

Member FINRA/SIPC

Toll-Free: 866-928-0928 ♦ www.DawsonJames.com ♦ 101 North Federal Highway - Suite 600 ♦ Boca Raton, FL 33432

Know Labs (ASE: KNW) - Buy

February 17, 2023

Reports 4th Quarter: Spending \$3.8M, \$9.7M in Cash

Jason Kolbert
Managing Director and Senior Analyst
jkolbert@dawsonjames.com

Know Labs reported 4th Quarter spending \$1.7M in R&D, and \$1.9M in SG&A and closing the period with \$9.7M in cash. Management guided that “cash on hand should be sufficient to fund operations through February 2024.” The company is working on refining its sensor (BioRFID) and the associated software in advance of trials. Management during Q&A stated that they hope to submit the company’s application to regulators (the FDA), later this year. The webcast (post earnings release) is available on the company’s website: [click here](#)

A Paradigm Shift in How We Measure – Radio Frequency Coupled with Artificial Intelligence (AI). The technology utilizes electromagnetic energy across a wide range of the spectrum from visible light and infrared to radio and microwave wavelengths to perform analytics (AI processing) which accurately identifies and quantitates its target. The first selected indication is set targeting the glucose levels (HbA1c) in type II diabetic patients.

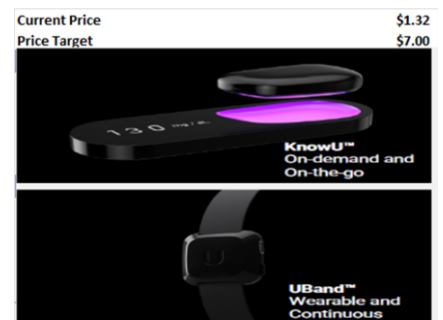
What is the Opportunity? With a competitive product and just a tiny piece of the market, the company can succeed. In just Type II diabetes in the U.S. alone, the CDC estimates there are 37M target patients. The numbers are even more significant in Europe.

Does it Work? The company has run hundreds of internal proof of concept studies and recently completed *In Vitro* validation at a world-renowned academic medical center. An *In Vivo* Study of Bio-RFID glucose monitoring is expected to begin soon.

What’s the Timeline & Pathway to the Marketplace? The company will be busy over the next two years as they complete product refinements and finalize the KnowU production units. Management is preparing to initiate a clinical program based on input from regulators. A pre-submission meeting with the FDA is the next step. Multiple variables predict the timeline. Management intends to use the De Novo pathway. This pathway does not rely on comparisons to a predicate device where equivalence must be shown. As the technology behind the KnowU band is novel, it may provide an accelerated path to market.

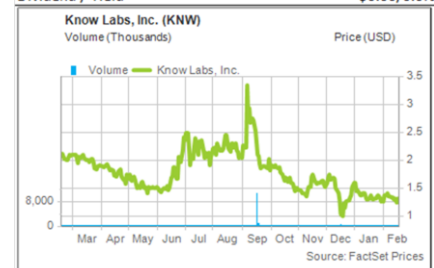
Valuation: We project our model out to 2030. We apply a conservative 30% success probability to our projected revenues in our product model, which is in addition to our 30% risk rate applied in our Free Cash Flow to the Firm (FCFF), discounted EPS (dEPS), and Sum-of-the-Parts (SOP) models, which are then equal-weighted and averaged and rounded to the nearest whole number to derive our 12-month projected price target of \$7.0.

Risks to our thesis include: 1. Regulatory Approvals 2. Clinical Science 3. Dependence on OEM suppliers 4. Development of the target markets 5. Intellectual Capital 6. Dilution



Source: Know Labs

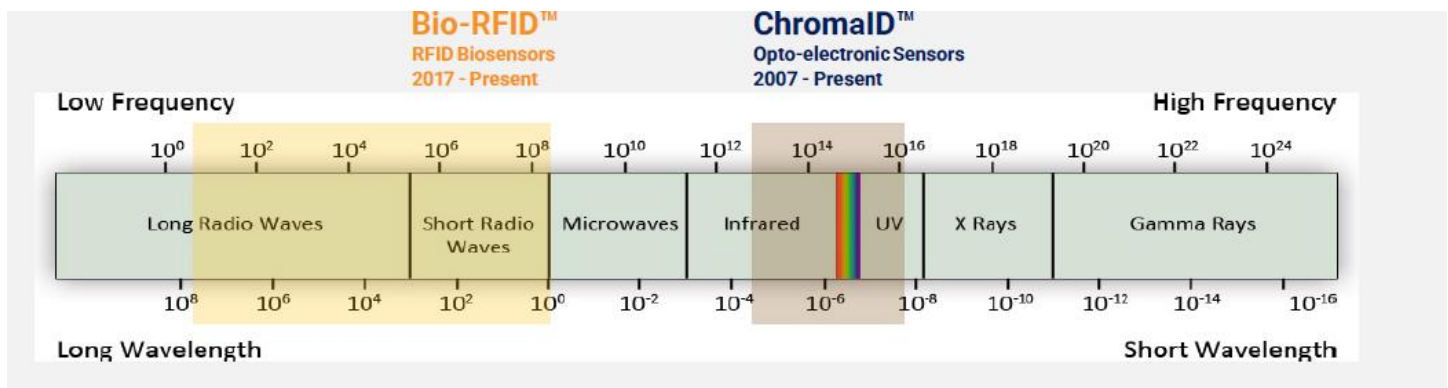
Stock Data Sept. YE			
52-Week Range	\$0.92	-	\$4.00
Shares Outstanding (mil.)	48.2		
Market Capitalization (mil.)	\$64		
Enterprise Value (mil.)	\$58		
Debt to Capital	0%		
Book Value/Share	NA		
Price/Book	-		
Average Three Months Trading Volume (K)	NA		
Insider Ownership	26.0%		
Institutional Ownership	2.4%		
Short interest (mil.)	1.0%		
Dividend / Yield	\$0.00/0.0%		



Company Description: Know Labs is an advanced technology company that is currently focused on developing “Bio-RFID”. The Bio-RFID sensor employs electromagnetic energy to detect, record, identify, and measure a unique signature of the target. The results are then analyzed using proprietary algorithms combined with its artificial intelligence (AI) Deep Learning platform.

How Does it Work? Bio-RFID utilizes spectroscopy at higher wavelengths to span radio wave and microwave segments of the electromagnetic spectrum. The technology, which is highly patented, utilizes electromagnetic energy along a wide range of the electromagnetic spectrum from visible light and infrared to radio and microwave wavelengths to perform analytics which allow the user to accurately identify and measure materials and analytes depending upon the specified targets or endpoints and field of use. A critical competitive differentiator for Bio-RFID is its ability not only to identify a wide range of organic and inorganic materials and analytes but to do so concurrently and in real-time, which potentially enables new multivariate models of clinical diagnostics and health and wellness monitoring. The company has been able to non-invasively measure blood glucose levels in humans with a high degree of accuracy and specificity. The company notes that its ability to obtain exacting results from the data obtained from its Bio-RFID sensor technology, also referred to as Radio Frequency Spectroscopy or RF Spectroscopy is a consequence of the application of the Company’s proprietary algorithms.

Exhibit 1. The Technology and the Spectrum



Source: Know Labs

It’s not just the sensor but its AI Artificial Intelligence & Machine Learning, too. The company has developed AI and Machine Learning that drives the accurate pattern recognition of its algorithms which has led to the development of a robust AI Deep Learning Platform at the company. The initial indication is pattern recognition for Bio-RFID’s exacting determination of blood glucose levels. The company notes that the same sensor/technology can provide the data recognition for blood alcohol and blood oxygen levels too. We note that the company sees value in its AI Deep Learning Platform and has structured this part of the business as a subsidiary, AI Mind, Inc.

How Well Does It Work, How Does it Compare to What’s on the Market Now? The company announced the results of laboratory-based comparison testing between its Bio-RFID technology and the leading continuous glucose monitors from Abbott Labs (Freestyle Libre®) and DexCom (G6®). These results provide evidence of a high degree of correlation between the Bio-RFID technology and the current industry leaders and their continuous glucose monitors. In addition to internal testing, the Company engaged a world-renowned research institution to perform third-party validation testing of the Bio-RFID technology. The purpose of the independent research was to confirm that Know Labs’ Bio-RFID technology is able to precisely and non-invasively measure and identify a variety of analytes in vitro by detecting their unique radio frequency spectral responses.

What’s the Pathway to the Market? The company intends to seek a De Novo approval versus the alternative a traditional 510(k) pathway. Recall that the 510(k) submissions rely on a predicate device that must prove substantial equivalence for market clearance; De Novo submissions begin with a clean slate and don’t use any existing equivalence criteria as a basis for approval of a device. And it is for this reason that some companies consider the De Novo pathway.

Exhibit 2. Model Assumptions

1. Our model is a simplified prevalence model where we assume a timeline, market share, and a price in the Type II diabetes markets in the U.S. and Europe.
2. We assume annual pricing of just \$1,000, which we note is well below competing devices now in use in the marketplace.
3. The market size is quite large; as such, almost any market share translates into commercial success.
4. We apply just a 30% probability of success. We believe this is conservative as the device has already demonstrated proof of concept and equivalence to other products in the marketplace. As we see clinical progress, we anticipate raising this probability which then has the effect of driving a higher suggested valuation.

Exhibit 3. Product Model

U.S. Type II Diabetese Market	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
US Market Prevalance	48,000,000	50,400,000	52,920,000	55,566,000	58,344,300	61,261,515	64,324,591	67,540,820	70,917,861	74,463,754	78,186,942
Assume 10% - Proactive & Insured	4,800,000	5,040,000	5,292,000	5,556,600	5,834,430	6,126,152	6,432,459	6,754,082	7,091,786	7,446,375	7,818,694
Market Share	0%	0%	0%	0%	3%	6%	8%	10%	12%	14%	15%
Annual Fee	-	-	-	-	175,033	367,569	514,597	675,408	851,014	1,042,493	1,172,804
Annual Fees - Price	-	-	\$1,000	\$1,020	\$1,040	\$1,061	\$1,082	\$1,104	\$1,126	\$1,149	\$1,172
Revenues (M)	-	-	\$0	\$0	\$182	\$390	\$557	\$746	\$958	\$1,197	\$1,374
Probability of Success			30%	30%	30%	30%	30%	30%	30%	30%	30%
Annual Revenues - Millions			\$0	\$0	\$55	\$117	\$167	\$224	\$288	\$359	\$412

ROW Type II Diabetese Market	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
US Market Prevalance	59,000,000	61,950,000	65,047,500	68,299,875	71,714,869	75,300,612	79,065,643	83,018,925	87,169,871	91,528,365	96,104,783
Assume 10% - Proactive & Insured	5,900,000	6,195,000	6,504,750	6,829,888	7,171,487	7,530,061	7,906,564	8,301,892	8,716,987	9,152,836	9,610,478
Market Share	0%	0%	-	-	1%	3%	5%	7%	9%	10%	11%
Annual Fee	-	-	-	-	71,715	225,902	395,328	581,132	784,529	915,284	1,057,153
Annual Fees - Price	-	-	\$1,000	\$1,020	\$1,040	\$1,061	\$1,082	\$1,104	\$1,126	\$1,149	\$1,172
Revenues (M)	-	-	\$0	\$0	\$75	\$240	\$428	\$642	\$884	\$1,051	\$1,239
Probability of Success			30%	30%	30%	30%	30%	30%	30%	30%	30%
Annual Revenues - Millions			\$0	\$0	\$22	\$72	\$128	\$192	\$265	\$315	\$372

Source: Dawson James

Valuation: Our valuation for Know Labs is based on our assumptions. The most critical of which is the timeline. We assume the company can leverage the De Novo pathway and, with one modestly powered trial, submit the device for approval. In our therapeutic model, we apply a 30% probability of success factor. This could prove conservative. The subsequent revenues are then fed into our income statement. To the income statement metrics, we then model a target valuation. We assume the company does raise additional capital, and as such, our valuation math is based on the 2030 fully diluted share count. We apply a 30% risk rate in these models, which is in addition to the probability of success factor in the therapeutic model. The risk rate is then set to 30% in our free cash flow to the Firm (FCFF), discounted EPS (dEPS), and Sum-of-the-Parts (SOP). We select 30% for micro-capitalized growth companies, and this represents our highest risk rate. The result of these three models is then equal-weighted and averaged and rounded to the nearest whole number to provide a 12-month target price.

Exhibit 4. Free Cash Flow Model

Average	\$	7
Price Target	\$	6
Year		2023

DCF Valuation Using FCF (mln):

units ('000 - Cnd\$)	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(25,360)	(7,779)	(8,100)	(13,202)	68,224	168,666	254,964	362,542	620,753	727,522
Tax Rate	0%	0%	0%	0%	0%	0%	10%	15%	20%	25%
EBIT(1-t)	(25,360)	(7,779)	(8,100)	(13,202)	68,224	168,666	229,468	308,161	496,602	545,641
CapEx	(300)	-	-	-	-	-	-	-	-	-
Depreciation	203	-	-	-	-	-	-	-	-	-
Change in NWC										
FCF	(25,457)	(7,779)	(8,100)	(13,202)	68,224	168,666	229,468	308,161	496,602	545,641
PV of FCF	(33,094)	(7,779)	(6,231)	(7,812)	31,053	59,055	61,802	63,844	79,142	86,957
Discount Rate										
Long Term Growth Rate										
Terminal Cash Flow		1,900,336.90								
Terminal Value YE2030		302,850								
NPV		670,659								
NPV-Debt		9191								
Shares out (thousands)		108,668	2030E							
NPV Per Share	\$	6								

Source: Dawson James estimates

Exhibit 5. Discounted EPS Model

Current Year	2023
Year of EPS	2030
Earnings Multiple	10
Discount Factor	30%
Selected Year EPS	\$ 5.02
NPV	\$ 8

		Discount Rate and Earnings Multiple Varies, Year is Constant					
		2030 EPS					
Earnings Multiple		5%	10%	15%	20%	25%	30%
		2	\$7.14	\$5.15	\$3.78	\$2.80	\$2.11
5	\$17.84	\$12.88	\$9.44	\$7.01	\$5.26	\$ 4.00	
10	\$35.68	\$25.77	\$18.88	\$14.01	\$10.53	\$ 8.00	
15	\$53.52	\$38.65	\$28.31	\$21.02	\$15.79	\$ 12.00	
20	\$71.37	\$51.53	\$37.75	\$28.02	\$21.06	\$ 16.00	
25	\$89.21	\$64.41	\$47.19	\$35.03	\$26.32	\$ 20.00	
30	\$107.05	\$77.30	\$56.63	\$42.04	\$31.59	\$ 24.00	
35	\$124.89	\$90.18	\$66.06	\$49.04	\$36.85	\$ 28.01	

Source: Dawson James estimates

Exhibit 6. Sum-of-the-Parts Model

Sum of the Parts	LT Gr	Discount Rate	Yrs. to Mkt	% Success	Peak Sales MMs	Term Val
Type 2	1%	30%	2	70%	\$1,374	\$4,738
NPV						\$7.22
Other	1%	30%	4	70%	\$250	\$862
NPV						\$0.78
Net Margin						40%
MM Shrs OS						109
Total						\$8

Source: Dawson James estimates

Risks Analysis includes: (1) Regulatory Approvals; (2) Clinical Science (3) Dependence on OEM suppliers; (4) Product Development (5) Intellectual Capital & IP (6) Competitive Landscape (7) Dilution and or Financing Risks.

Regulatory risk: Know Labs must be able to obtain the approval of the FDA before commercial sales of the product candidates commence in the United States. The timing of these approvals is uncertain.

Clinical Science risk: The trials may take longer than expected and the design may face challenges. The company plans to pursue the De Novo pathway but there can be no guarantees that this will be viable versus another pathway such as the FDA's 510-K.

Dependence on OEM suppliers: The company must rely on others to manufacture its devices.

Product Development risk: The company is still in early stages of finalizing its products and software.

Intellectual Capital & IP: The company is still small with a select group of internal people able to understand and develop the technology. The company's ability to expand may be dependent on its ability to retain existing and recruit new people to join the organization. The company has a defined patent estate but there can be no guarantees that the company patents are valid and or may be challenged.

Competitive Landscape: The medical device market is intensely competitive. Know Labs must compete with existing and new treatment methods, as well as new technologies for its disease targets. In addition, the company faces intense competition, including well-capitalized devices companies and other emerging technology companies, most of which are well financed.

Dilution and or Financing risk: Know Labs is not a profitable company. While the company has a cash balance today, it is likely that it might need to raise additional capital prior to commercialization. The company's ability to do so could be critical to keeping the current programs moving forward and providing a value-creation event in the future.

Exhibit 7. Income Statement

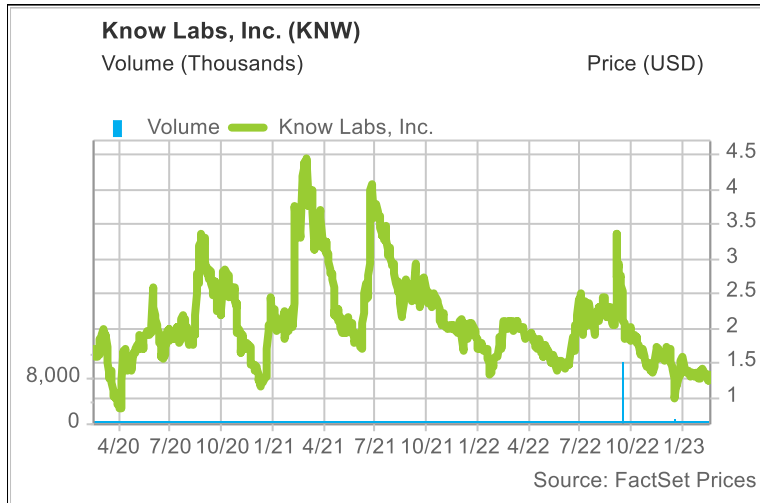
KNW, Inc. Income Statement (\$000)															
YE Sept. 31		2021A	1Q22A	2Q22A	3Q22A	4Q22A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue (\$000)															
US Type 2 Diabetes			-	-	-	-	-			54,631	117,020	167,105	223,712	359,249	412,238
ROW Type 2 Diabetes										300	300	300	300	300	300
Other Platform Services												25,000	50,000	75,000	100,000
Total Revenues			9	-	4,360	-	4,369	-	-	109,563	234,340	334,510	447,723	718,798	824,776
Expenses															
COGS			-	-	-	-	-	-	-	15,339	23,434	26,761	31,341	43,128	41,239
% COGS										14%	10%	8%	7%	6%	5%
Gross Profit			9	-	4,360	-	4,369	-	-	94,224	210,906	307,749	416,383	675,670	783,537
Research & Development	868,584	3,970	1,249	1,273	1,994	1,743	2,779	3,000	6,000	12,000	12,240	12,485	12,734	12,989	13,249
General & Administrative	994,221	6,476	1,448	1,589	4,087	1,905	5,000	5,100	5,202	10,000	15,000	15,300	15,606	15,918	16,236
Marketing & Business Development			155	164	-	-	-	-	2,000	4,000	15,000	25,000	25,500	26,010	26,530
Total expenses		10,446	2,851	3,025	6,081	3,648	15,606	8,100	13,202	26,000	42,240	52,785	53,840	54,917	56,016
Operating Profit		(10,446)	(2,843)	(3,025)	(1,721)	(3,648)	(11,237)	(8,100)	(13,202)	68,224	168,666	254,964	362,542	620,753	727,522
Oper Margin															
Interest Income (expense)	-5228	(14,914)		(240)		(227)	(467)	-	-	-	-	-	-	-	-
Other Income			(3)	262		52	311	-	-	-	-	-	-	-	-
Pre-tax income		(25,360)	(6,141)	(3,003)	(1,721)	(3,823)	(14,688)	(8,100)	(13,202)	68,224	168,666	254,964	362,542	620,753	727,522
Pretax Margin															
Income Tax (Benefit)			-	-	-	-	-	-	-	-	-	25,496	54,381	124,151	181,880
Tax Rate			0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	15%	20%	25%
GAAP Net Income		(25,360)	(6,141)	(3,003)	(1,721)	(3,823)	(14,688)	(8,100)	(13,202)	68,224	168,666	229,468	308,161	496,602	545,641
GAAP-EPS		(0.86)	(0.16)	(0.07)	(0.04)	(0.08)	(0.35)	(0.15)	(0.13)	0.65	1.60	2.16	2.88	4.60	5.02
Non GAAP EPS (dil)		(0.86)	(0.07)	(0.03)	(0.02)	(0.03)	(0.15)	(0.10)	(0.13)	0.65	1.60	2.16	2.88	4.60	5.02
Wgtd Avg Shrs (Bas) - '000s		29,371	37,872	43,761	40,370	48,187	42,548	55,944	58,908	59,380	59,857	60,337	60,821	61,309	61,801
Wgtd Avg Shrs (Dil) - '000s		29,371	93,000	93,186	80,000	113,599	94,946	100,981	104,202	104,933	105,670	106,411	107,158	107,910	108,668

Source: Company reports and Dawson James

Companies mentioned in this report:

Important Disclosures:

Price Chart:



Price target and rating changes over the past three years:

- Initiated – Buy – February 8, 2022 – Price Target \$7.0
- Update Report – Buy – February 15, 2022 – Price Target \$7.0
- Update Report – Buy – May 24, 2022 – Price Target \$7.0
- Update Report – Buy – September 7, 2022 – Price Target \$7.0
- Update Report – Buy – September 19, 2022 – Price Target \$7.0
- Update Report – Buy – December 21, 2022 – Price Target \$7.0
- Update Report – Buy – January 27, 2023 – Price Target \$7.0
- Update Report – Buy – February 17, 2023 – Price Target \$7.0

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 the subject company 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 received 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 January 30, 2023, 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 affect 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 affect 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 "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) **Neutral:** The analyst believes the price of the stock is fairly valued for the next 12-18 months.
- 3) **Sell:** 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.

Current as of 15-Feb-23

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	22	67%	1	5%
Market Perform (Neutral)	11	33%	2	18%
Market Underperform (Sell)	0	0%	0	0%
Total	33	100%	3	9%

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.