\$1.53)	(\$1.71)	\$0.29	\$1.30	\$1.93
Net Earnings (Losses) Per Share—Diluted	(\$2.38)	(\$1.93)	(\$1.73)	(\$0.43)	(\$0.50)	(\$0.34)	(\$0.29)	(\$1.53)	(\$1.71)	\$0.29	\$1.30	\$1.93
Shares outstanding—basic	6,531	9,292	10,412	10,711	12,122	12,887	12,937	12,164	13,337	17,337	17,737	18,137
Shares outstanding—diluted	6,531	9,292	10,412	10,711	12,122	12,887	12,937	12,164	13,337	17,337	17,737	18,137
<b>Margin Analysis (% of Revenue)</b>												
Gross (Biocenter)	33%	36%	39%	39%	40%	40%	40%	40%	40%	40%	40%	40%
Cost of RI-002	-	-	-	-	-	-	0%	0%	50%	50%	50%	50%
R&D	303%	161%	98%	95%	150%	57%	47%	82%	45%	11%	7%	6%
Plasma operation	80%	66%	66%	61%	58%	51%	44%	52%	45%	44%	43%	41%
G&A	142%	82%	94%	80%	76%	61%	52%	65%	37%	9%	6%	5%
M&S	-	-	-	-	-	-	-	-	37%	9%	6%	5%
Operating Income (loss)	-490%	-271%	-216%	-196%	-242%	-127%	-102%	-158%	-104%	12%	27%	31%
Net Income	-506%	-303%	-250%	-217%	-265%	-147%	-117%	-178%	-114%	6%	16%	19%
<b>Financial Indicator Growth Analysis (Y/Y)</b>												
Product (Biocenter) revenue	170%	93%	21%	41%	73%	59%	28%	47%	24%	8%	5%	6%
RI-002 revenue (projected)	N.A.	907%	84%	30%								
Total Revenue	174%	93%	21%	41%	73%	59%	26%	46%	91%	324%	71%	28%
Research and development	168%	2%	-26%	45%	126%	-21%	-25%	23%	4%	5%	5%	5%
Plasma center operating expenses	38%	59%	20%	22%	18%	22%	10%	18%	7%	4%	3%	2%
General and administrative	39%	11%	40%	27%	20%	-14%	-12%	2%	-12%	5%	4%	4%
Marketing and sales	-	-	-	-	-	-	-	-	-	6%	5%	5%
Operating incomes	90%	6%	-3%	30%	56%	-20%	-22%	7%	25%	-148%	285%	49%
Pretax Income	96%	12%	4%	28%	28%	-15%	-19%	4%	22%	-135%	357%	51%
Net Income	113%	15%	0%	28%	28%	-15%	-19%	4%	22%	-122%	357%	51%
EPS - Basic	35%	-19%	-10%	18%	13%	-29%	-35%	-11%	12%	-117%	347%	48%
EPS - Diluted	35%	-19%	-10%	18%	13%	-29%	-35%	-11%	12%	-117%	347%	48%
Shares outstanding—basic	58%	42%	12%	9%	13%	20%	25%	17%	10%	30%	2%	2%
Shares outstanding—diluted	58%	42%	12%	9%	13%	20%	25%	17%	10%	30%	2%	2%

Yale Jen, Ph.D. 212-953-4978

Source: Bloomberg LP; Company reports; Laidlaw &amp; Company estimates.

**DISCLOSURES:****ANALYST CERTIFICATION**

The analyst responsible for the content of this report hereby certifies that the views expressed regarding the company or companies and their securities accurately represent his personal views and that no direct or indirect compensation is to be received by the analyst for any specific recommendation or views contained in this report. Neither the author of this report nor any member of his immediate family or household maintains a position in the securities mentioned in this report.

**EQUITY DISCLOSURES**

For the purpose of ratings distributions, regulatory rules require the firm to assign ratings to one of three rating categories (i.e. Strong Buy/Buy-Overweight, Hold, or Underweight/Sell) regardless of a firm's own rating categories. Although the firm's ratings of Buy/Overweight, Hold, or Underweight/Sell most closely correspond to Buy, Hold and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis against the analyst sector universe of stocks. An analyst's coverage sector is comprised of companies that are engaged in similar business or share similar operating characteristics as the subject company. The analysis sector universe is a sub-sector to the analyst's coverage sector, and is compiled to assist the analyst in determining relative valuations of subject companies. The composition of an analyst's sector universe is subject to change over time as various factors, including changing market conditions occur. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12-months relative to the analyst's sector universe.

**Additional information available upon request.**

‡ Laidlaw & Company has received compensation from the subject company for investment banking services in the past 12 months and expects to receive or intends to seek compensation for investment banking services from the company in the next three months.

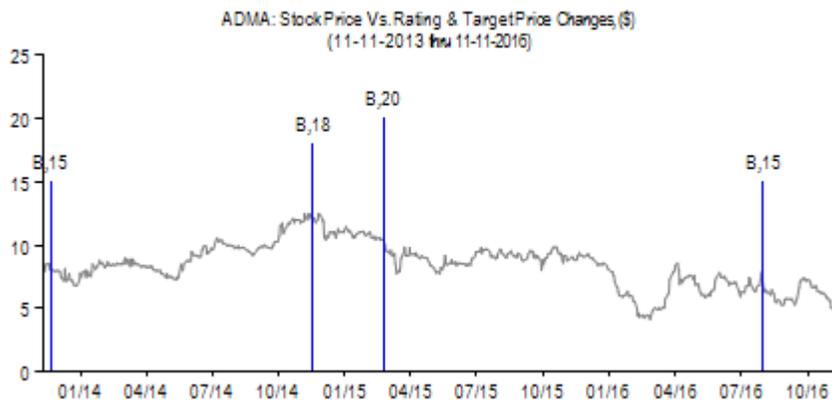
# Laidlaw & Co (UK) Ltd. has not provided any investment banking services for the company (ies) mentioned in this report over the last 12 months.

**RATINGS INFORMATION****Rating and Price Target Change History****3 Year Rating Change History**

Date	Rating	Closing Price (\$)
11/21/2013	Buy (B)	8.10

**3 Year Price Change History**

Date	Target Price (\$)	Closing Price, (\$)
11/21/2013	15.00	8.10
11/18/2014	18.00	12.05
02/23/2015	20.00	10.40
08/01/2016	15.00	6.49



Source: Laidlaw &amp; Company

Created by: Blue-Compass.net

Laidlaw & Company Rating System*		% of Companies Under Coverage With This Rating	% of Companies for which Laidlaw & Company has performed services for in the last 12 months	
			Investment Banking	Brokerage
<b>Strong Buy (SB)</b>	Expected to significantly outperform the sector over 12 months.	2.56%	2.56%	0.00%
<b>Buy (B)</b>	Expected to outperform the sector average over 12 months.	58.97%	28.21%	2.56%
<b>Hold (H)</b>	Expected returns to be in line with the sector average over 12 months.	5.13%	0.00%	0.00%
<b>Sell (S)</b>	Returns expected to significantly underperform the sector average over 12 months.	2.56%	0.00%	0.00%

**ADDITIONAL COMPANIES MENTIONED****ADDITIONAL DISCLOSURES**

As of the date of this report, neither the author of this report nor any member of his immediate family or household maintains an ownership position in the securities of the company (ies) mentioned in this report.

This report does not provide individually tailored investment advice and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. Laidlaw & Co (UK), Ltd. recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. The securities, instruments, or strategies discussed in this report may not be suitable for all investors, and certain investors may not be eligible to purchase or participate

in some or all of them. This report is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy.

Associated persons of Laidlaw & Co (UK), Ltd not involved in the preparation of this report may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned herein and may trade them in ways different from those discussed in this report. While Laidlaw & Co (UK), Ltd., prohibits analysts from receiving any compensation. Bonus or incentive based on specific recommendations for, or view of, a particular company, investors should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest.

With the exception of information regarding Laidlaw & Co (UK), Ltd. this report is based on public information. Laidlaw & Co (UK), Ltd makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete and it should not be relied upon as such. Any opinions expressed are subject to change and Laidlaw & Co (UK), Ltd disclaims any obligation to advise you of changes in opinions or information or any discontinuation of coverage of a subject company. Facts and views presented in this report have not been reviewed by, and may not reflect information known to, professionals in other Laidlaw & Co (UK), Ltd business areas. Laidlaw & Co (UK), Ltd associated persons conduct site visits from time to time but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

Any trademarks and service marks contained in this report are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data. This report or any portion thereof may not be reprinted, sold or redistributed without the written consent of Laidlaw & Co (UK), Ltd. This report is disseminated and available primarily electronically, and, in some cases, in printed form.

The information and opinions in this report were prepared by Laidlaw & Co (UK), Ltd. For important disclosures, please see Laidlaw & Co (UK), Ltd.'s disclosure website at [www.LaidlawLtd.com](http://www.LaidlawLtd.com), or contact your investment representative or Laidlaw & Co (UK), Ltd at 546 Fifth Ave, 5th Floor, New York, NY 10036 USA.

© 2016 Laidlaw & Co. (UK), Ltd.

**NOTES:**