Zacks Small-Cap Research

December 18, 2014

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

scr.zacks.com

111 North Canal Street, Chicago, IL 60606

CytoSorbents Cp (CTSOD-OTCBB)

CTSOD: Fresenius Adds More Than Just Marketing Muscle…

Current Recommendation	**Outperform**
Prior Recommendation	N/A
Date of Last Change	06/04/2012
Current Price (12/17/14)	$6.60
Target Price	**$12.50**

OUTLOOK

CytoSorb was CE Marked in March 2011 and subsequently commenced its initial commercialization. Initial focus on building awareness appears to be paying off. CTSO now generating clinical outcomes data which is just starting to be used to accelerate adoption and utilization. CTSO now expects to pursue cardiac surgery indication in the U.S. as this may provide the lowest cost, easiest and fastest route to the U.S. market. Cardiac surgery indication has driven substantial interest overseas with successful outcomes. Gov't contracts/grants that CTSO continues to score should benefit near-term revenue and cash flow as well as also aid their awareness-building efforts, further increase visibility and credibility of the technology, and potentially expand the menu of potential applications of the device. Interest in and use of CytoSorb from hospitals and physicians continues to increase. Also seeing great interest from distributors and other industry partners.

SUMMARY DATA

52-Week High	**$8.75**
52-Week Low	**$3.00**
One-Year Return (%)	**106.25**
Beta	**-1.65**
Average Daily Volume (sh)	**32,605**
Shares Outstanding (mil)	**23**
Market Capitalization ($mil)	**$154**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**0**
Insider Ownership (%)	**24**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2014 Estimate	**N/A**
P/E using 2015 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Avg.,**
Type of Stock	**N/A**
Industry	**Med Products**

ZACKS ESTIMATES

Revenue
(in '000 of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2013	371 A	292 A	881 A	879 A	2423 A
2014	1062 A	1025 A	1162 A	1587 E	4836 E
2015					14210 E
2016					22380 E

Earnings per Share

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2013	-0.25 A	-0.22 A	-0.15 A	-0.18 A	-0.75 A
2014	-0.20 A	-0.27 A	-0.22 A	-0.11 E	-0.77 E
2015					-0.26 E
2016					-0.15 E

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

© Copyright 2014, Zacks Investment Research. All Rights Reserved.

Fresenius Adds More Than Just Marketing Muscle

Over the last several quarters CtyoSorbents has been feverishly building out a distribution platform for its flagship device, CytoSorb, throughout Europe as well as parts of Asia and the Middle East. The company uses a small, highly experienced in-house sales team to cover Germany, Austria and Switzerland and utilizes third-party distributors to sell in 22 other countries, including Biocon, the largest biotech in India.

But while CTSO has rapidly expanded their geographic reach which has included relationships with significant institutions in the international life sciences space, none of these partners bring the name recognition, marketing muscle or implied credibility that Fresenius does.

Fresenius has marketing exclusivity of CytoSorb in France, Poland, Sweden, Denmark, Norway and Finland which brings the number of countries where CytoSorb will be available to 25. The deal includes minimum guaranteed orders. Fresenius is the largest dialysis provider in the world, providing dialysis services and dialysis equipment and supplies.

Fresenius' distribution reach including in France, which is the second largest market for medical devices in Europe, will almost certainly be a material needle-mover of CTSO's revenue. But Fresenius brings much more than just a large dialysis service/equipment/supplies network. Fresenius is THE leader in dialysis, has a calling card to the largest and most prestigious hospitals and clinics, employs a highly experienced sales team and has the resources to support ongoing development and clinical case studies of CytoSorb.

But even beyond that Fresenius has a reputation of leadership and quality in the space and one that they are unlikely to risk tainting if they had reservations about the utility of CytoSorb. The face of Fresenius now includes the face of CytoSorb. As such we view the relationship with Fresenius as one that is likely to provide more than just a significant increase to the geographic distribution footprint for CytoSorb (which alone is highly material). Fresenius gives both CytoSorbents and CytoSorb an additional significant vote of credibility.

And credibility potentially gets CytoSorb used by the leading and most prestigious hospitals in these distribution territories. When it comes to building credible awareness, having influential key opinion leaders, medical institutions and device companies supporting utility of a novel device can provide one of the most effective marketing messages and spur much more widespread uptake.

As we have noted in our ongoing coverage of CytoSorbents, building credible awareness has been at the heart of the company's marketing strategy. As opposed to a "just trust us that our product works" followed by many novel device manufacturers, CTSO has been very methodical and deliberate in building evidenced-based support for the efficacy of its device. We think it is unlikely a company of Fresenius' caliber would partner with CTSO had this early evidence not existed.

And CTSO remains very focused on growing the clinical experience database. The company just recently launched a patient registry which houses case study data submitted by CytoSorb users for various indications. This type of evidence-based outcomes data can provide a compelling marketing message to clinicians considering adopting CytoSorb and, even prior to launch of the database, has almost certainly been a catalyst in driving demand for the device and helped to consummate major distribution agreements.

And certain of these case studies have already been published in industry journals including a cardiac surgery study published in February in the journal Kardiotechnik which indicated CytoSorb can significantly reduce inflammatory response during cardiac surgery. And more recently, in December, two separate case studies were published in the peer-reviewed Indian Journal of Critical Care Medicine and the journal, Liver Transplantation. In both of these cases a critically ill patient with organ failure and near death eventually recovered following intervention with CytoSorb.

So as we have discussed in our coverage of CytoSorbents, we view management's marketing and awareness building strategy, which is based on clinical successes and evidence and not on a "just trust me" sales pitch, as having the greatest potential to drive demand for CytoSorb. And based on the rapid product sales growth (7 straight quarters of product revenue growth) and consummation of high-potential distribution agreements, we think

it's fair to conclude that this strategy is paying significant dividends. This deal with Fresenius is one which we think speaks particularly loud to CTSO's successes and the growing confidence in the utility of CytoSorb.

We continue to think the shares trade well below fair value and are maintaining our Outperform rating on CTSO and our (25:1 reverse-split adjusted) $12.50 price target.

FINANCIAL MODEL

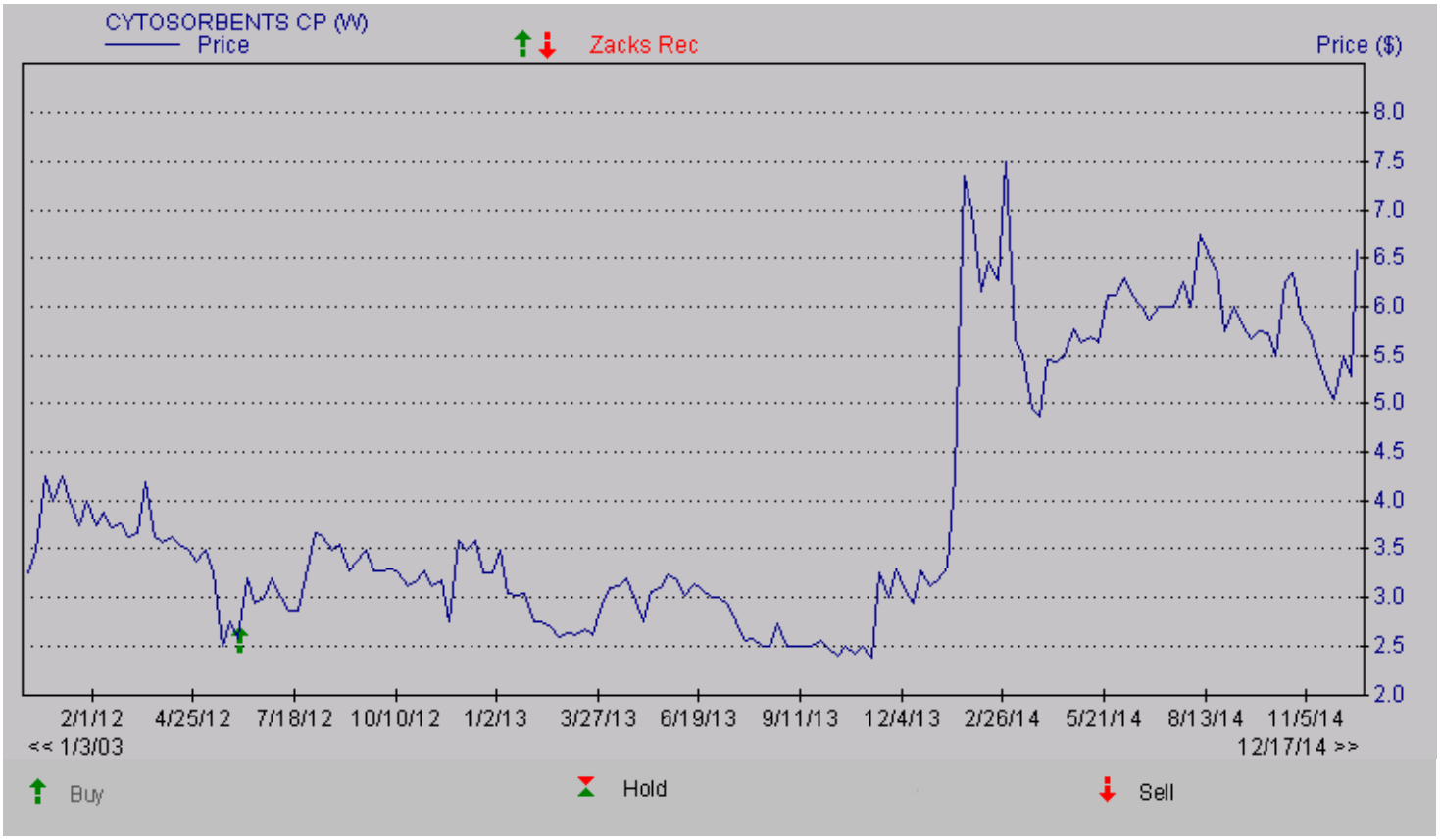
CytoSorbents Inc.

	2013 A	Q1A	Q2A	Q3A	Q4E	2014 E	2015 E	2016 E	2017 E
CytoSorb Sales	$821.8	$569.2	$663.2	$1,031.8	$1,180.0	$3,444.2	$13,110.0	$22,180.0	$30,090.0
y-o-y growth	*442.1%*	*223.3%*	*418.3%*	*406.9%*	*275.6%*	*319.1%*	*280.6%*	*69.2%*	*35.7%*
Total Royalties/Grants/Other	$1,600.9	$492.9	$361.4	$130.6	$407.0	$1,391.9	$1,100.0	$200.0	$0.0
y-o-y growth	*34.4%*	*152.5%*	*121.0%*	*-80.7%*	*-28.0%*	*-13.1%*	*-21.0%*	*-81.8%*	*-100.0%*
Revenue	$2,422.7	$1,062.2	$1,024.7	$1,162.3	$1,587.0	$4,836.2	$14,210.0	$22,380.0	$30,090.0
YOY Growth	*80.4%*	*186.0%*	*251.5%*	*32.0%*	*80.5%*	*99.6%*	*193.8%*	*57.5%*	*34.5%*
Cost of Goods Sold	$1,911.6	$662.5	$666.2	$475.9	$847.6	$2,652.2	$6,154.8	$8,658.4	$11,434.2
Gross Income	$511.1	$399.6	$358.5	$686.5	$739.4	$2,184.0	$8,055.2	$13,721.6	$18,655.8
Gross Margin	*21.1%*	*37.6%*	*35.0%*	*59.1%*	*46.6%*	*45.2%*	*56.7%*	*61.3%*	*62.0%*
SG&A	$3,485.4	$1,317.1	$1,394.6	$1,492.5	$1,664.0	$5,868.2	$9,654.0	$13,236.0	$15,616.7
% SG&A	*143.9%*	*124.0%*	*136.1%*	*128.4%*	*104.9%*	*121.3%*	*67.9%*	*59.1%*	*51.9%*
R&D	$1,738.9	$236.8	$347.0	$880.3	$862.0	$2,326.1	$4,500.0	$4,200.0	$3,287.0
% R&D	*71.8%*	*22.3%*	*33.9%*	*75.7%*	*54.3%*	*48.1%*	*31.7%*	*18.8%*	*10.9%*
Operating Income	($4,713.2)	($1,154.2)	($1,383.1)	($1,686.4)	($1,786.6)	($6,010.2)	($6,098.8)	($3,714.4)	($247.9)
Operating Margin	-	-	-	-	-	-	-	-	-
Total Other Expense	$422.8	($179.1)	$470.5	($188.0)	($47.0)	$56.4	$0.0	$0.0	$0.0
Pre-Tax Income	($5,136.1)	($975.1)	($1,853.6)	($1,498.4)	($1,739.6)	($6,066.6)	($6,098.8)	($3,714.4)	($247.9)
Taxes (benefit)	($458.3)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Tax Rate	*8.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Preferred Dividend	$2,395.5	$1,114.5	$1,374.2	$1,281.1	$701.0	$4,470.8	$0.0	$0.0	$0.0
Net Income	($7,073.3)	($2,089.6)	($3,227.8)	($2,779.4)	($2,440.6)	($10,537.4)	($6,098.8)	($3,714.4)	($247.9)
Net Margin	-	*-196.7%*	*-315.0%*	*-239.1%*	*-153.8%*	-	*-42.9%*	*-16.6%*	*-0.8%*
EPS	($0.75)	($0.20)	($0.27)	($0.22)	($0.11)	($0.73)	($0.26)	($0.15)	($0.01)
YOY Growth	-	-	-	-	-	-	-		
Diluted Shares O/S	9,441	10,619	12,048	12,496	22,600	14,441	23,400	24,000	24,800

Brian Marckx, CFA

© Copyright 2014, 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.

© Copyright 2014, Zacks Investment Research. All Rights Reserved.

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 1139 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- 16.1%, Hold/Neutral- 77.6%, Sell/Underperform – 6.0%. Data is as of midnight on the business day immediately prior to this publication.