



CytoSorbents

Working to Save Lives Through Blood Purification

CytoSorbents 2013 – The Rise of an Emerging Critical Care Immunotherapy Company

Monmouth Junction, NJ, January 15, 2014 – CytoSorbents Corporation (OTCBB: CTSO), a critical care immunotherapy company commercializing its European Union approved CytoSorb® blood purification therapy to treat life-threatening illnesses in the intensive care unit, issues a shareholder letter authored by its Chief Executive Officer, Dr. Phillip Chan, MD, PhD.

2013 Financial Highlights:

- **2013 represents the first full year of CytoSorb® commercialization**
- **We expect to report total 2013 revenue of approximately \$2.4 million, including both product sales and grant income**
- **Full year 2013 CytoSorb® sales are expected to be in the range of \$840,000 to \$870,000**
- **Expected Q4 2013 product sales in the range of \$330,000 to \$360,000 were a record for the Company and represent a greater than 60% sequential increase from the previous Q3 2013, and a greater than 275% increase from the year ago fourth quarter**
- **Gross product margins in Q4 2013 are expected to exceed 60%**
- **Ramping manufacturing of CytoSorb® to meet increased demand from direct sales and distributors**

Dear Fellow Shareholders and Friends,

The ability to alter the immune response to combat disease is called immunotherapy. This is one of the most historically important and promising areas in medicine today and also one of the most valuable.

CytoSorbents is emerging as a leading pioneer in the critical care immunotherapy space. Our flagship product, CytoSorb®, represents a potential paradigm shift in the treatment of critically ill patients suffering from massive inflammatory conditions such as sepsis, trauma, burn injury, lung injury, pancreatitis, and a host of other life-threatening conditions. Severe uncontrolled inflammation can precipitate organ failure, the cause of nearly half of all deaths in the intensive care unit (ICU) and for which no effective treatment exists. Because of this, millions of critically

ill patients die each year. CytoSorb®, as the only specifically approved cytokine filter in the European Union (E.U.), reduces the cytokine storm that “fuels the fire” of inflammation, with the goal of reducing inflammation and then preventing or treating deadly organ failure.

To further understand the key role that CytoSorb® plays in the immunotherapy ecosystem, the following explanation may be helpful. The immune system is a remarkably complex network of specialized immune cells whose activities are tightly orchestrated by a host of signaling factors, the most important of which are cytokines. Every day, our immune system protects us against infection and injury by generating some degree of inflammation. This inflammation is normally helpful and protective, provided that it is kept under control. A simple but illustrative example is a sprained ankle. When the injury occurs, there is an immediate local release of cytokines and other inflammatory substances that lead to local inflammation and rapid swelling. This, in fact, is a completely normal immune response. Inflammation increases blood flow, oxygen, nutrient delivery, immune cells, and healing factors to the site of injury to help it heal. Once the area is healed, the inflammation is turned off. But the problems arise when the immune system does not respond the way it should, causing either too little inflammation at one end of the spectrum, or too much inflammation at the other end.

When the immune system is too weak or fails to recognize and kill bacteria, viruses, tumor cells, and other dangerous substances, it can lead to a high risk of infection and cancer. To counter this, many different immunotherapy approaches have been developed to activate the immune response.

- Vaccines are a classic example. In the influenza vaccine, for example, flu virus particles are mixed with immune stimulants that boost the immune response against the flu, providing future protection. The top 5 vaccine companies including Sanofi (NYSE: SNY), Merck (NYSE: MRK), Glaxo Smith Kline (NYSE: GSK), Pfizer (NYSE: PFE), and Novartis (NYSE: NVS), generated \$21.5 billion in vaccine sales in 2012.
- Another example is cancer immunotherapy, which was cited by Science Magazine as the 2013 Breakthrough of the Year. Cancers have evolved clever ways to evade and suppress the immune system. The use of monoclonal antibodies against cancer targets to enable better immune system recognition is the basis of blockbuster therapies such as Rituxan® and Herceptin® (Genentech/Roche, OTC:RHHBY) and Erbitux® (Bristol Meyers Squibb, NYSE: BMY) which together generated \$14.4 billion in 2012 revenue. And now a new breed of cancer immunotherapy companies are stimulating immune cells to directly attack cancer cells through activated cell therapies or cancer vaccines. Examples include Dendreon (NASDAQ: DNDN), which generated \$325M in sales of its PROVENGE® prostate cancer vaccine in 2012, and other companies still in clinical trials such as NewLink Genetics (NASDAQ: NLNK), Northwest Biotherapeutics (NASDAQ: NWBO), ImmunoCellular Therapies (NYSE: IMUC); Celldex Therapeutics (NASDAQ: CLDX); Galena Biopharma (NASDAQ: GALE) and Inovio Pharmaceuticals (NYSE: INO). These six pre-revenue companies have a collective market capitalization of \$4.3 billion.

On the other end of the spectrum is when the immune system is overactive. This can be subtle, as in heart disease, or it can be overt and catastrophic, as seen in life-threatening illnesses in the ICU. The latter is where CytoSorbents is focused, and is estimated to be a \$10-15 billion market in the U.S. and Europe alone.

- Autoimmune diseases such as rheumatoid arthritis, psoriasis, and inflammatory bowel disease, where an overactive immune system attacks normal healthy tissues is a prime example. Blockbuster biologics that try to treat these diseases by targeting specific cytokines, include Humira® from AbbVie (NYSE: ABBV), Remicade® from Johnson and Johnson (NYSE: JNJ), and Enbrel® from Amgen (NASDAQ: AMGN). These 3 products have 2012 worldwide sales of \$25.5 billion.
- Other examples of a hyperactive immune response include allergy, asthma, and anaphylaxis, where even minute exposure to an allergen can lead to a severe, and even rapidly fatal immune response. Common prescription and over the counter antihistamines and steroids are a multi-billion dollar category.

As can be seen, immunotherapy is a massive market with many, many multi-billion dollar products. And this is our opportunity. Unlike most areas of immunotherapy that are extremely crowded, critical care immunotherapy for the treatment of patients in the ICU is just beginning to develop. Steroids have been the blunt hammer used by critical care physicians to fight inflammation in the ICU for decades, but it has been well-documented in many clinical trials studying many life-threatening illnesses, that although steroids may have a beneficial near term effect, they don't improve survival and in some cases, actually increase the risk of death. For most critical illnesses, such as sepsis, burn injury, trauma, pancreatitis, acute respiratory distress syndrome and others, there is nothing currently being done to control the underlying deadly inflammation (often called the systemic inflammatory response syndrome or SIRS) that can then lead to organ failure and death. This is one of the biggest unmet medical needs in medicine, and CytoSorb® is uniquely positioned to step into this void and potentially become a dominant therapy in the ICU. With our progress in 2013 we now have a foothold in this market and are very excited by what we are seeing.

Accelerating Momentum in 2013.

This was the operative phrase for 2013.

We saw a tremendous amount of progress in all parts of our business. But the first full year of CytoSorb® commercialization was the highlight. Our strategy to grow revenue combining direct sales of CytoSorb® using our own sales force in Germany, Austria and Switzerland, as well as distributor or partner sales in other countries, is working and there is a lot of room for expansion. CytoSorb® is approved through the European C.E. Mark and can be sold in all 28 countries of the E.U. With registration, CytoSorb® can also be sold in countries outside the E.U. that accept CE Mark approval, such as India, Russia, Canada, Australia, the Middle East, Brazil and others. In

fact, our European approval allows us access to most of the world, with the notable exception of countries like the U.S. and Japan.

As mentioned previously, we expect to report strong 2013 full-year revenue of approximately \$2.4 million, a combination of both CytoSorb® sales and grant income. 2013 sales of CytoSorb® are expected to be in the range of \$840-870K with continued solid gross margins, buoyed by strong fourth quarter sales and increasing order and re-order momentum. These results were primarily based on the efforts of our small 4 person direct sales force, who have generated the support and interest of more than 100 key opinion leaders in major university and public hospitals throughout Germany and many in Austria and now in the U.K. But in addition to the sales efforts, it is the initial clinical data that continues to drive this increasing interest. As we reported from our first ever CytoSorb® Users Meeting at the DIVI conference in December, our customers and collaborators are seeing many treatment successes with the therapy. And now we have advanced the establishment of a first class international CytoSorb® registry to help keep track of the outcomes of CytoSorb® treatment which will also help. The registry will be hosted by SepNet, the Sepsis Trials Network in Germany, and the University of Jena, Germany, a leading epicenter of sepsis research in Europe.

In Q4, we have also witnessed the early success of our initial efforts to increase adoption and usage amongst junior and senior physicians, a trend we expect to continue in 2014. In addition, we now have more than 30 investigator initiated studies, looking at a broad set of clinical applications that include sepsis, cardiac surgery, trauma, liver failure, and others, that have either started, or are being planned, with many of these expected to yield data this year. Dr. Rainer Kosanke, our European Director of Scientific Affairs, is actively overseeing these studies on behalf of the company, as well as our ongoing Dosing Study that we discussed recently. Importantly, these studies will provide a stream of clinical data that may help to create even greater awareness and usage of CytoSorb® in the scientific community.

Based upon the increasing interest in the market, we have invested in the expansion of our sales team with now 5 sales reps, with a near term target of 7. We have added a clinical support person to support our customers, with another addition soon. We are also hiring a resource to help support and manage our distributors as well.

We have now established distribution of CytoSorb® in the United Kingdom, Ireland, the Netherlands, Turkey, Russia and India. Distributor sales were accretive to the overall results in 2013, but we expect a more meaningful contribution to sales in 2014 as marketing efforts intensify at existing distributors, and more distributorships and partnerships are added – which we are pursuing aggressively. In particular, our strategic partnership with Biocon, India's largest biotechnology company, is very exciting and holds great promise. They have committed a significant amount of internal resources to support the launch and exclusive distribution of CytoSorb® in India and select emerging countries, and a number of patients have already been treated, again with many positive outcomes.

And finally, we were very active in the U.S. First, in early 2013, we solidified our management team with the addition of Kathleen Bloch as Chief Financial Officer, and Chris Cramer as Vice President of Business Development. We received FDA IDE approval to run a US Air Force funded randomized controlled 30 patient human pilot study (valued at ~\$3M) using CytoSorb® to treat patients with trauma and rhabdomyolysis. To help support our efforts, we established a world class trauma board. We executed well against our milestones for DARPA and the US Army, bringing in more than \$1.5M in non-dilutive milestone payments. And we were awarded a \$204K Phase I SBIR contract by the National Heart, Lung and Blood Institute (NHLBI), a division of the National Institutes of Health (NIH), to accelerate commercial development of our HemoDefend™ technology for blood transfusions. Lastly, we recently met with officials from both NYSE and NASDAQ to discuss our options to up-list our stock to one of these exchanges, a goal for 2014.

Growth in 2014.

2014 could be a pivotal year for CytoSorbents as we near critical mass in many parts of our business, particularly commercialization of CytoSorb®. Our product revenues have been growing rapidly, and we are nearing the important milestone of \$1 million in trailing twelve-month sales. Based on the foundation we laid in 2013, we now have the formula in place for growth:

- Strong key opinion leader support
- Positive clinical experiences
- Increasing orders and reorders
- A growing sales and clinical support team to more efficiently capture sales
- Clear evidence that our marketing efforts with junior and senior physicians in critical care departments are bearing fruit
- New clinical data from a multitude of clinical studies that may drive usage
- New markets like cardiac surgery where we are seeing a high level of interest
- Existing distributors coming on-line, with new distribution being added
- Reimbursement in key markets
- Strong interest from potential strategic partners

If we execute well and are successful, this has the potential to significantly change our value proposition as a Company and the trajectory of our business.

In conclusion, we look back at our accomplishments in 2013 with pride as a Company, but also with humble appreciation for how we got there. So many people - from physicians and nurses, to patients, to our advisors and research collaborators, to our distribution partners, to our investors, to our service providers, to our Board of Directors, and to our dedicated employees and their families – have contributed greatly to our progress, and they have our deepest gratitude. Thank you all for sharing our common vision of helping those who need it most, in our quest to save lives and revolutionize critical care medicine.

Best wishes to all in the New Year!

Phillip

Phillip P. Chan, MD, PhD

Chief Executive Officer

CytoSorbents Corporation

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About CytoSorbents Corporation

CytoSorbents is a critical care focused immunotherapy company using blood purification to modulate inflammation - with the goal of preventing or treating multiple organ failure in life-threatening illnesses. Organ failure is the cause of nearly half of all deaths in the intensive care unit, with little to improve clinical outcome. CytoSorb[®], the Company's flagship product, is approved in the European Union as a safe and effective extracorporeal cytokine filter, designed to reduce the "cytokine storm" that could otherwise cause massive inflammation, organ failure and death in common critical illnesses such as sepsis, burn injury, trauma, lung injury, and pancreatitis. These are conditions where the mortality is extremely high, yet no effective treatments exist. CytoSorbents' purification technologies are based on biocompatible, highly porous polymer beads that can actively remove toxic substances from blood and other bodily fluids by pore capture and surface adsorption. CytoSorbents has numerous products under development based upon this unique blood purification technology, protected by 32 issued US patents and multiple applications pending, including HemoDefend[™], ContrastSorb, DrugSorb, and others. Additional information is available for download on the Company's website: <http://www.cytosorbents.com>

Forward-Looking Statements

This press release includes forward-looking statements intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Forward-looking statements in this press release are not promises or guarantees and are subject to risks and uncertainties that could cause our actual results to differ materially from those anticipated. These statements are based on management's current expectations and assumptions and are naturally subject to uncertainty and changes in circumstances. We caution you not to place undue reliance upon any such forward-looking statements. Actual results may differ materially from those expressed or implied by the statements herein. Risk factors are detailed in the Company's Form 10-K filed with the SEC on April 3, 2013, which is available at <http://www.sec.gov>.

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