



CytoSorbents Corporation (NASDAQ: CTSO)

A Leader in Critical Care Immunotherapy

Q4 2016 and Fiscal 2016 Earnings Conference Call

March 3, 2017

Conference Call Participants

Dr. Phillip Chan, MD, PhD

Chief Executive Officer and President

Vincent Capponi, MS

Chief Operating Officer

Kathleen Bloch, MBA, CPA

Chief Financial Officer

Dr. Christian Steiner, MD

Vice President of Sales and Marketing

Christopher Cramer, MS, MBA

Vice President of Business Development

Moderator: Amy Phillips – Pascale Communications

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 3, 2017 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



Sepsis



Trauma



Burn Injury



Influenza



**Millions Die
Of Uncontrolled Deadly
Inflammation
Each Year**



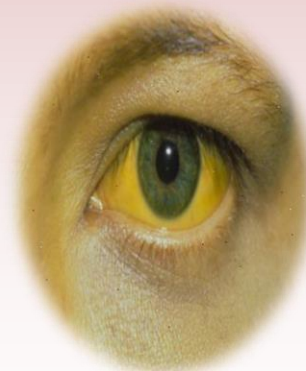
Lung Injury



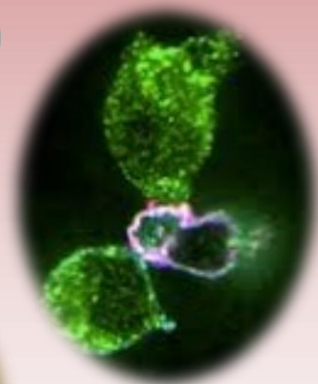
Pancreatitis



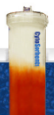
Surgical
Complications



Liver Failure



Cytokine
Release
Syndrome

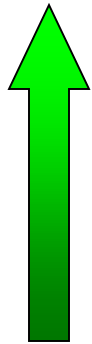


CytoSorb® Removes the Fuel to the Fire

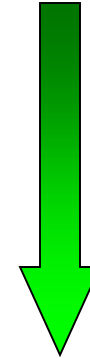
- CytoSorb® targets the \$20+ billion opportunity in critical care and cardiac surgery
- Approved in the European Union as the only specifically approved extracorporeal cytokine filter
- Approved for use in any situation where cytokines are elevated
- Removes cytokines and many other inflammatory mediators such as free hemoglobin, bacterial toxins, myoglobin, and activated complement
- Works with standard dialysis and heart-lung machines
- Safe and well-tolerated: In ~20,000 human treatments, up from 9,000 a year ago



Goal: To Prevent or Treat Organ Failure

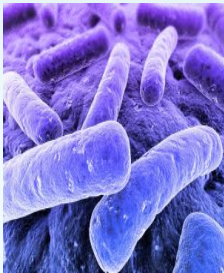


Improve
Patient
Outcome
and
Survival

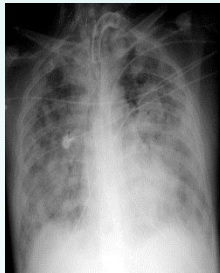


Decrease
Costs Of
ICU and
Patient
Care

Sepsis



ARDS



Burn Injury



Trauma



Pancreatitis



Influenza



Surgical



The Potential to Revolutionize Critical Care Medicine



CytoSorbents

Working to Save Lives Through Blood Purification

Financial Highlights

Comparative Annual Revenue Results

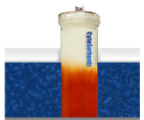
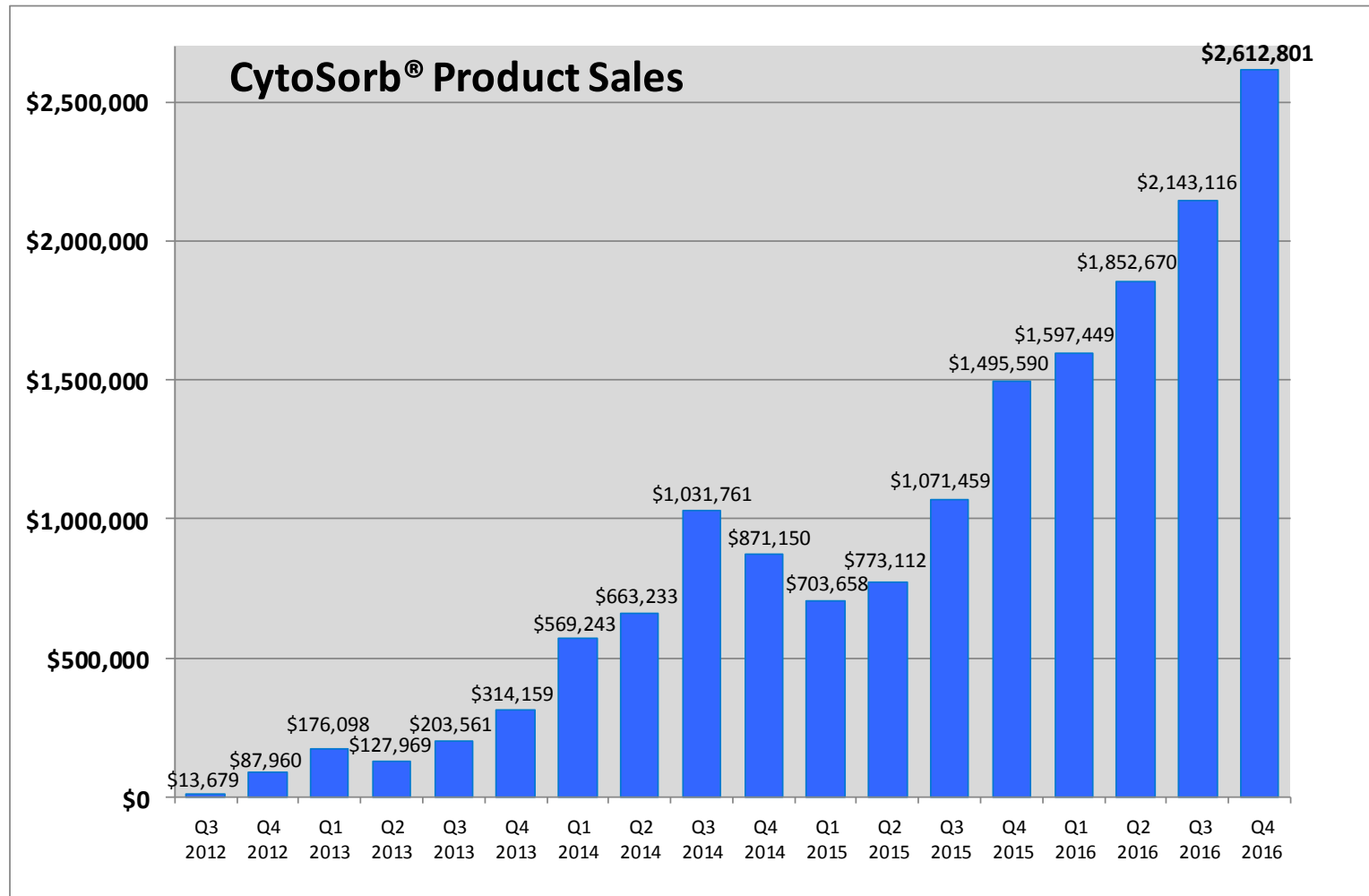
	Year Ended Dec 31, 2016		Year Ended Dec 31, 2015		% Incr.
Product revenue	\$ 8,206,036		\$ 4,043,819		103%
Grant and other income	1,321,807		747,797		77%
Total revenue	\$ 9,527,843		\$ 4,791,616		99%

- CytoSorb® product sales for the year 2016 increased 103% to \$8.2M, from \$4.0M for the year 2015
- Grant revenue in 2016 grew 77% to \$1.3M compared to \$748K in the year 2015
- Total revenue, which includes both product sales and grant revenue, increased by 99% to \$9.5M in 2016 as compared to \$4.8M for the year 2015

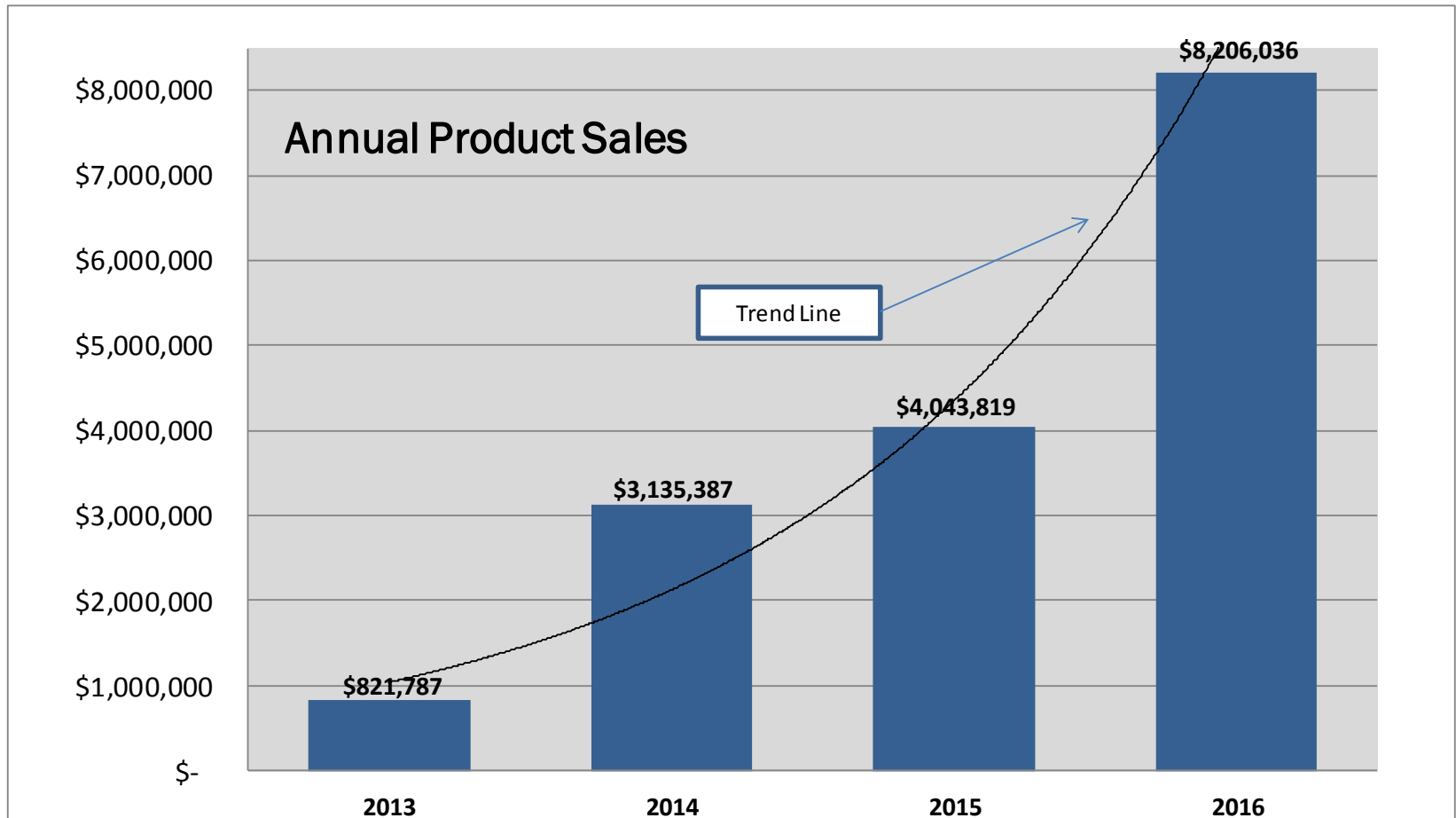
Quarterly Product Sales

Seventh consecutive quarter of product sales growth

Sixth consecutive quarter of record sales



Annual Product Sales

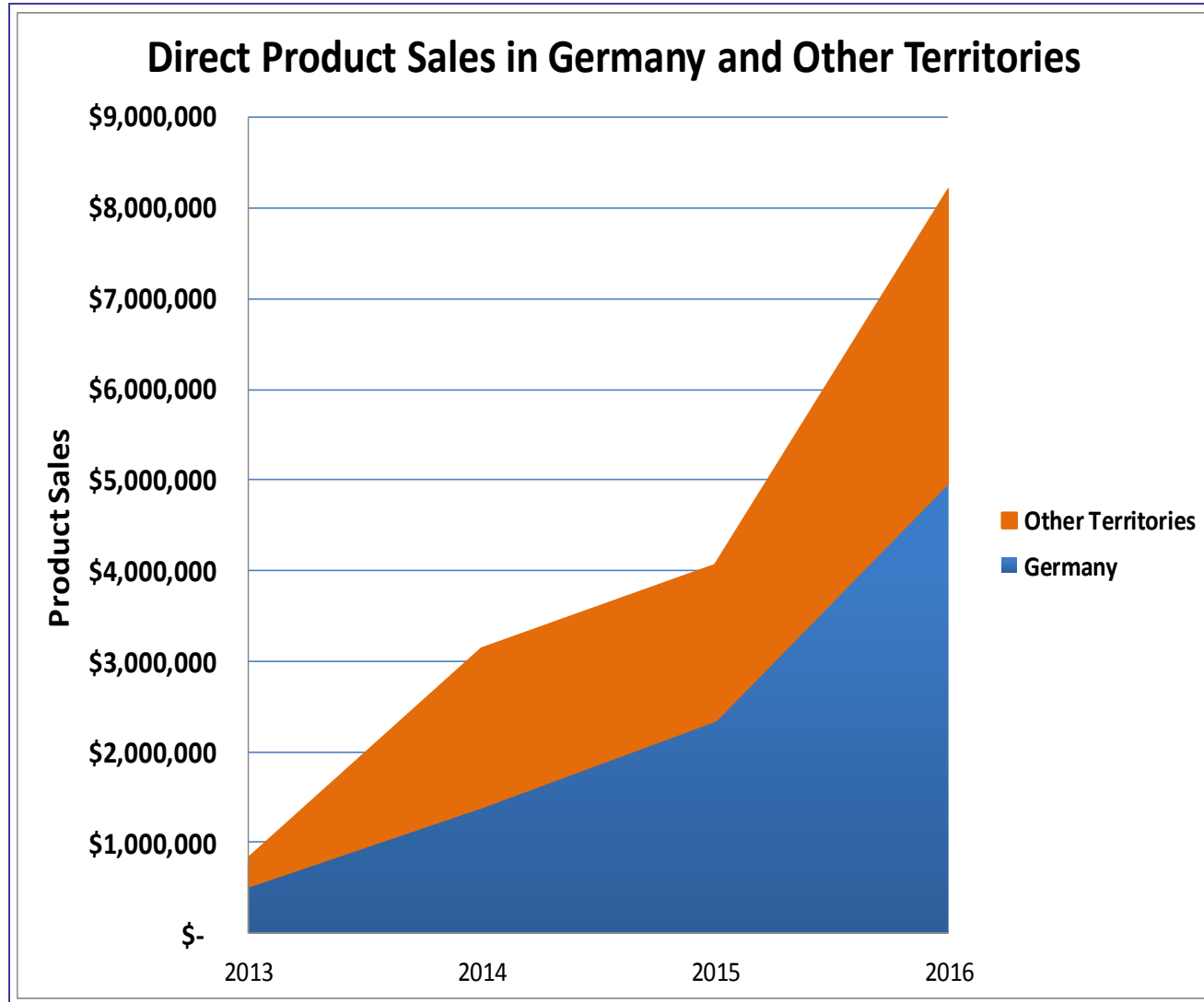


Direct Product Sales in Germany



Over the past three years, the compound growth rate of return (“CAGR”) on product sales in Germany, the market we have been in the longest was 128%

Worldwide Product Sales



Sales outside Germany are growing as new countries are added and CytoSorb is adopted and used more frequently in existing countries.



CytoSorb® Distributed in 42 Countries



IntensivMed

CytoSorbents
Working to Save Lives Through Blood Purification



TekMed



WMC

Working Capital and Cap Table

Working Capital as of				
	12/31/16	12/31/15	12/31/14	12/31/13
Current Assets:				
Cash and short-term investments	\$ 5,245	\$ 7,509	\$ 5,550	\$ 2,183
Grants and accounts receivable, net	1,433	649	819	453
Inventories	834	1,191	538	245
Prepaid expenses and other current assets	316	512	700	605
Total current assets	7,828	9,861	7,607	3,486
Current Liabilities(1):				
Accounts payable	1,330	685	698	787
Accrued expenses and other current liabilities	2,115	723	825	362
Current maturities of long-term debt	833			
Deferred revenue		-	1	272
Total current liabilities	4,278	1,408	1,524	1,421
Net Working Capital	\$ 3,550	\$ 8,453	\$ 6,083	\$ 2,065
(1) Excludes warrant liability, a current liability that does not have cash implications.				

Cap Table 12/31/2016

	Fully Diluted Common Shares
Common Stock	25,483,966
Options	2,762,177
Warrants	1,078,561
	29,324,704

We Expect to Achieve
Operating Profitability
Within 1-2 Years



CytoSorb® Is a High Margin Razorblade

- CytoSorbents is pure play high margin disposables business where CytoSorb is the “razorblade” that is fully compatible with the existing installed base of “Razor” ICU dialysis and ECMO machines, and heart-lung machines in the OR
- Blended gross margins are >65%, but with economies of scale and manufacturing efficiencies, this is expected to be closer to 80%
- Average Selling Price is approximately \$1,000 per cartridge
- Approximately 1 - 10 cartridges are typically used per patient. Open heart surgery uses 1-2 cartridges, treatment of sepsis uses 3-5 cartridges. An entire course of treatment for sepsis is roughly the cost of 1 day in the ICU
- In Germany, 400 hospitals have >400 beds. Each of these hospitals will see 300-600 sepsis patients per year. At 3-5 cartridges per patient:
 - Revenue per patient = ~\$3,000-5,000
 - Potential revenue per hospital = \$1-3M for sepsis alone



Dedicated Reimbursement In Germany

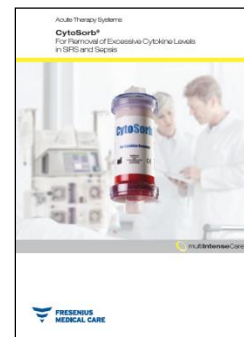
- CytoSorb has achieved a permanent, dedicated reimbursement code in Germany – our most important market and the largest medical device market in the European Union
- Validates the importance of our therapy to physicians in the country
- Was achieved very rapidly by the initiative and strong support of several major medical societies across different medical specialties
- Effective January 1, 2017, the new code is expected to result in much higher reimbursement compared to the more generic code we have used, which in many cases led to inadequate reimbursement, impeding usage and sales
- Expected to catalyze major increases in usage and CytoSorb sales in Germany, and positively impact reimbursement in other countries

Expanded Fresenius Partnership

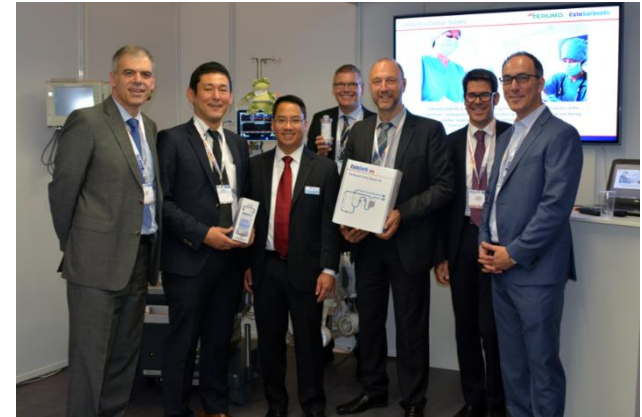
CytoSorbents renewed its partnership with Fresenius Medical Care in January 2017



- 1) 3 year extension on exclusive distribution of CytoSorb for ICU applications in France, Poland, Norway, Sweden, and Finland
- 2) Increased commitment with guaranteed quarterly orders of CytoSorb evaluable every 1.5 years
- 3) Co-marketing agreement across all of the countries where CytoSorb is sold, where possible
 - Increases the “effective” sales force by 2-3x in each country
 - Fresenius to provide written endorsement of CytoSorb for the multiFiltrate platform including the inclusion of CytoSorb as a programmed option on the multiFiltrate PRO
 - Jointly developed marketing materials



- Entered into a multi-year partnership with Terumo Cardiovascular Group, a global leader in medical devices for cardiac and vascular surgery
- Initial exclusive distribution of CytoSorb® in France, Denmark, Norway, Sweden, Finland, and Iceland
- Launched December 2016
- Strong validation of our technology and opens door to potential expansion to other countries, such as Japan – the second largest medical device market in the world



Biocon Has Renewed Focus on CytoSorb

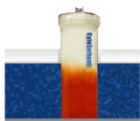


Treat Primary Infection with
Antibiotics



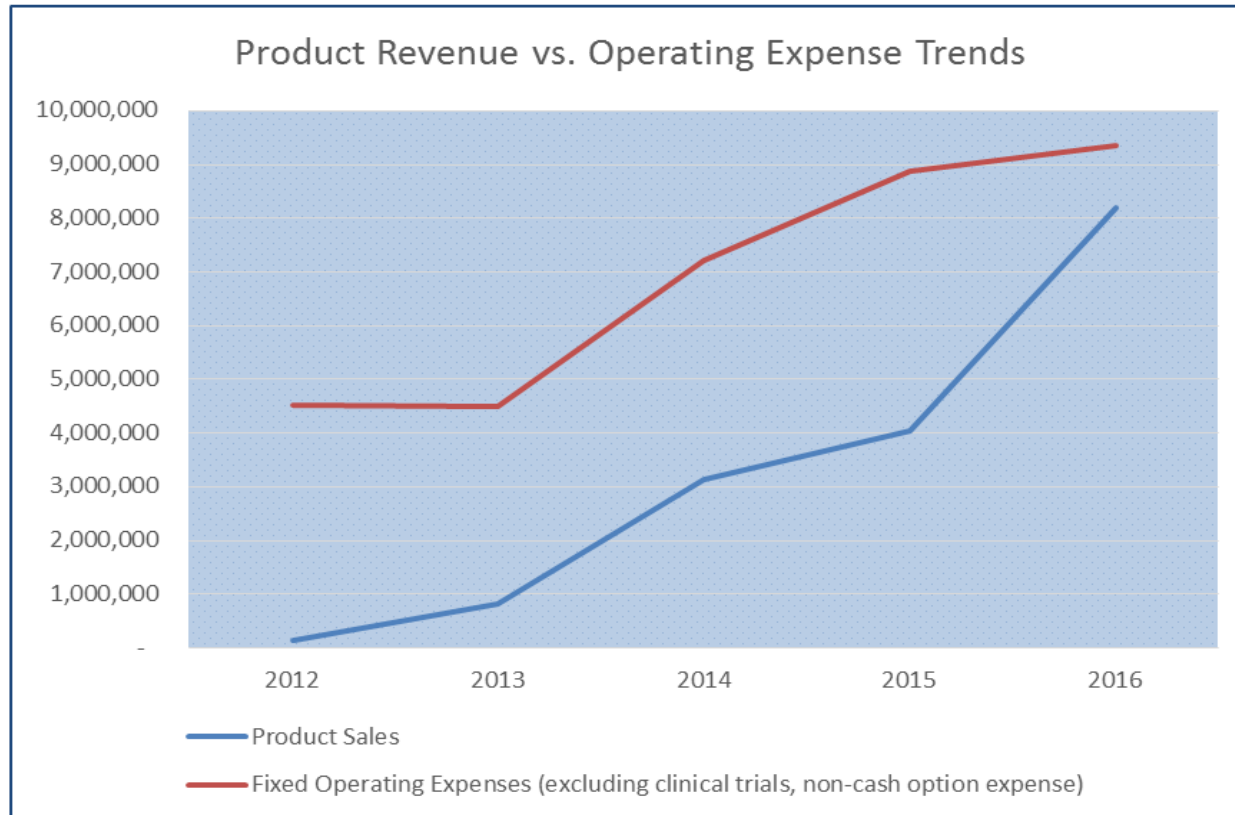
Treat Massive Inflammatory
Response with CytoSorb

- Biocon is the largest biopharmaceutical company in India
- Significant growth in India with expansion into Sri Lanka
- They have renewed their commitment to CytoSorb with its own division, sales force, and funding for small clinical studies



Driving Toward Operating Profitability

Product sales continue to grow rapidly while increases in fixed non-clinical, non-cash expenses taper off.



We expect to begin the path
to U.S. approval later this
year with initiation of a
U.S. cardiac surgery
REFRESH II Trial



U.S. REFRESH I Trial – Safety Confirmed

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
- Working with major cardiac surgery centers
 - Baylor College of Medicine and Texas Heart Institute
 - Baystate Medical Center
 - Columbia University
 - Cooper University Hospital
 - University of Kentucky
 - University of Maryland
 - University of Pennsylvania
 - University of Pittsburgh Medical Center
- Primary endpoints were safety and reduction in free hemoglobin

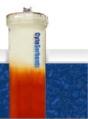


REFRESH I Trial – Safety

REduction in FREe Hemoglobin Trial



- In this first RCT using CytoSorb in high risk cardiac surgery, we have:
 - Demonstrated safety of the therapy
 - Identified surgical procedures where patients have the highest levels of plasma free hemoglobin and can be used to enrich future studies for those at greatest risk of organ injury
 - Demonstrated that CytoSorb reduces key inflammatory mediators during the treatment period
- An abstract of the REFRESH I Trial has been submitted for the AATS conference
- Meanwhile we plan to confirm the clinical trial strategy with the FDA and expect to begin a registration trial later this year, designed to seek approval of CytoSorb in the U.S. for the application of cardiac surgery
- Depending on the clinical path, approval could occur in the 2018-20 timeframe.



CytoSorbents: A Unique Company



CytoSorbents Is A Unique “De-risked” Hybrid

Combines greater visibility and lower risk of a medtech company with a “razorblade”, high margin business model and strong technology validation

- \$8.2M in 2016 sales
- 70+% Direct Margins
- 20,000 human treatments and growing

**\$18M in Grant
and Contract
Funding**



And the upside profile of a biotechnology company with a \$20B worldwide market opportunity in critical care and cardiac surgery

2017: Expecting a Pivotal Year

In 2017, we plan to continue achieving multiple value creating milestones and expect to meet the investment criteria for a wide range of high quality, fundamental institutional investors

- As of Q4 2016, we have already exceeded a \$10M in sales run-rate, a key revenue threshold for many fundamental institutional investors
- We expect to achieve operating profitability, with expanding sales and gross margins, within the next 1 - 2 years, completely changing our investment profile
- Following discussions with the FDA, we plan to initiate a pivotal, registration trial for CytoSorb in the U.S., putting a time-line, for the first time, on a potential U.S. approval

We expect 2017 to be a major year of visibility and progress for our company, to the benefit of all of our shareholders

CytoSorb®

SIRS and Sepsis: Regain Control!



CytoSorbents

Working to Save Lives Through Blood Purification

Q&A Session

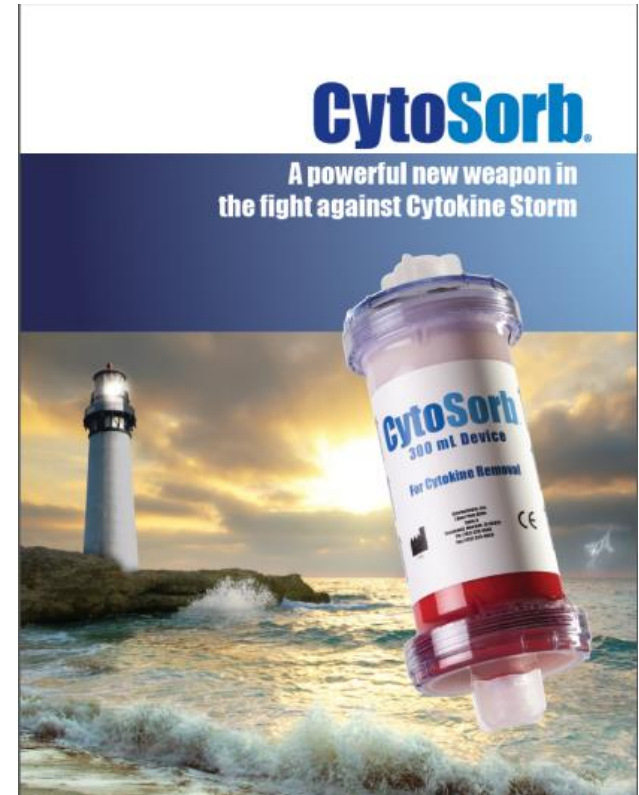
CytoSorbents Corporation

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Working to Save Lives Through Blood Purification