

CytoSorbents Corporation (NASDAQ: CTSO)

A Leader in Critical Care Immunotherapy Q4 and Full Year 2015 Earnings Conference Call March 9, 2016

Safe Harbor Statement

Statements in this presentation regarding CytoSorbents Corporation and its operating subsidiaries CytoSorbents Medical, Inc and CytoSorbents Europe GmbH that are not historical facts are forward-looking statements and are subject to risks and uncertainties that could cause actual future events or results to differ materially from such statements. Any such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. It is routine for our internal projections and expectations to change. Although these expectations may change, we are under no obligation to inform you if they do. Actual events or results may differ materially from those contained in the projections or forward-looking statements. The following factors, among others, could cause our actual results to differ materially from those described in a forward-looking statement: our history of losses; potential fluctuations in our quarterly and annual results; competition, inability to achieve regulatory approval for our device, technology systems beyond our control and technology-related defects that could affect the companies' products or reputation; risks related to adverse business conditions; our dependence on key employees; competition for qualified personnel; the possible unavailability of financing as and if needed; and risks related to protecting our intellectual property rights or potential infringement of the intellectual property rights of third parties. This list is intended to identify only certain of the principal factors that could cause actual results to differ from those discussed in the forward-looking statements. Readers are referred to a discussion of important risk factors detailed in the Company's Form 10-K filed with the Securities and Exchange Commission on March 9, 2016 and other reports and documents filed from time to time by us, which are available online at www.sec.gov.



CytoSorbents is A Leader in Critical Care Immunotherapy



Leading the Prevention or Treatment of Life-Threatening Inflammation in the ICU and Cardiac Surgery using CytoSorb[®] Blood Purification



CytoSorb® Removes the Fuel to the Fire

- CytoSorb[®] targets the \$20+ billion opportunity in critical care and cardiac surgery
- Approved in the European Union as the only specifically approved extracorporeal cytokine filter
- Clinically proven to remove key cytokines in the blood of critically-ill patients
- Approved for use in any situation where cytokines are elevated
- Works with standard dialysis and heart-lung machines
- Removes many other inflammatory mediators such as free hemoglobin, bacterial toxins, and complement
- Safe and well-tolerated: In 10,000+ human treatments





Goal: To Prevent or Treat Organ Failure

Improve Patient Outcome and Survival



Decrease Costs Of ICU and Patient Care



The Potential to Revolutionize Critical Care Medicine



Operating and Financial Highlights



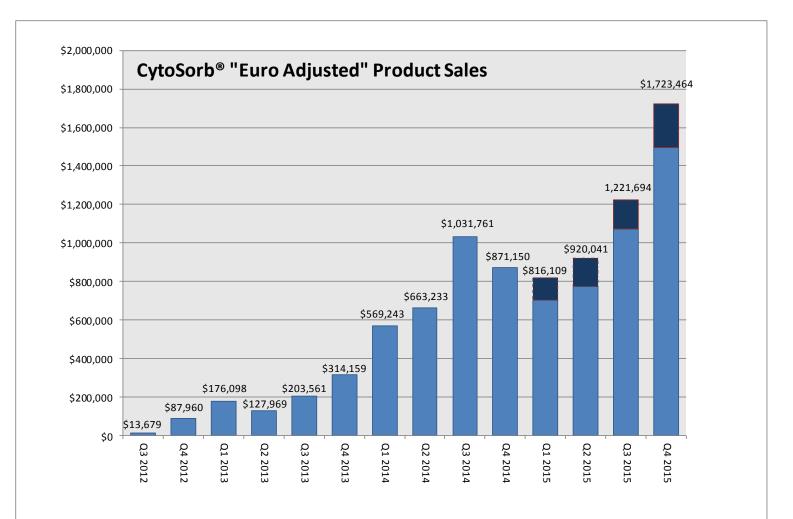
2015 Comparative Revenue Results

	Year Ended Dec 31, 2015	Year Ended Dec 31, 2014	% Incr.
Product revenue	\$ 4,043,819	\$ 3,135,387	29%
Grant and other income	747,797	987,438	(24)%
Total revenue	\$ 4,791,616	\$ 4,122,825	16%

- CytoSorb[®] product sales were \$4.0M in 2015, a 29% increase over product sales of \$3.1M in 2014
- Product sales were negatively impacted by the decline in the exchange rate of the Euro, which amounted to approximately \$637K or 16% of product sales in 2015
- Grant revenue was \$748K in 2015, slightly lower than grant revenue of \$987K in 2014
- Gross profit margins on product sales in 2015 were approximately 62%



Quarterly "Euro-Adjusted" Product Sales





Working Capital and Cap Table

Working Capital as of								
	12/31/15	12/31/14	12/31/13	12/31/12				
Current Assets:								
Cash and short-term investments	\$ 7,508	\$ 5,550	\$ 2,183	\$ 1,729				
Grants and accounts receivable, net	649	819	453	51				
Inventories	1,191	538	245	682				
Prepaid expenses and other current assets	512	700	605	476				
Total current assets	9,860	7,607	3,486	2,938				
Current Liabilities(1):								
Accounts payable	685	698	787	801				
Accrued expenses and other current liabilities	723	825	362	350				
Deferred revenue	-	1	272	-				
Total current liabilities	1,408	1,524	1,421	1,151				
Net Working Capital	\$ 8,452	\$ 6,083	\$ 2,065	\$ 1,787				
(1) Excludes warrant liability, a current liability that								

CAP TABLE AS OF DECEMBER 31, 2015				
	Fully Diluted			
(unaudited)	Common Shares			
Common Stock	25,397,056			
Options	2,477,279			
Warrants	1,114,833			
	28,989,168			



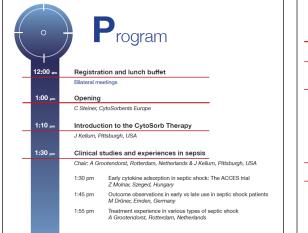
Operating Highlights

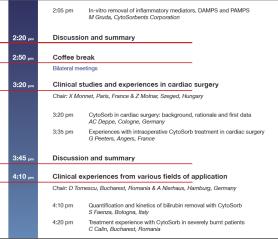


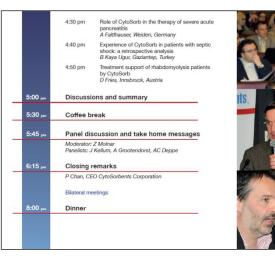
3rd International CytoSorb Users Meeting

- CytoSorbents will host its 3rd International CytoSorb Users Meeting in Brussels, Belgium on March 14, 2016
- Currently, more than 100 people are registered to attend the meeting from a total of 22 countries
- Agenda includes 12 clinical and pre-clinical presentations and one panel session









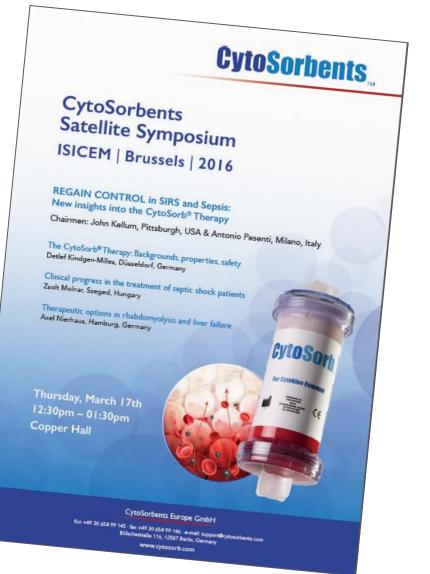


For more information, visit: https://www.b2match.eu/cytosorbusersmeeting2016

36th ISICEM Conference

- The International Symposium of Intensive Care and Emergency Medicine (ISICEM) in Brussels, Belgium from March 15-18, 2016 is one of the largest, most prominent critical care conferences in the world
- CytoSorbents is a Gold Sponsor and will exhibit and host a research symposium on Thursday, March 17th from 12:30-1:30 PM featuring three major thought leaders







Fresenius Medical Care and ISICEM

- Fresenius will initiate the marketing push behind CytoSorb[®] at the ISICEM Conference in Brussels, Belgium next week ahead of a forthcoming launch
- CytoSorb[®] will be featured in the Fresenius exhibition booth on the multiFiltrate Acute Therapy System
- Fresenius will use the event to introduce the CytoSorb[®] therapy broadly to its customers
- Fresenius is also sending approximately 18 people to our 3rd International CytoSorb Users Meeting on March 14, 2016





Biocon and Cardiac Surgery Partners



- Biocon and CytoSorbents recently completed a four city, week-long trip in India and Sri Lanka with Prof. Dr. Zsolt Molnar, Chairman of SepsEast, the Central and Eastern European Sepsis Forum and experienced user of CytoSorb for critical illnesses
- Introduced CytoSorb[®] to more than 250 KOLs





- Ongoing partnership discussions with multiple cardiac surgery partners who have expressed strong interest in CytoSorb[®]
- Key clinical data from the cardiac surgery evaluation study led by Prof. Christophe Baufreton, MD, PhD, cardiothoracic surgeon and Vice Dean of Research from C.H.U - Angers, France, in a patient population similar to those in the REFRESH I study, will be presented at the 3rd International CytoSorb Users meeting next week

REFRESH I Trial Update

REFRESH

REduction in FREe Hemoglobin

- 40-patient, eight-center study evaluating the safety and efficacy of intra-operative use of CytoSorb[®] in a heart-lung machine during complex cardiac surgery in elective, non-emergent cardiac surgery > 3 hours
 - Aortic reconstruction, CABG redos, multiple valve replacements, etc
- Goal: Safe reduction of plasma-free hemoglobin and other inflammatory mediators that can cause post-operative complications









REFRESH I Trial Update REduction in FREe Hemoglobin Trial



- Working with major cardiac surgery centers
 - Baylor College of Medicine
 - Baystate Medical Center
 - Columbia University
 - Cooper University Hospital
 - University of Kentucky
 - University of Maryland
 - University of Pennsylvania
 - University of Pittsburgh Medical Center
- 7 of 8 sites currently active in the trial
- Trial 35% enrolled with several additional patients already consented for the study
- Expected to complete enrollment by mid-2016, to be followed by discussions with FDA on direction for potential pivotal trial (REFRESH 2) intended to support application for U.S. approval of CytoSorb for cardiac surgery



International CytoSorb[®] Registry Update

- The CytoSorb registry is intended to collect treatment data from all over the world
- It is funded by CytoSorbents, but is managed independently by the Center of Clinical Studies at University of Jena led by Prof. Dr. med. Frank Brunkhorst
- The analysis of data is governed by an independent medical steering committee composed of leaders in critical care and cardiac surgery
- 103 Institutions have registered to submit data to the registry
- The first interim data analysis from the registry is expected to be finalized soon





Sepsis Definition Update

The Third International Consensus Definitions Task Force just published their new guidelines for the definition of sepsis in JAMA*

Sepsis was defined as:

"The life-threatening organ dysfunction caused by a dysregulated host response to infection"

• This aligns very well with the message that we have been communicating with KOLs around the world about what CytoSorb[®] is designed to do

• As one of the only therapies designed to target the underlying causes of organ dysfunction and failure in sepsis and a host of other life-threatening conditions, we believe we are strategically-positioned to save lives and change the way critically-ill patients are treated today



* Singer, M., et. al. "The Third International Consensus Definitions for Sepsis and Septic Shock", JAMA. 2016; 315(8):801-810.



Select Case Reports



Refractory Septic Shock

At the 26th Symposium for Intensive Medicine + Critical Care in Bremen, Germany, Dr. Sigrun Friesecke, Senior Intensivist in the Greifswald University Hospital MICU reported on a prospective, single arm study in 22 patients with refractory late-stage septic shock

- Patients had refractory shock despite high doses of vasopressors, respiratory failure requiring mechanical ventilation or ECMO, anuric kidney failure requiring dialysis, and lactate > 8 mmol/L
- A similar population (n=16) receiving standard of care, where shock could not be reversed, also on mechanical ventilation with an initial lactate level of 6.1 ± 4 mmol/L, and 75% requiring renal replacement therapy had a mortality of 100% at 28 days.*
- Results from the CytoSorb Greifswald Study
 - 28-day survival was 41%, a 30-40% absolute improvement over expected (0-10%)
 - Resolution of shock in 68% of patients treated with CytoSorb
 - Reduction of IL-6 from an initial average of 87,000 pg/mL to below 10,000 pg/mL after 24 hours
 of treatment

* Conrad, M., et. al., "Early prediction of norepinephrine dependency and refractory septic shock with a multimodal approach of vascular failure", J Crit Care, 2015; 30:739-743.





Severe Burn Injury

- 51 year old man was admitted and acutely treated for severe burn injury (60% BSA) and inhalation trauma due to an explosion accident
- On Day 2, the patient developed acute kidney failure requiring dialysis
- He subsequently developed shock requiring high doses of vasopressors (noradrenaline 3.6mg/h, vasopressin 2.4 IE/h, dobutamine 45mg/h)
- Due to his massive burn injuries, he also developed severe rhabdomyolysis with myoglobinemia (15,696 $\mu g/L$) and severe inflammation (CRP 275 mg/L, PCT 28.75 $\mu g/L$, WBC 15,500/ μL)
- Patient underwent continuous CytoSorb treatment sessions for 72 hours, using a total of 3 devices. With treatment:
 - Regained hemodynamic stabilization with significantly decreased needs for vasopressors (noradrenaline 0.6mg/h, dobutamine 5mg/h)
 - Renal function improved, myoglobin decreased to 7,944 µg/L and inflammatory markers decreased (CRP 237 mg/l, PCT 10.78 µg/l, WBC 9,900/µl)
- Patient was stabilized, was ultimately weaned from both mechanical ventilation and dialysis, and was successfully discharged from the hospital to physical rehabilitation





CytoSorb® SIRS and Sepsis: Regain Control!

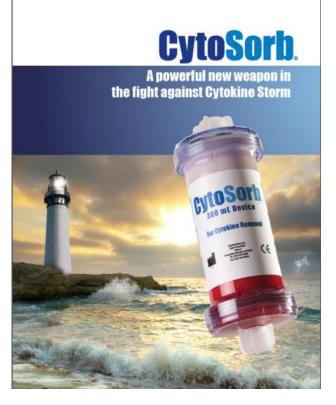


Q&A Session

CytoSorbents Corporation

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