# Dossier: CYTOSORBENTS MEDICAL INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,918.00

**Award Date:** 2023-05-12

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

CytoSorbents Medical, Inc. is a critical care immunotherapy company focused on employing blood purification technologies to control deadly inflammation in life-threatening illnesses. Their core mission is to save lives by modulating the body's immune response to various inflammatory conditions. The company aims to address the significant unmet need for effective treatments for conditions such as sepsis, cytokine release syndrome (CRS), trauma, acute respiratory distress syndrome (ARDS), and other inflammatory diseases. Their unique value proposition lies in their CytoSorb® adsorption technology, which is designed to remove excessive levels of cytokines and other inflammatory mediators from the bloodstream, thereby reducing the inflammatory storm and potentially improving patient outcomes. This technology is a broad-spectrum blood purification technology, which allows it to potentially address a wide range of inflammatory conditions.

**Technology Focus:**

* CytoSorb® Adsorption Technology:\*\* A proprietary blood purification technology based on porous polymer beads that actively remove inflammatory mediators, such as cytokines, chemokines, exotoxins, and other substances, from the blood. The beads are biocompatible and hemocompatible.
* Ecosorb® Blood Purification Technology:\*\* A next-generation technology designed to be a broader spectrum cartridge removing additional inflammatory targets and toxins. Being in pre-clinical development as of late 2023.

**Recent Developments & Traction:**

* Distribution Agreement with Terumo BCT (June 2023):\*\* CytoSorbents entered into an exclusive distribution agreement with Terumo BCT for the distribution of CytoSorb® in the United States and Canada for use in cardiac surgery.
* U.S. FDA Emergency Use Authorization (EUA) Renewal for COVID-19 (2021):\*\* CytoSorb® received renewed EUA from the U.S. FDA for use in treating critically ill COVID-19 patients with imminent or confirmed respiratory failure. (While the EUA has since ended with the end of the declared public health emergency, this signifies previous recognition and validation of their technology.)
* Expanded Manufacturing Capacity (Ongoing):\*\* The company has been actively investing in expanding its manufacturing capacity to meet increasing demand for its products and to prepare for potential future growth.

**Leadership & Team:**

* Phillip P. Chan, MD, PhD (Chief Executive Officer):\*\* Dr. Chan has been CEO since January 2018 and has extensive experience in the life sciences industry. He previously held various leadership positions at investment firms focusing on healthcare investments.
* Vincent J. Capponi (President & Chief Operating Officer):\*\* Mr. Capponi has been with the company since 2007. He has significant experience in operations and commercialization.
* Efthymios Deliargyris, MD (Chief Medical Officer):\*\* Dr. Deliargyris has experience in critical care and regulatory affairs.

**Competitive Landscape:**

* Baxter International:\*\* Baxter offers blood purification products, including continuous renal replacement therapy (CRRT) systems, which can be used to manage fluid overload and electrolyte imbalances in critically ill patients. CytoSorbents differentiates itself through its targeted removal of inflammatory mediators rather than solely addressing fluid and electrolyte balance.
* Fresenius Medical Care:\*\* Similar to Baxter, Fresenius offers CRRT systems. CytoSorbents' primary differentiator is its specific focus on immunomodulation and cytokine removal, which is a distinct therapeutic approach compared to general renal support provided by CRRT.

**Sources:**

1. [https://cytosorbents.com/](https://cytosorbents.com/)

2. [https://www.sec.gov/edgar/browse/?CIK=0001192448](https://www.sec.gov/edgar/browse/?CIK=0001192448) (SEC filings for financial information and disclosures)

3. [https://www.globenewswire.com/news-release/2023/06/26/2692728/0/en/CytoSorbents-Partners-with-Terumo-BCT-to-Bring-CytoSorb-to-Cardiothoracic-Surgery-in-the-U-S-and-Canada.html](https://www.globenewswire.com/news-release/2023/06/26/2692728/0/en/CytoSorbents-Partners-with-Terumo-BCT-to-Bring-CytoSorb-to-Cardiothoracic-Surgery-in-the-U-S-and-Canada.html)

4. [https://www.fda.gov/](https://www.fda.gov/) (For information on regulatory approvals, including EUA status. Search 'Cytosorbents')