DAWSON JAMES SECURITIES

INSTITUTIONAL RESEARCH

Biotechnology

UPDATE REPORT

Member FINRA/SIPC

Toll Free: 561-391-5555 ♦ www.DawsonJames.com ♦ 1 North Federal Highway - Suite 500 ♦ Boca Raton, FL 33432

Adma Biologics (NASDAQ/ADMA)

BUY Time to Commercialize

Adma received official word earlier this week that the FDA product licenses for BIVIGAM and Nabi-HB are now transferred to the company.

July 10, 2019

Jason Kolbert
Head of HealthCare Research
646-465-6891
jkolbert@dawsonjames.com

Investment Highlights
ADMA announced the United States Food and Drug Administration ("FDA") has notified the company that the licenses for BIVIGAM and Nabi-HB have been transferred and issued to ADMA's U.S. License No. 2019. This news is yet another positive and follows the FDA's recent approval of SCENIV too.

SCENIV (RI-002) FDA Approved for PIDD's. On April 1st (No Fools) the FDA approved ASCENIV Immune Globulin Intravenous, Human – slra 10% Liquid, formerly referred to as RI-002. ASCENIV or RI-002 is an Intravenous Immune Globulin drug product for the treatment of Primary Humoral Immunodeficiency Disease ("PIDD") in adults and adolescents (12 to 17 years of age). The dept. of Health and Human Services issued U.S. license No. 2019 to ADMA in connection with the approval of ASCENIV. The license covers the Boca Raton, FL manufacturing facility which has demonstrated compliance with FDA requirements as well as authorizes ADMA to manufacture and enter into interstate commerce with ASCENIV. Adma anticipates having the product available for commercial launch during the second half of 2019.

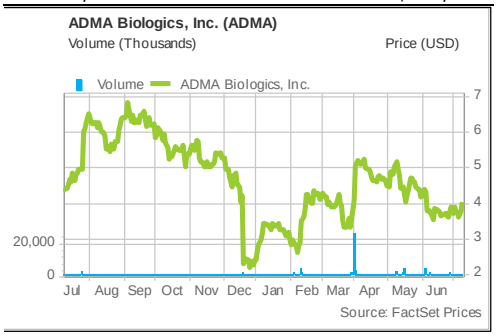
Manufacturing Math. ADMA now owns and operates its manufacturing plant, located in Boca Raton, Fla. The facility can produce three products: (1) BIVIGAM; (2) Nabi-HB; and (3) RI-002. We have worked out the manufacturing math associated with the plant and conclude that the plant at full capacity can make $118M annually of BIVIGAM at 10% margins or $693M of RI-002 at 70% gross margin. The challenge for ADMA we see is to optimize sales of RI-002 and use the remaining capacity to manufacture the other products, BIVIGAM and higher margin Nabi-HB. NABI-HB addresses a smaller market with (by our estimates), peak sales of $10M but like RI-002 with margins at 70%. We estimate that by 2020, ADMA should be producing and selling $33M of RI-002, $43M of BIVIGAM, and $10M of Nabi-HB, which if realized means that ADMA is a cash flow positive company.

Valuation. ADMA as a company has gone through a significant transition from a drug developer to a company that now will be manufacturing multiple products and soon, with the approval of RI-002 now in hand, ADMA expects to be commercializing this and other products soon. We see RI-002 as a unique high-value, high margin product. In our opinion RI-002 remains the key driver for the company. How successful can ADMA be in commercializing RI-002? We estimate the product could price at $500 per gram versus BIVIGAM at $85 per gram versus the cost to produce each, RI-002 at $150 per gram and BIVIGAM at $75 per gram. BIVIGAM is a low margin product, but ADMA should be able to sell as much as it can manufacture in the U.S. as the market size is large, and there are reports of supply shortages.

Current Price	**$4.03**
Price Target	**$6.00**

Estimates	F2017A	F2018E	F2019E
Revenues ($000s)	$ 22,761	$ 16,985	$ 42,662
1Q March	$ 2,629	$ 4,043	$ 3,528
2Q June	$ 3,399	$ 4,656	$ 9,214
3Q September	$ 4,729	$ 4,230	$ 12,940
4Q December	$ 12,003	$ 4,056	$ 16,980
	F2017A	F2018E	F2019E
EPS (diluted)	$ (2.00)	$ (1.45)	$ (0.81)
1Q March	$ (0.51)	$ (0.39)	$ (0.28)
2Q June	$ (0.55)	$ (0.35)	$ (0.22)
3Q September	$ (0.59)	$ (0.33)	$ (0.17)
4Q December	$ (0.36)	$ (0.39)	$ (0.13)
EBITDA/Share			
EV/EBITDA (x)			

Stock Data	
52-Week Range	$2.08 - $6.96
Shares Outstanding (mil.)	59.3
Market Capitalization (mil.)	$239
Enterprise Value (mil.)	$212
Debt to Capital	6%
Book Value/Share	$0.89
Price/Book	5.6
Average Three Months Trading Volume (K)	548
Insider Ownership	23.5%
Institutional Ownership	40.4%
Short interest (mil.)	7.6%
Dividend / Yield	$0.00/0.0%



Update - July 10 , 2018 - Buy - Price Target $6

As such, we see the combination of BIVIGAM and ADMA's other product Nabi-HB as creating an operational base for ADMA. RI-002 as a high margin product becomes the performance driver to turn the company cash flow positive. In addition to our models, which reflect how the product mix may develop, we must also be aware of the facility value or the value of ADMA's manufacturing operations. We should also factor into our thinking the fact that the Boca Raton facility has now under-gone a top to bottom FDA review, and we believe the facility is now in full compliance. We know that acquisitions of similar facilities have been in the $300 million to $400 million range. For the purposes of our valuation, we do not include the facility value but recognize it could be a factor should one of the larger players decide to make an acquisition bid for ADMA.

Our models for BIVIGAM and RI-002 are patient based. These then feed into our income statement and allow us to apply valuation metrics based on our projected regulatory timelines, pricing and costs, expected cost of goods sold, and other factors. We assume that BIVIGAM is re-launched by the middle of 2019 and is RI-002. For new RI-002 indications in development, we apply a probability of success of just 30%. These indications include HSCT, SOT, and chemotherapy patients. The development of these indications is partially dependent on the demand for RI-002 in the primary indication, PIDD. If the demand is high, the need to develop RI-002 is lower in these other indications, as ADMA's capacity is limited. See our product modeling assumptions for more detail.

Our valuation conclusion is an equally weighted average of our free cash flow to the firm (FCFF), earnings per share (EPS), and sum-of-the-parts analysis discounted at a rate of 30% to account for the risks of development and commercialization and rounded to the nearest whole number. We typically use 30% for companies with only pipeline products that are not yet cash flow positive as is the case for ADMA. We assume a P/E multiple of just 15x, (which is based on a comparative analysis), which we feel is conservative versus the few comparisons, none of which are ideal, but suggest a higher multiple. The result of our analysis is a $6 price target.

Exhibit 1. Free Cash Flow Model

Average	$	6

Price Target	$	6
Year		2020

DCF Valuation Using FCFF:

units ('000)	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
EBIT	(45,076)	(1,631)	12,540	56,810	101,329	155,036	185,640	205,683	228,460	255,627
Tax Rate	0%	0%	5%	7%	9%	10%	12%	12%	15%	18%
EBIT(1-t)	(45,076)	(1,631)	11,913	52,834	92,209	139,532	163,363	181,001	194,191	209,614
CapEx	(300)	(330)	(363)	(399)	(439)	(483)	(531)	(585)	(643)	(707)
Depreciation	4,282	5,139	6,167	7,400	8,880	10,656	12,787	15,344	18,413	22,096
Change in NWC										
FCF	(41,094)	3,178	17,717	59,834	100,650	149,705	175,619	195,761	211,961	231,002
PV of FCF	(53,422)	3,178	13,628	35,405	45,812	52,416	47,299	40,557	33,779	28,318
Discount Rate	30%									
Long Term Growth Rate	1%									
Terminal Cash Flow	681,787									
Terminal Value YE2023	141,250									
NPV	424,837									
NPV-Debt	55,768									
Shares out (thousands)	63,244	2028E								
NPV Per Share	$ 6									

Source: Dawson James.

Exhibit 2. Discounted-EPS Model

Current Year		2020
Year of EPS		2028
Earnings Multiple		15
Discount Factor		30%
Selected Year EPS	$	3.31
NPV	$	6

		Discount Rate and Earnings Multiple Varies, Year is Constant 2028 EPS					
		5%	10%	15%	20%	25%	30%
PE Multiple	1	$2.14	$1.41	$0.94	$0.64	$0.44	$ 0.31
	5	$10.68	$7.03	$4.71	$3.21	$2.22	$ 1.56
	10	$21.36	$14.06	$9.42	$6.42	$4.45	$ 3.13
	15	$32.04	$21.08	$14.13	$9.63	$6.67	$ 4.69
	20	$42.73	$28.11	$18.84	$12.85	$8.90	$ 6.25
	25	$53.41	$35.14	$23.55	$16.06	$11.12	$ 7.81
	30	$64.09	$42.17	$28.26	$19.27	$13.34	$ 9.38
	35	$74.77	$49.19	$32.97	$22.48	$15.57	$ 10.94

Source: Dawson James.

Exhibit 3. Sum-of-the-Parts Model

ADMA Biologics Sum-of-the-Parts	LT Gr	Discount Rate	Yrs. to Mkt	% Success	Peak Sales MM's	NPV
RI-002 (PIDD)	1%	30%	1	100%	$229	$789
NPV						$3.84
Hematopoietic Stem Cell Transplant (HSCT)	1%	30%	4	30%	$50	$174
NPV						$0.12
Solid Organ Transplant (SOT)	1%	30%	4	30%	$22	$77
NPV						$0.05
Cancer patients (receiving chemotherapy)	1%	30%	4	30%	$76	$261
NPV						$0.17
Contract manufacturing and other products	1%	30%	1	100%	$13	$46
NPV						$0.22
BIVIGAM	1%	30%	0	100%	$78	$268
NPV						$1.70
Nabi-HB	1%	30%	0	100%	$3	$10
NPV						$0.06
Plasma Centers (Plasma Sold)- one left	1%	15%	10	30%	$13	$93
NPV						$0.04
Net Margin						40%
MM Shrs OS (2028E)						63
Total						$6

Source: Dawson James.

Risk Analysis

Clinical and regulatory risk. The products may not receive regulatory approval in the products' respective jurisdictions. For ADMA, this is approval in the U.S. by the FDA. There are no assurances ADMA's products will be approved and even if approved, will be reimbursed by insurance.

Manufacturing risk. Manufacturing, packaging, labeling, storage, and distribution procedures must all conform to good manufacturing practices. ADMA acquired its contract manufacturer's facility in an effort to ensure product compliance. There can be no assurances that the facility will be certified, and once certified will remain in compliance with regulators' standards. We note that while it rarely happens regulatory authorities may withdraw product approvals, request product recalls, or impose marketing restrictions through labeling changes or product removals if a company fails to comply with regulatory standards, if regulators encounter problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

Commercial risk. There are no assurances that the company will be able to achieve a critical level of market share to become profitable. ADMA is working to drive a product mix towards its higher margin product RI-002 versus lower margin products such as BIVIGAM. There are no assurances that ADMA will be successful in achieving a product mix that can support the company to become cash flow positive.

Competition risk. The IVIG marketplace is oligopolistic with three well-capitalized large companies (Shire, CSL Behring, and Grifols) which control as much as 80% of the marketplace. Competing with these companies is likely to be a challenge for ADMA.

Financial risk. The company may need to raise capital in the marketplace, and there can be no assurances that the company will be able to successfully raise capital and do so on favorable terms.

Intellectual property risk. The company may have to defend its positions against possible infringement of others' patents and avoid infringing the proprietary rights of third parties.

Exhibit 4. Income Statement

ADMA Biologics Income Statement ($000)																					
ADMA Biologics	**2016A**	**2017A**	**2018A**	**1Q19A**	**2Q19E**	**3Q19E**	**4Q19E**	**2019E**	**1Q20E**	**2Q20E**	**3Q20E**	**4Q20E**	**2020E**	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**
Revenue ($000)																					
RI-002 Indications																					
PIDD					3,850	7,700	10,965	22,515	7,660	8,326	7,993	9,325	33,303	46,858	95,600	134,092	174,093	190,277	200,572	217,803	228,914
Hematopoietic Stem Cell Transplant (HSCT)				-	-	-	-	-	-	-	-	-	-	-	7,170	12,800	20,518	32,347	36,879	43,561	50,496
Solid Organ Transplant (SOT)				-	-	-	-	-	-	-	-	-	-	-	1,314	5,364	12,311	15,349	17,081	18,876	22,218
Cancer patients (receiving chemotherapy)				-	-	-	-	-	-	-	-	-	-	-	4,481	13,714	32,642	42,812	53,378	59,401	75,744
Other immune compromised groups, elderly																					
Other Revenue																					
Plasma Centers (Plasma Sold)- one left	10,518	11,600	8,718		250	300	350	900	525	550	575	850	2,500	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694
License Revenues	143	143	142	36	5	5	5	51	19	19	19	19	76	76	76	76	76	76	76	76	76
Nabi-HB		4,518	3,695	609	615	621	627	2,473	634	640	646	653	2,573	2,599	2,625	2,651	2,678	2,704	2,731	2,759	2,786
BIVIGAM				2,700	4,306	4,134	4,823	17,224	9,878	10,737	10,308	12,026	42,949	59,744	65,008	70,459	71,875	77,633	74,794	76,297	77,831
Contract and other products		6,500	4,429	184	188	180	210	750	181	197	189	221	788	4,000	5,000	7,000	7,350	9,000	11,000	12,000	13,200
Total Product Sales	**10,661**	**22,761**	**16,985**	**3,528**	**9,214**	**12,940**	**16,980**	**43,912**	**18,897**	**20,469**	**19,730**	**23,093**	**82,188**	**115,902**	**184,031**	**249,050**	**324,582**	**373,390**	**399,862**	**434,291**	**474,958**
Expenses																					
Cost of Goods Sold (BIVIGAM)	6,361	29,164	42,194	9,205	3,789	3,638	4,244	20,876	8,693	9,449	9,071	10,583	37,795	52,575	57,207	62,004	63,250	68,317	65,819	67,142	68,491
% COGS (high)				88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Cost of Goods Sold (RI-002)			-	-	1,155	2,310	3,289	6,754	2,298	2,498	2,398	2,797	9,991	14,057	32,570	49,791	71,869	84,236	92,373	101,892	113,211
% COGS (low)				30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Cost of Goods Sold (Nabi-HB)			-	200	185	186	188	759	190	192	194	196	772	780	787	795	803	811	819	828	836
% COGS (high)				30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Cost of Goods Sold (all other bus. Areas)			-		255	305	355	915	544	569	594	869	2,576	2,701	2,832	2,970	3,115	3,267	3,426	3,594	3,770
% COGS				75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Total COGS			-	9,405	5,384	6,439	8,077	29,305	11,725	12,708	12,257	14,445	51,134	70,113	93,396	115,560	139,038	156,631	162,437	173,455	186,308
% COGS				267%	58%	50%	48%	48%	62%	62%	62%	63%	63%	60%	51%	46%	43%	42%	41%	40%	39%
General and Administrative	8,495	18,093	22,503	5,595	6,011	6,011	6,011	23,628	6,025	6,025	6,025	6,025	24,101	24,583	25,074	25,576	26,087	26,609	27,141	27,684	28,238
Research and Development	7,688	6,230	3,926	871	871	871	871	4,005	1,021	1,021	1,021	1,021	4,085	4,166	4,250	4,335	4,421	4,510	4,600	4,692	4,786
Plasma Center Cost to Operate			7,806	654																	
Amortization of Intangibles			845	211																	
Total expenses	**27,991**	**62,071**	**77,274**	**16,737**	**12,265**	**13,321**	**14,958**	**57,281**	**18,771**	**19,754**	**19,303**	**21,491**	**79,319**	**98,862**	**122,720**	**145,471**	**169,546**	**187,750**	**194,179**	**205,832**	**219,332**
Oper. Inc. (Loss)	(17,330)	(39,310)	(60,289)	(13,209)	(3,052)	(381)	2,022	(14,619)	126	715	427	1,602	2,869	17,040	61,310	103,579	155,036	185,640	205,683	228,460	255,627
Interest Income	50	57	195	127				127					-	-	-	-	-	-	-	-	-
Interest Expense Biotest	(2,240)	(3,286)	(5,523)	(1,541)	(225)	(225)	(225)	(2,216)	(225)	(225)	(225)	(225)	(900)	(900)	(900)	(450)	-	-	-	-	-
Interest Expense Marathon				(9,974)	(9,974)	(9,974)	(9,974)	(3,600)	(900)	(900)	(900)	(900)	(3,600)	(3,600)	(3,600)	(1,800)					
Change in Fair Value of Warrants																-	-	-	-	-	-
Plasma Centers (gain)		(10)		11,527												-	-	-	-	-	-
Loss on extinguishment of debt		(1,210)																			
Total Other Expenses	(2,185)	(4,449)	(127)	**140**	**(10,199)**	**(10,199)**	**(10,199)**	(30,457)	**(1,125)**	**(1,125)**	**(1,125)**	**(1,125)**	(4,500)	(4,500)	(4,500)	(2,250)	-	-	-	-	-
Pretax Income	**(19,515)**	**(43,758)**	**(65,743)**	**(13,068)**	**(13,251)**	**(10,580)**	**(8,177)**	**(45,076)**	**(999)**	**(410)**	**(698)**	**477**	**(1,631)**	**12,540**	**56,810**	**101,329**	**155,036**	**185,640**	**205,683**	**228,460**	**255,627**
Income Tax Benefit (Provision)	-	-	-	-	-	-	-	-	-	-	-	-	-	627	3,977	9,120	15,504	22,277	24,682	34,269	46,013
Tax Rate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	7%	9%	10%	12%	12%	15%	18%
GAAP Net Income (loss)	**(19,515)**	**(43,758)**	**(65,743)**	**(13,068)**	**(13,251)**	**(10,580)**	**(8,177)**	**(45,076)**	**(999)**	**(410)**	**(698)**	**477**	**(1,631)**	**11,913**	**52,834**	**92,209**	**139,532**	**163,363**	**181,001**	**194,191**	**209,614**
GAAP-EPS	**(1.61)**	**(1.91)**	**(1.45)**	**(0.28)**	**(0.22)**	**(0.17)**	**(0.13)**	**(0.81)**	**(0.02)**	**(0.01)**	**(0.01)**	**0.01**	**(0.03)**	**0.19**	**0.86**	**1.49**	**2.24**	**2.61**	**2.88**	**3.08**	**3.31**
Non GAAP EPS (dil)	(1.61)	(2.00)	(1.45)	(0.28)	(0.22)	(0.17)	(0.13)	(0.81)	(0.02)	(0.01)	(0.01)	0.01	(0.03)	0.19	0.86	1.49	2.24	2.61	2.88	3.08	3.31
Wgtd Avg Shrs (Bas) - '000s	12,153	22,896	45,188	46,353	60,978	61,039	61,100	57,368	61,161	61,222	61,284	61,345	61,253	61,498	61,745	61,992	62,240	62,490	62,740	62,991	63,244
Wgtd Avg Shrs (Dil) - '000s	12,153	22,896	45,188	46,353	60,978	61,039	61,100	57,368	61,161	61,222	61,284	61,345	61,253	61,498	61,745	61,992	62,240	62,490	62,740	62,991	63,244

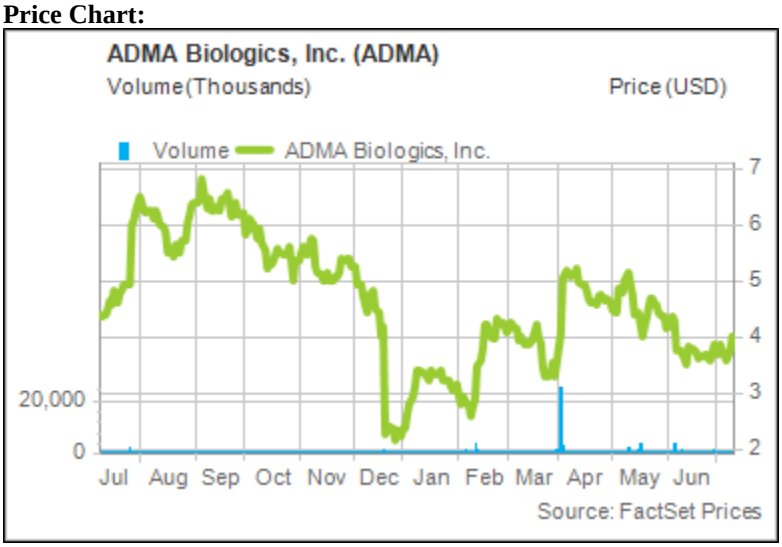
Source: Dawson James.

Companies mentioned in this report:

Biotest (BIO3: Not Rated)

Important Disclosures:

Price Chart:



Price target and ratings changes over the past 3 years:
Initiated – Buy – December 28, 2018 – Price Target $7.0
Update – Buy – April 3, 2019 – Price Target $7.0
Update – Buy – May 30, 2019 – Price Target lowered from $7.0 to $6.0
Update – Buy – July 10, 2019 – Price Target $6.0

Dawson James Securities, Inc. (the "Firm") is a member of the Financial Industry Regulatory Authority ("FINRA") and the Securities Investor Protection Corporation ("SIPC").

The Firm does not make a market in the securities of the subject company(s). The Firm has NOT engaged in investment banking relationships with ADMA in the prior twelve months, as a manager or co-manager of a public offering and has NOT received compensation resulting from those relationships. The Firm may seek compensation for investment banking services in the future from the subject company(s). The Firm has NOT received any other compensation from the subject company(s) in the last 12 months for services unrelated to managing or co-managing of a public offering.

Neither the research analyst(s) whose name appears on this report nor any member of his (their) household is an officer, director or advisory board member of these companies. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future. As of June 30, 2019, the Firm as a whole did NOT beneficially own 1% or more of any class of common equity securities of the subject company(s) of this report. The Firm, its officers, directors, analysts or employees may effect transactions in and have long or short positions in the securities (or options or warrants related to those securities) of the company(s) subject to this report. The Firm may effect transactions as principal or agent in those securities.

Analysts receive no direct compensation in connection with the Firm's investment banking business. All Firm employees, including the analyst(s) responsible for preparing this report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of the Firm and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Although the statements in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice.

Information about valuation methods and risks can be found in the "STOCK VALUATION" and "RISK ANALYSIS" sections of this report.

The securities of the company discussed in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.

Ratings Definitions:

1) **Buy**: the analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months;
2) **Neutra**l: the analyst believes the price of the stock is fairly valued for the next 12-18 months;
3) **Sel**l: the analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	38	84%	12	32%
Market Perform (Neutral)	7	16%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	45	100%	12	27%

Analyst Certification:

The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his (their) personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) all Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.