Zacks Small-Cap Research

March 13, 2015

Brian Marckx, CFA
bmarckx@zacks.com
Ph (312) 265-9474

scr.zacks.com

10 S. Riverside Plaza, Ste 1600, Chicago, IL 60606

BioLife Solutions Inc (BLFS-NASDAQ)

BLFS: *Core Products +25% in 2014 , Initial 2015 Guidance*

Current Recommendation	**Outperform**
Prior Recommendation	Neutral
Date of Last Change	02/13/2014
Current Price (03/13/15)	$1.69
Target Price	**$6.00**

OUTLOOK

Demand for biopreservation media is estimated to grow at an annual rate of almost 20% over the next several years, largely driven by rapid growth of the emerging field of regenerative medicine (including cell therapy and tissue engineering). BioLife's strategy is to build greater visibility and awareness of the benefits of their biopreservation products compared to the "home-brews" that currently dominate the market. The company's contract manufacturing business was providing a source of near-term revenue although loss of their major mfg customer caused a big hiccup in revenue in 2014. However, the core biopreservation product sales are growing 25%+ due to growing uptake from clinical trial-stage products as well as in the hair restoration field. This is what we expect to be the long-term driver of revenue and earnings. Company also recently signed a new contract mfg agreement and entered into a JV - both of which we see as complementary revenue opportunities.

SUMMARY DATA

52-Week High	**$6.00**
52-Week Low	**$1.58**
One-Year Return (%)	**-67.68**
Beta	**-0.47**
Average Daily Volume (sh)	**35,817**
Shares Outstanding (mil)	**12**
Market Capitalization ($mil)	**$20**
Short Interest Ratio (days)	**0.24**
Institutional Ownership (%)	**4**
Insider Ownership (%)	**8**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**50.9**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2015 Estimate	**N/A**
P/E using 2016 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**High,**
Type of Stock	**Small-Value**
Industry	**Med Products**

ZACKS ESTIMATES

Revenue
(in '000 of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2014	2065 A	1212 A	1243 A	1670 A	6191 A
2015	1426 E	1529 E	1598 E	2213 E	6766 E
2016					9540 E
2017					13501 E

Earnings per Share

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2014	-$0.10 A	-$0.07 A	-$0.07 A	-$0.08 A	-$0.31 A
2015	-$0.09 E	-$0.08 E	-$0.07 E	-$0.06 E	-$0.31 E
2016					-$0.13 E
2017					$0.00 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/A**

© Copyright 2015, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW……

Q4 / FY 2014 Results: *Solid Year With Continued Strength in Core Products, New Revenue Opportunities…*

BioLife announced results for Q4 and the full-year ending December 31, 2014. Q4 and full-year revenue, as expected following the company's revenue preannouncement in January, came in at $1.7 million and $6.2 million. Relative to Q4, gross margin surprised big on the upside, partially benefitting from product mix but most of which looks to be a result of (one-time) engineering/validation work for preparations related to the manufacturing contract with Somahlution for DuraDraft. Meanwhile, OpEx jumped fairly significantly from Q3 (as well as yoy) and was meaningfully higher than our estimate – the difference compared to our numbers appears to be related to more than anticipated sales/mktg spend as well as additional hires and consulting expense in R&D – some of which has to do with development of the biologistex-related software platform. But this unanticipated level of increase in OpEx was completely offset by the wider than expected gross margin, resulting in Q4 net income and EPS coming in just about exactly where we had predicted.

Operationally, as we have discussed in recent updates, BioLife has made meaningful progress with stocking their chest with additional revenue opportunities while at the same time continuing to grow their core biopreservation media products business (core products revenue grew 25% in 2014 and management is guiding for 20% - 30% growth in 2015). The most significant bolt-on revenue catalysts were announced during 2014 – those being a contract manufacturing agreement with Somahlution and the formation of biologistex, a joint-venture with SAVSU.

The most recent addition to their portfolio of revenue opportunities comes with the manufacture of low molecular weight Dextran solutions. Dextran is used off-label to thaw cryopreserved cells – mostly used for cord blood – but shortages of Dextran has been an ongoing issue for years (with periodic shortages more severe at times). BLFS will use some of its manufacturing capacity to produce low molecular weight Dextran solutions – and has indicated they already have potential customers lined up. And while we do not expect this to be an overly significant revenue contributor (particularly as noted on the Q4 call that BLFS will not be competitive on pricing compared to much larger higher-volume manufacturers), it has the potential to add incrementally and help absorb manufacturing capacity as the company continues to look for additional contract manufacturing opportunities.

But while we think these new opportunities (particularly the JV) could add meaningfully to revenue and profitability of BLFS, recent delays to getting the JV fully operational and in initiating manufacture of DuraGraft prompted some meaningful revisions to our model. We discuss this in further detail below.

Financials

Q4 revenue was $1.67M, down 27% yoy but up 34% sequentially. All of the yoy revenue decrease was a result of the loss of the major contract manufacturing customer (Organ Recovery Systems). BLFS recorded $210k of contract manufacturing-related revenue in Q4 2014 (this was engineering / validation work which needed to be completed prior to initiating manufacture of DuraGraft), down from $1.1 million in Q4 2013.

For the full year, revenue was $6.19M, down 31% from $8.95M in 2013 but, again, all of the contraction was related to contract manufacturing. Contract manufacturing revenue fell 71% from $4.42M in 2013 to just $1.28M in 2014.

Meanwhile, product sales growth remains very robust – coming in at $1.46M in Q4, a new all-time record and representing a 21% yoy and 17% sequential increase through Q4. For the full-year, product sales increased 25%. We reiterate that while there is potential for short-term volatility in product sales, we continue to expect revenue from the company's biopreservation media to grow over the long term as BLFS successfully expands their customer base. As noted, management is guiding for core products revenue to increase another 20% - 30% in 2015.

Q4 OpEx was $2.0MM, up considerably from $1.2M in Q4 2013 and $1.46M in Q3 2014 and about 16% higher than our estimate. While, as indicated, we had expected a meaningful increase in OpEx – mostly as a result of further build-out of the sales/mktg infrastructure in support of the new business opportunities and fees/expenses related to the biologistex agreement – we underestimated S&M spend by $164k (32%). But also contributing to our miss in OpEx was R&D expense more than doubling from Q3 – management noted some of this is not expected to recur and appears to be related to supporting development of the biologistex business.

Q4 net loss and EPS were $996k and ($0.08), in-line with our $957 loss and ($0.08) estimates. For the full-year, net loss and EPS were $3.2M and ($0.31), compared to $1.1M loss and ($0.22) in 2013. The increased net loss in 2014 as compared to 2013 can be attributed to the 31% decrease in revenue (again – all of which relates to lost

contract manufacturing revenue), higher OpEx for infrastructure build-out and fees related mostly to biologistex, which was partially offset by a 700 basis point widening (42% in 2013 to 49% in 2014) of gross margin. The relatively beefy GM in 2014 was aided by the reduction in (lower margin) contract manufacturing revenue as well as the aforementioned one-time engineering/validation revenue captured in Q4.

So, while revenue and net loss deteriorated from 2013 to 2014, the details illustrate that fundamentals of the business remain solid and BLFS is restocking for their next anticipated wave of growth. We reiterate that core product sales growth has been (23% in 2012, 30% in 2013, 25% in 2014) and is expected to continue to be robust (20% - 30% in 2015). The additional OpEx spend relates to new business opportunity investments, namely biologistex – which are expected to make a meaningful contribution over the long-term. On the contract manufacturing side, which has been a spot of softness since the loss of the Organ Recovery Systems contract in Q2 2014, revenue should return to meaningful levels – although this has been delayed from expectations since when the Somahlution agreement was penned.

Cash
Q4 and full-year cash flow used in operating activities was $697k and $3.2M. Excluding changes in working capital, cash used was $749k in Q4 and $2.5M for the year. BLFS used another $590k in 2014 for the purchase of PP&E. Cash balance (including liquid investments), which was recently bolstered by the $13.6M (net) equity issuance in March, stood at $9.9M at year-end. Management expects cash use to increase by as much as 30% in 2015. We also note that, per the biologistex JV agreement, BLFS will contribute $2.4M to the JV (which is in addition to the $1 million that is being paid monthly from Q3 2014 – Q3 2015).

Guidance
BLFS provided initial financial guidance for 2015 which includes core product revenue growth of 20% - 30%, gross margin of 50% - 60% and cash use and net loss increasing by as much as 30% - all compared to full-year 2014.

Model Update
Prompted by management's financial guidance and certain delays in getting the JV fully operational and in initiating manufacture of DuraGraft, we have made some meaningful revisions to our model – this includes downward revisions to revenue and upward revisions to OpEx – resulting in significant downward revisions to near-term net income and EPS.

We note that on the Q2 2014 call management indicated that they had expected to begin shipping DuraGraft product to Somahlution in Q4 2014. And following CE Mark of DuraGraft, which came in October 2014, the expectation was again that manufacturing revenue would begin to flow. Based on management's comments on the Q4 call, it now seems that manufacturing and revenue related to this agreement will not be meaningful until DuraGraft receives FDA approval/clearance – timing of which is uncertain – as a placeholder for now, we assume this happens by Q3 of this year and we are now modeling related contract manufacturing revenue to begin then and ramp from there.

There also appears to be delays with biologistex – management has pointed towards the need to lock down IP protection – presumably mostly related to the software platform – prior to rolling out the service. On the positive side, there is little doubt the company is making headway and preparing for the launch – which is evidenced by the build-out of sales and support infrastructure. Management had initially expected revenue from this JV to commence in early 2015 – based on comments on the Q4 call, this is likely now pushed back by at least by 6 – 9 months, or possibly more. This delay has resulted in us pushing back our biologistex-related revenue estimates as well. We also note that, while we think BLFS has a real opportunity in this space given the highly fragmented yet large market and the company's advantage in being able to leverage their core cryopreservation customer base, that this can be resource-intensive and require some time to ramp. Given the significant upfront financial commitment by BLFS to the JV as well as ongoing expenses required to operate the business (some of which should be reimbursed by the JV), we feel it is critical that the company executes in a fashion that maximizes the potential for success, including fast-tracking time-to-market.

Model revision…
Prior to Q4 we were modeling core product revenue growth of approximately 35% - we have since revised to midpoint of management's 20% - 30% guidance (a reduction of ~$800k). The Somahlution and biologistex delays have resulted in us shaving another $1.3M off of our top-line estimate for 2015. We carry the effect of the delays and lower than previously estimated growth in core product revenue through the out-years in our model.

The additional and significant expected increase in OpEx to support the new business opportunities has moved our 2015 estimated operating expenses from $6.7M to $7.6M.

Net for the changes to our model, we now look for 2015 revenue and net income / EPS of $6.8M and ($3.8)M / ($0.31), revised from $8.9M and ($2.1)M / ($0.14). The revisions to our model have also affected our price target which has moved from $8.00 to $6.00 per share.

VALUATION / RECOMMENDATION

Our comparable group used to value BLFS consists of five companies – some direct competitors as well as small stem cell therapeutics and regenerative medicine companies. Our valuation metrics include enterprise value-to-sales (EV/Sales) and price-to-sales (P/Sales) multiples using sales at trailing twelve months (ttm), estimated 2015, and estimated 2016 (estimates from analyst forecasts). We note the previously our comp group had included PLI.TO, which we have since removed due to it becoming an outlier and have replaced it with EDTXF and MBX.TO.

Based on these six metrics, BioLife is valued between approximately $4/share and $8/share. Average valuation of all six metrics is about $6.00/share. BLFS currently trades at approximately $1.69, which is below what we calculate to be fair value. We are maintaining our Outperform rating. Our price target is $6.00/share.

	TICKER						Implied
METRIC	CYRX	ICEL	EDTXF	CYTX	MBX.TO	Average	BLFS pps
EV/ Sales (ttm)	9.5	5.6	33.0	17.0	5.8	16.3	$8.13
EV/ Sales (2014 E)	8.5	3.6	15.4	9.1	4.8	9.1	$5.49
EV/ Sales (2015 E)	3.1	2.4	10.3	2.8	3.2	4.7	$4.29
P/ Sales (ttm)	14.0	6.9	40.0	15.0	5.2	19.0	$8.36
P/ Sales (2014 E)	9.5	2.4	17.2	8.2	4.1	9.3	$4.91
P/ Sales (2015 E)	3.5	3.1	11.5	2.5	2.7	5.1	$3.70
						Avg.	$5.81

FINANCIAL MODEL

BioLife Solutions Inc.

	2014 A	Q1E	Q2E	Q3E	Q4E	2015 E	2016 E	2017 E	2018 E
Prdct Sales/Ctrct Manu/JV	$6,190.7	$1,426.3	$1,529.0	$1,597.5	$2,212.6	$6,765.5	$9,540.1	$13,501.2	$16,335.5
YOY Growth	*-25.8%*	*-30.9%*	*26.2%*	*28.5%*	*32.5%*	*9.3%*	*41.0%*	*41.5%*	*21.0%*
Licensing Revenue	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
YOY Growth	-	-	-	-	-	-	-	-	-
Total Revenues	$6,190.7	$1,426.3	$1,529.0	$1,597.5	$2,212.6	$6,765.5	$9,540.1	$13,501.2	$16,335.5
YOY Growth	*-30.8%*	*-30.9%*	*26.2%*	*28.5%*	*32.5%*	*9.3%*	*41.0%*	*41.5%*	*21.0%*
Cost of Product Sales	$3,155.3	$570.5	$611.6	$664.0	$1,120.0	$2,966.2	$4,691.0	$5,896.5	$6,139.0
Gross Income	$3,035.4	$855.8	$917.4	$933.5	$1,092.6	$3,799.3	$4,849.1	$7,604.7	$10,196.4
Gross Margin	*49.0%*	*60.0%*	*60.0%*	*58.4%*	*49.4%*	*56.2%*	*50.8%*	*56.3%*	*62.4%*
R&D	$871.1	$288.0	$274.0	$185.0	$166.0	$913.0	$805.0	$825.0	$855.0
% R&D	*14.1%*	*20.2%*	*17.9%*	*11.6%*	*7.5%*	*13.5%*	*8.4%*	*6.1%*	*5.2%*
Selling & Mktg	$1,329.7	$481.0	$494.0	$506.0	$525.0	$2,006.0	$2,289.6	$2,497.7	$2,793.4
% Sell&Mktg	*21.5%*	*33.7%*	*32.3%*	*31.7%*	*23.7%*	*29.7%*	*24.0%*	*18.5%*	*17.1%*
G&A	$3,970.3	$1,170.0	$1,185.0	$1,158.0	$1,201.0	$4,714.0	$4,016.4	$4,333.9	$4,639.3
% G&A	*64.1%*	*82.0%*	*77.5%*	*72.5%*	*54.3%*	*69.7%*	*42.1%*	*32.1%*	*28.4%*
Operating Income	($3,135.7)	($1,083.2)	($1,035.6)	($915.5)	($799.4)	($3,833.7)	($2,261.9)	($51.9)	$1,908.8
Operating Margin	*-50.7%*	*-75.9%*	*-67.7%*	*-57.3%*	*-36.1%*	*-56.7%*	*-23.7%*	*-0.4%*	*11.7%*
Total Other Inc. (Exp.)	($165.1)	$7.0	$4.0	$3.0	$1.0	$15.0	$75.0	$100.0	$0.0
Pre-Tax Income	($3,300.9)	($1,076.2)	($1,031.6)	($912.5)	($798.4)	($3,818.7)	($2,186.9)	$48.1	$1,908.8
Taxes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Tax Rate	-	-	-	-	-	-	-	-	-
Net Income	($3,217.8)	($1,076.2)	($1,031.6)	($912.5)	($798.4)	($3,818.7)	($2,186.9)	$48.1	$1,908.8
YOY Growth	*196.8%*	*92.4%*	*16.8%*	*5.8%*	*-19.8%*	*18.7%*	*-42.7%*	*-102.2%*	*3871.6%*
Net Margin	*-52.0%*	*-75.5%*	*-67.5%*	*-57.1%*	*-36.1%*	*-56.4%*	*-22.9%*	*0.4%*	*11.7%*
EPS	($0.31)	($0.09)	($0.08)	($0.07)	($0.06)	($0.31)	($0.13)	$0.00	$0.11
YOY Growth	*42.6%*					*1.3%*	*-56.8%*	*-102.1%*	*3767.2%*
Diluted Shares O/S	10,425	12,150	12,175	12,202	12,304	12,208	16,200	17,040	17,500

Brian Marckx, CFA

© Copyright 2015, Zacks Investment Research. All Rights Reserved.

MANAGEMENT

Michael Rice
Chairman & Chief Executive Officer

Mike Rice became president and chief executive officer and a member of our Board of Directors in August 2006, and Chairman in August 2007. He has more than 20 years of leadership and entrepreneurial experience in the medical and high tech industries. He was most recently the senior business development manager for medical and wireless products at AMI Semiconductor (NASDAQ:AMIS). Mr. Rice also served as the director of marketing and business development at Cardiac Science, Inc., a manufacturer of automated external defibrillators. Prior to that, he was the Vice President, Sales and Marketing for TEGRIS Corporation, a privately held network services provider. Mr. Rice also spent 12 years at Physio Control Corporation in several sales and marketing management roles prior to its acquisition by Medtronic Inc.

Aby J. Mathew, Ph.D.
Sr. Vice President and Chief Technology Officer

Dr. Mathew was part of the founding team of BioLife Solutions, and is a co-developer of BioLife′s biopreservation media solutions. He is a co-inventor on multiple issued and pending patents related to methods, devices, and formulations for the preservation of cells, tissues, and organs. He holds a Ph.D. in Biological Sciences within the Biochemistry, Cell and Molecular Biology Program from Binghamton University and a B.S. in Microbiology from Cornell University. Dr. Mathew has been researching low temperature biopreservation since 1994, and his studies contributed to the development of BioLife′s current commercial HypoThermosol and CryoStor product platforms and intellectual property foundation. Dr. Mathew was part of the scientific team that linked cell death via apoptosis (programmed cell death) to exposure to hypothermic and/or freezing temperatures. These discoveries were integral to the development of BioLife′s improved intracellular-like biopreservation solutions, and also contributed to improvements in cryosurgical ablation of cancer. Dr. Mathew is currently active in, or previously a member of, the International Society for Cell Therapy (ISCT), AABB (formerly the American Association of Blood Banks), BEST (the Biomedical Excellence for Safer Transfusion collaborative), Tissue Engineering & Regenerative Medicine International Society (TERMIS), Society for Cryobiology, International Society for Biological and Environmental Repositories (ISBER), American Society for Cell Biology, and the Society for In Vitro Biology.

Daphne Taylor
Vice President, Finance & Administration, Chief Financial Officer

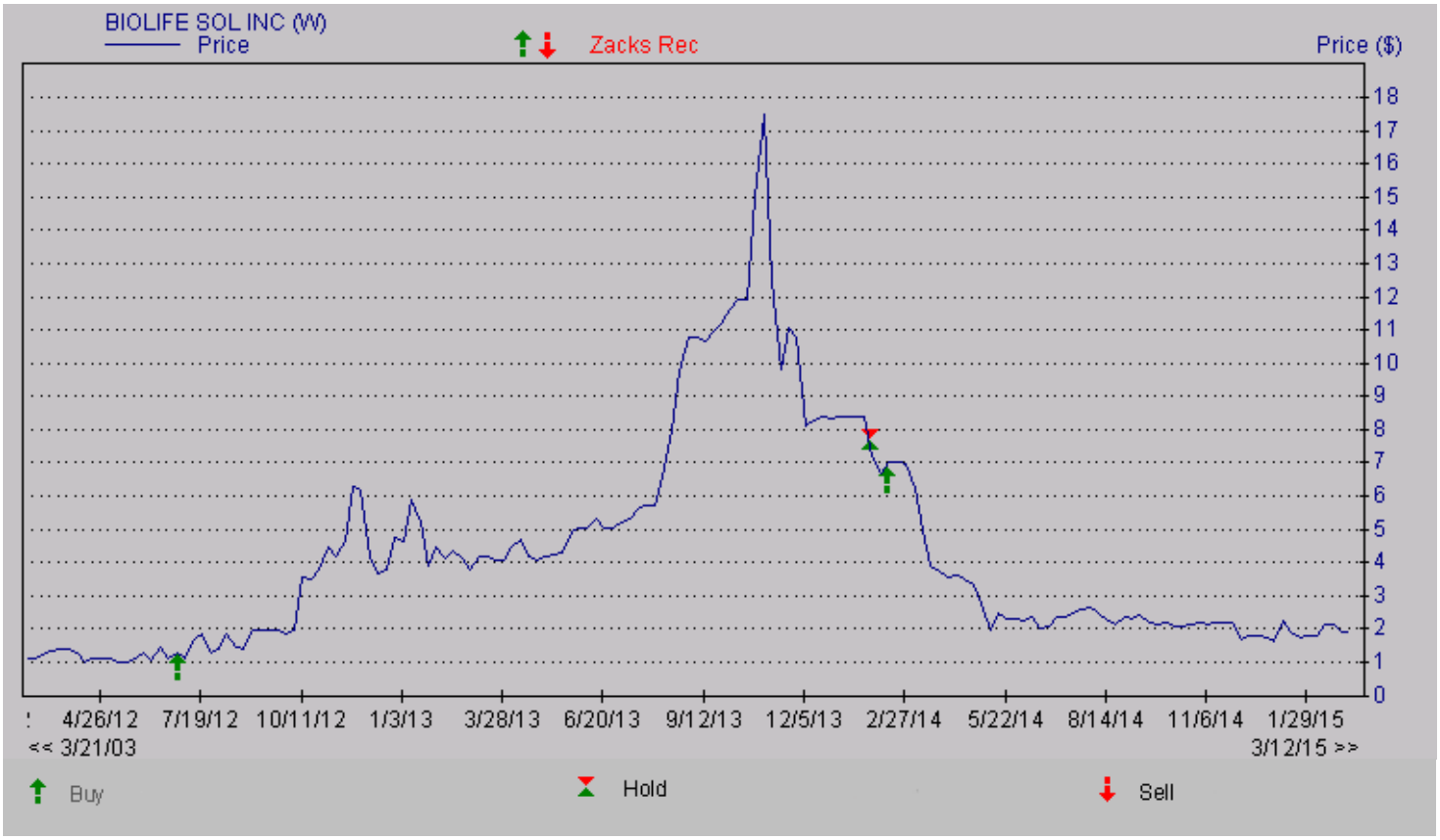
Daphne Taylor has served as Vice President, Finance & Administration, and Chief Financial Officer since August 2011. She has 20 years experience as a finance professional. Prior to joining BioLife, Ms. Taylor served as Vice President, Corporate Controller and Chief Accounting Officer of Cardiac Science Corporation from November 2005 through January 2009. From April 2002 through November 2005, she held various positions, including Vice President and Corporate Controller for LookSmart, a publicly held Internet technology company. In 2001, Ms. Taylor was Controller at SpeedTrak Communications and prior to that she was Controller for ViroLogic, a publicly held biotechnology company. Ms. Taylor held various finance positions at Core-Mark International, a distribution company, from 1996 to 2000. From 1991 to 1994, she was in public accounting with Coopers & Lybrand and is a licensed CPA. Ms. Taylor holds a B.A. in Management/Accounting from Sonoma State University, California.

Joe Annicchiarico
Chief Operating Officer

Joe joined BioLife Solutions in December 2011 after serving for six years at MediQuest Therapeutics, Inc. in Bothell, Washington, where he was an integral part of the company′s first NDA filing. He spearheaded process scale-up and validation efforts, patent protection, and clinical trial supply chain management. His tenure at MediQuest included time as a Scientist, Formulation Manager, and most recently, as Director of Manufacturing and Clinical Supplies. Prior to his tenure at MediQuest, he worked in speciality chemical sales at Drummond American and spent four years as a formulation development Chemist at a pair of personal care products companies in New Jersey. Joe earned his Bachelor′s Degree in Biology from The Johns Hopkins University in Baltimore, Maryland, in 1997.

© Copyright 2015, Zacks Investment Research. All Rights Reserved.

HISTORICAL ZACKS RECOMMENDATIONS



DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, Brian Marckx, CFA, CFA, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESMENT BANKING, REFERRALS, AND FEES FOR SERVICE

Zacks SCR does not provide nor has received compensation for investment banking services on the securities covered in this report. Zacks SCR does not expect to receive compensation for investment banking services on the Small-Cap Universe. Zacks SCR may seek to provide referrals for a fee to investment banks. Zacks & Co., a separate legal entity from ZIR, is, among others, one of these investment banks. Referrals may include securities and issuers noted in this report. Zacks & Co. may have paid referral fees to Zacks SCR related to some of the securities and issuers noted in this report. From time to time, Zacks SCR pays investment banks, including Zacks & Co., a referral fee for research coverage.

Zacks SCR has received compensation for non-investment banking services on the Small-Cap Universe, and expects to receive additional compensation for non-investment banking services on the Small-Cap Universe, paid by issuers of securities covered by Zacks SCR Analysts. Non-investment banking services include investor relations services and software, financial database analysis, advertising services, brokerage services, advisory services, equity research, investment management, non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per client basis and are subject to the number of services contracted. Fees typically range between ten thousand and fifty thousand USD per annum.

POLICY DISCLOSURES

Zacks SCR Analysts are restricted from holding or trading securities placed on the ZIR, SCR, or Zacks & Co. restricted list, which may include issuers in the Small-Cap Universe. ZIR and Zacks SCR do not make a market in any security nor do they act as dealers in securities. Each Zacks SCR Analyst has full discretion on the rating and price target based on his or her own due diligence. Analysts are paid in part based on the overall profitability of Zacks SCR. Such profitability is derived from a variety of sources and includes payments received from issuers of securities covered by Zacks SCR for services described above. No part of analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports are based on data obtained from sources we believe to be reliable, but are not guaranteed as to be accurate nor do we purport to be complete. Because of individual objectives, this report should not be construed as advice designed to meet the particular investment needs of any investor. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.

ZACKS RATING & RECOMMENDATION

ZIR uses the following rating system for the 1129 companies whose securities it covers, including securities covered by Zacks SCR:
Buy/Outperform: The analyst expects that the subject company will outperform the broader U.S. equity market over the next one to two quarters.
Hold/Neutral: The analyst expects that the company will perform in line with the broader U.S. equity market over the next one to two quarters.
Sell/Underperform: The analyst expects the company will underperform the broader U.S. Equity market over the next one to two quarters.

The current distribution is as follows: Buy/Outperform- 15.4%, Hold/Neutral- 74.9%, Sell/Underperform – 8.9%. Data is as of midnight on the business day immediately prior to this publication.