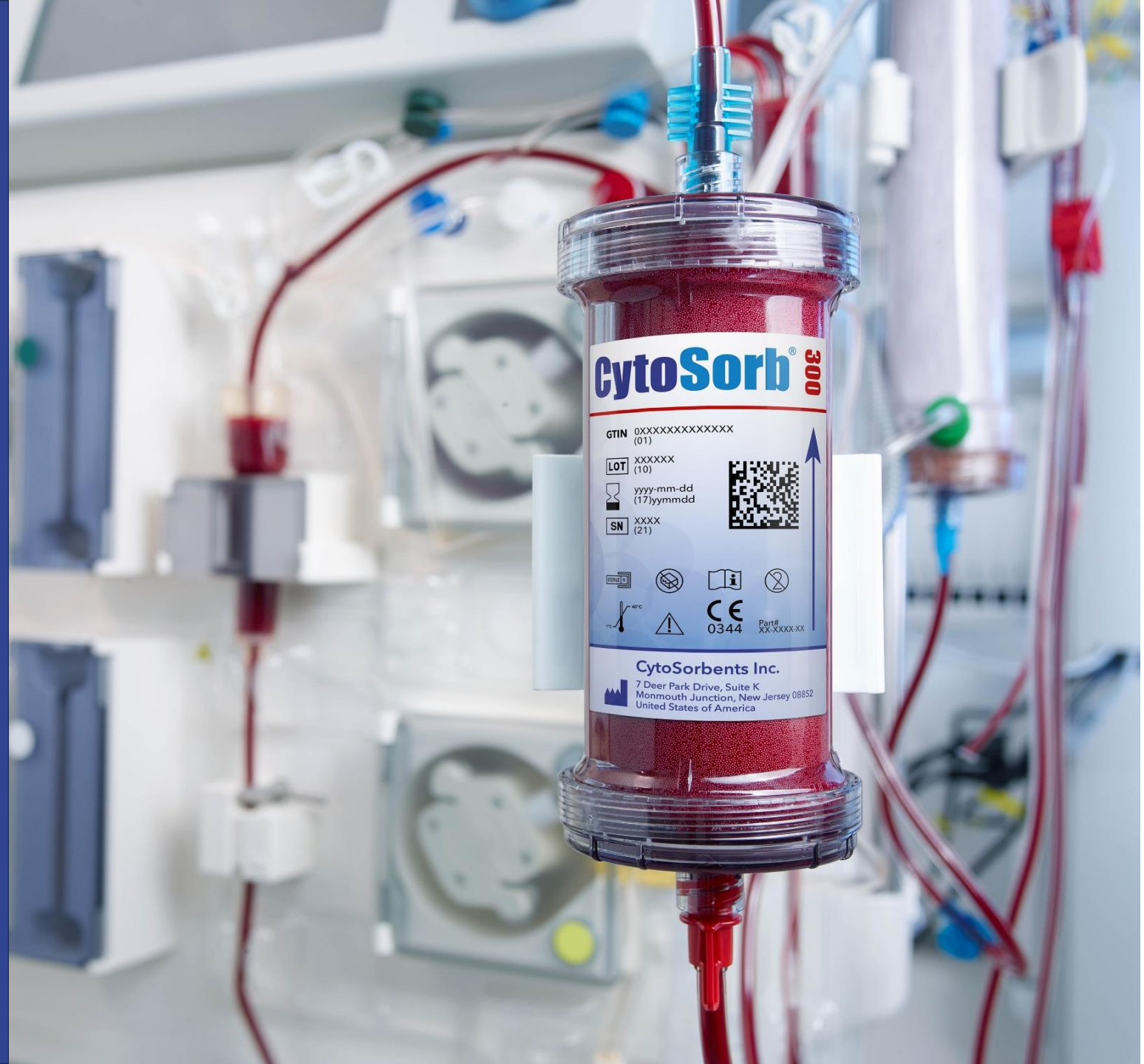


CytoSorbents™

Working to save lives **together.**

NASDAQ: CTSO

Investor Presentation

April 2026

CytoSorbents™

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, the restructuring of our direct sales team and strategy in Germany, our ability to resolve deficiencies in the FDA denial letter and the Health Canada Notice of Refusal, competition, our ability to achieve regulatory approval for our devices, our ability to continue reducing costs and optimize operations and achieve cash-flow break-even in 2026, 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 2025 Form 10-K filed with the Securities and Exchange Commission on March 30, 2026, and other reports and documents filed from time to time by us, which are available online at www.sec.gov.

CytoSorbents™

Regulatory Disclaimer

CytoSorb

- **CE Marked in Europe for the following APPROVED Indications for Use:**
  - Cytokine Removal
  - Bilirubin and Myoglobin Removal
  - Ticagrelor and Rivaroxaban removal during cardiothoracic surgery
- **CytoSorb is NOT yet cleared/approved by the FDA or Health Canada**
- **CytoSorb received U.S. FDA Emergency Use Authorization in April 2020 to treat patients 18 years of age or older with confirmed COVID-19 admitted to the ICU with confirmed or imminent respiratory failure.**
  - The CytoSorb device has neither been cleared or approved for the treatment of patients with COVID-19 infection.
  - The CytoSorb device is authorized only for the duration of the declaration that circumstances exist justifying the authorization of the EUA of the CytoSorb device under section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the authorization is terminated or revoked sooner

DrugSorb-ATR

- **INVESTIGATIONAL DEVICE:** Limited by U.S. Federal Law to Investigational Use Only
- This Investigational Device is NOT yet cleared/approved by FDA, Health Canada, or by any other Global Regulatory Agency, and it is NOT commercially available for sale
- *Proposed* Indication for Use: ***To reduce the severity of perioperative bleeding in patients undergoing coronary artery bypass grafting (CABG) within 2 days of ticagrelor discontinuation***

CytoSorbents™

CytoSorbents at a Glance

- **Platform** blood purification technology to remove toxins and harmful substances from the blood
- **High margin** "razorblade" that we manufacture in the U.S. and is "plug and play" into existing hospital blood pumps

CytoSorb

- Used to treat life-threatening conditions in the ICU and cardiac surgery
- E.U. CE Mark approved to remove cytokines, bilirubin, myoglobin. Also ticagrelor & rivaroxaban removal in cardiac surgery
- **>300,000** CytoSorb devices utilized cumulatively to date in 70+ countries worldwide
- 2025 product sales of **$37.1 million** and 71% gross margins

DrugSorb ATR

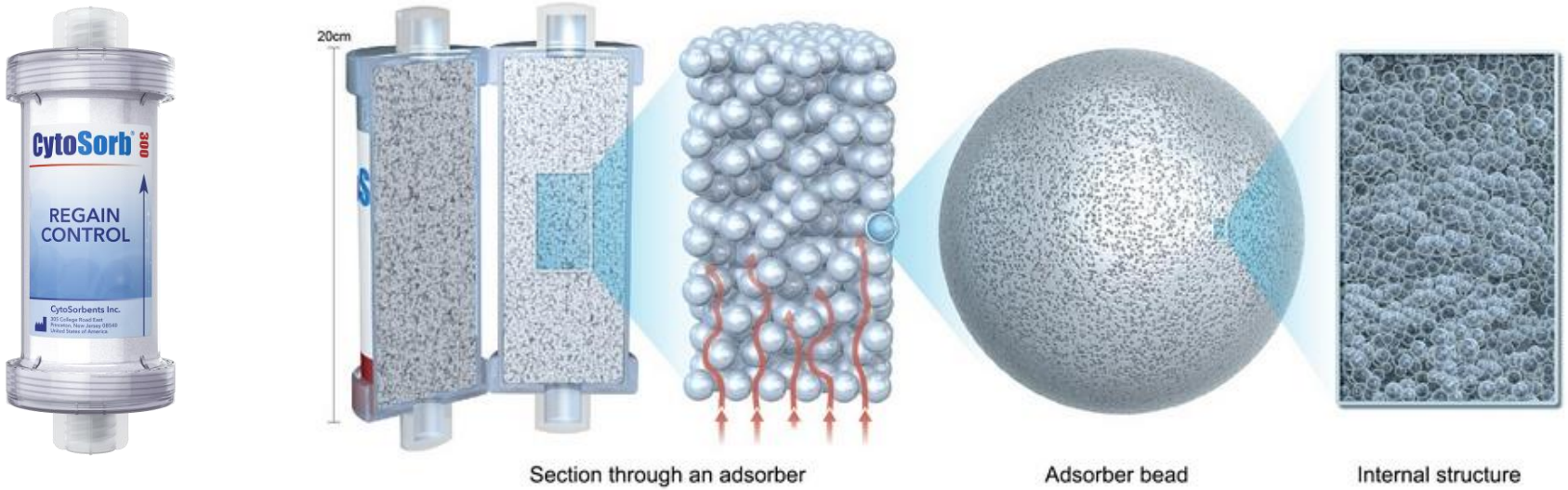
- INVESTIGATIONAL DEVICE to reduce severity of perioperative bleeding in CABG patients on ticagrelor
- **Two FDA Breakthrough Device Designations**
- Actively pursuing **regulatory approval in the U.S. with new De Novo application**

- Driving to **cash flow breakeven** in 2H 2026 as a key priority

CytoSorbents™

The Power of the Bead

Hemocompatible, highly porous polymer bead platform technology that act like tiny sponges to remove harmful substances from blood by pore capture, adsorption, and concentration



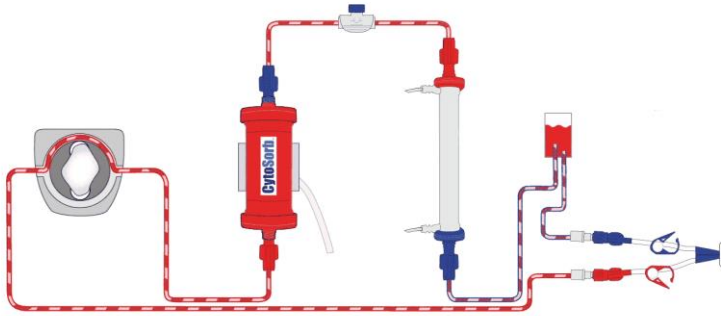
- Excellent removal of a broad range of substances from whole blood and plasma
- Solid state porous polymer chemistry that does not use ligands, antibodies, cells, or biologics
- 20 issued U.S. patents and multiple patents issued and pending worldwide
- Beneficiary of ~$50M in grants and non-dilutive funding from NIH, DARPA, DOD, and others

CytoSorbents™

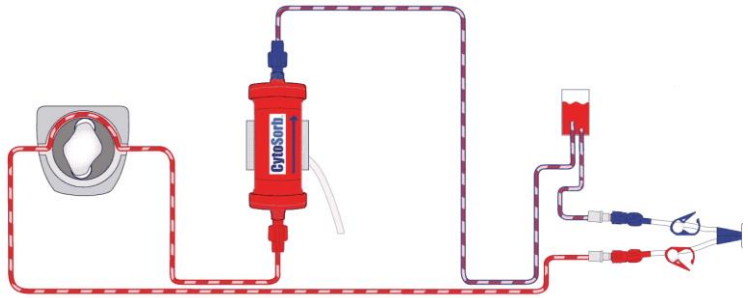
Products are “Plug and Play” Compatible

Compatible with Existing Blood Pump Infrastructure In Hospitals Today

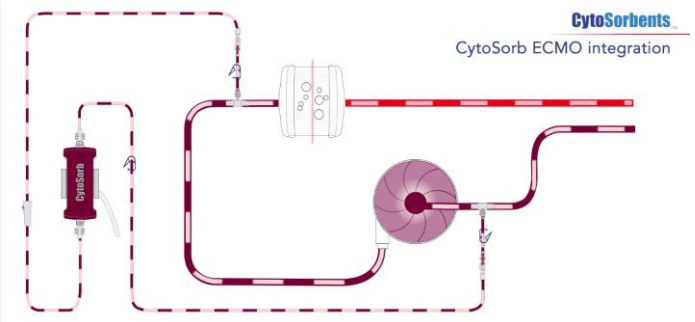
Dialysis or CRRT
(Continuous Renal Replacement Therapy)



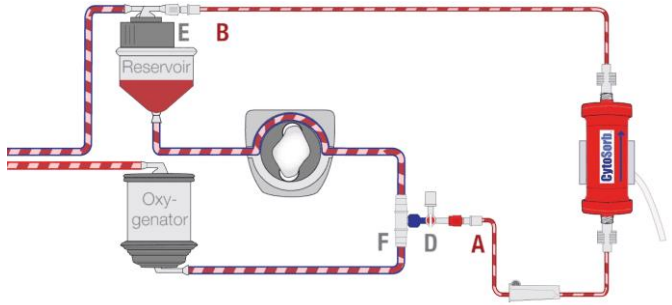
Hemoperfusion
(Standalone Treatment)



ECMO
(Extracorporeal Membrane Oxygenation)



CPB
(Cardiopulmonary Bypass)

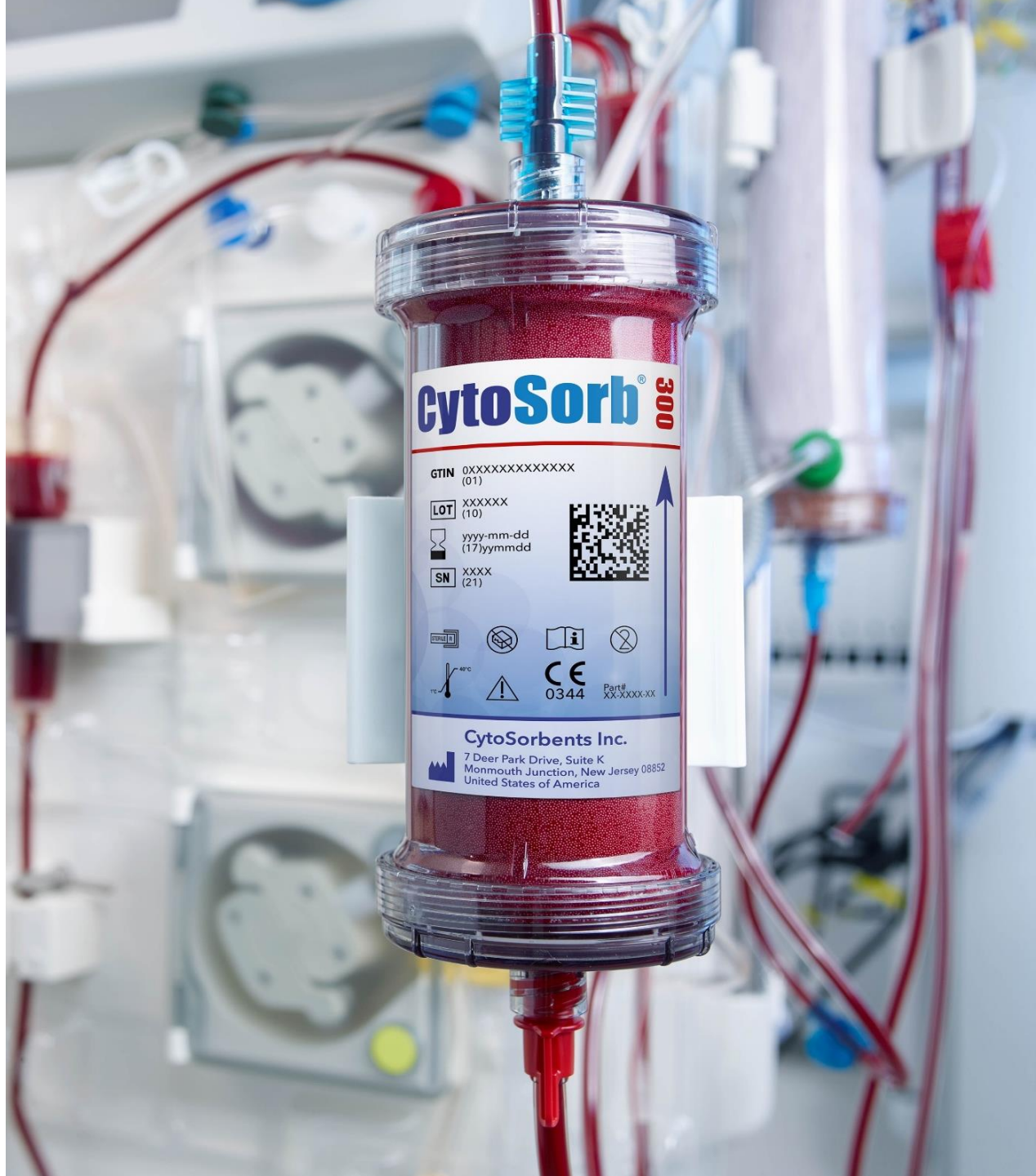


CytoSorbents™

CytoSorb

Our Core Business

CytoSorb is E.U. CE Mark approved but not yet cleared or approved in the U.S./Canada



CytoSorb is Expanding the Dimension of Blood Purification

CytoSorb is a powerful blood purification technology CE-mark approved in the E.U. to reduce cytokines, bilirubin, myoglobin, and blood thinners like ticagrelor & rivaroxaban. It can remove many substances that dialysis cannot.

CytoSorb is designed to work like the liver

Large Molecules and
Fat soluble substances

Cytokines
Inflammatory mediators
Bacterial toxins
Liver toxins
Proteins and peptides

Dialysis is designed to work like the kidney

Small Molecules and
Water soluble substances

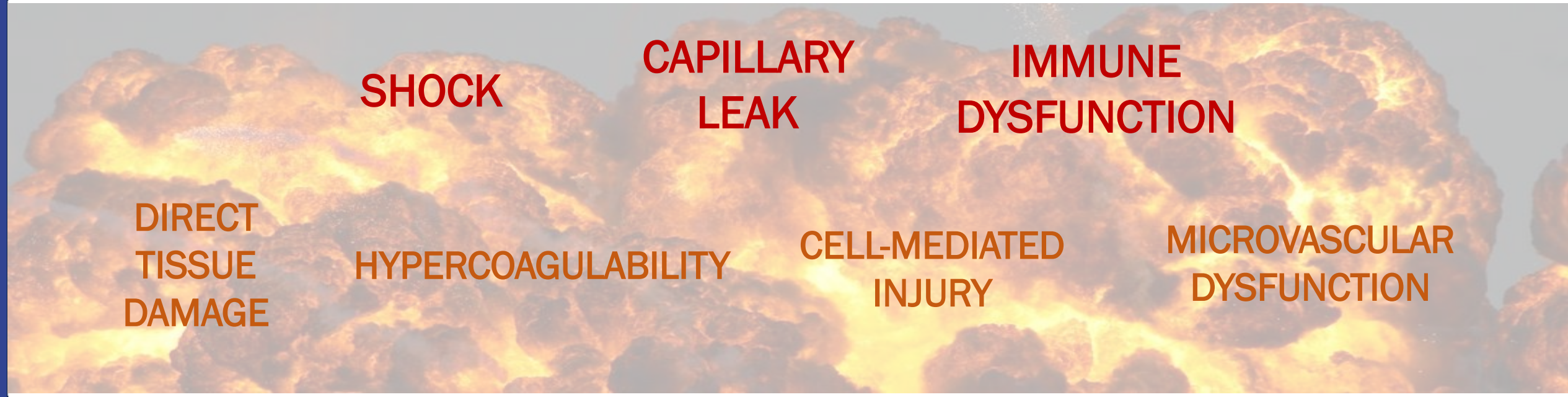
Urea, Ammonia
Electrolytes
Water
Water-soluble drugs

CytoSorb has 7 football fields of surface area to bind toxins versus
¾ of a ping pong table for a dialyzer

CytoSorbents™

Uncontrolled Massive Inflammation - the Heart of Critical Illness

- Acute inflammation is the body's mechanism to fight injury and infection
- However, severe inflammation, driven by cytokine storm, can cause a chain reaction of problems that can end in organ failure and death



- Severe inflammation is the common thread amongst most critical illnesses and impacts up to 60% of patients in the ICU. Is directly correlated to increased severity of illness, organ failure, and mortality

CytoSorb removes cytokines and other inflammatory toxins that fuel the fire of this deadly inflammation

CytoSorbents™

Targets Deadly Conditions That Afflict Millions of People

Critical Care

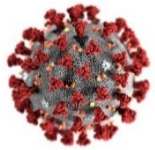
Removes the "fuel to the fire" of massive uncontrolled inflammation that is often associated with organ failure and death

Sepsis

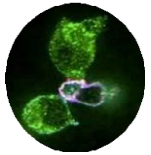
Surgical Complications

Influenza

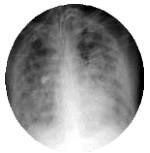
Burn Injury



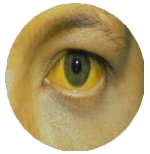
COVID-19



Cytokine Release Syndrome



Lung Injury



Liver Failure

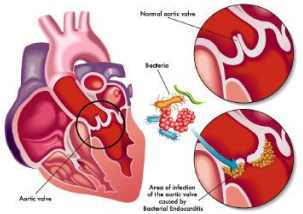
Trauma

Pancreatitis

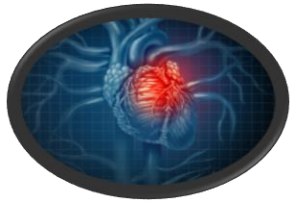
Cardiothoracic Surgery

Reduces inflammation and blood thinners, targeting reduction in complications of cardiac surgery like sepsis, bleeding, shock, and others

Life-threatening bleeding due to anti-thrombotic "blood thinners"



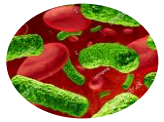
Infective Endocarditis



High Risk Procedures

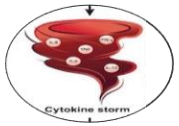
CytoSorbents™

CytoSorb Has Much Larger ICU Opportunity than Dialysis

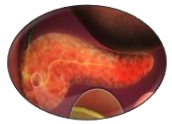


Sepsis, Septic Shock, Other Shock

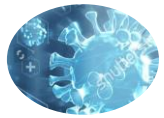
Liver failure



Cytokine storm/ Cytokine release syndrome



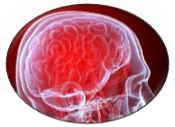
Pancreatitis



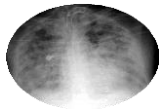
Infectious diseases (flu, COVID-19, other)

Burn injury

Post-surgical complications Organ transplant

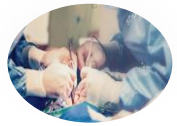


Neuroinflammation



Acute Respiratory Distress Syndrome (ARDS)

Trauma, Rhabdomyolysis

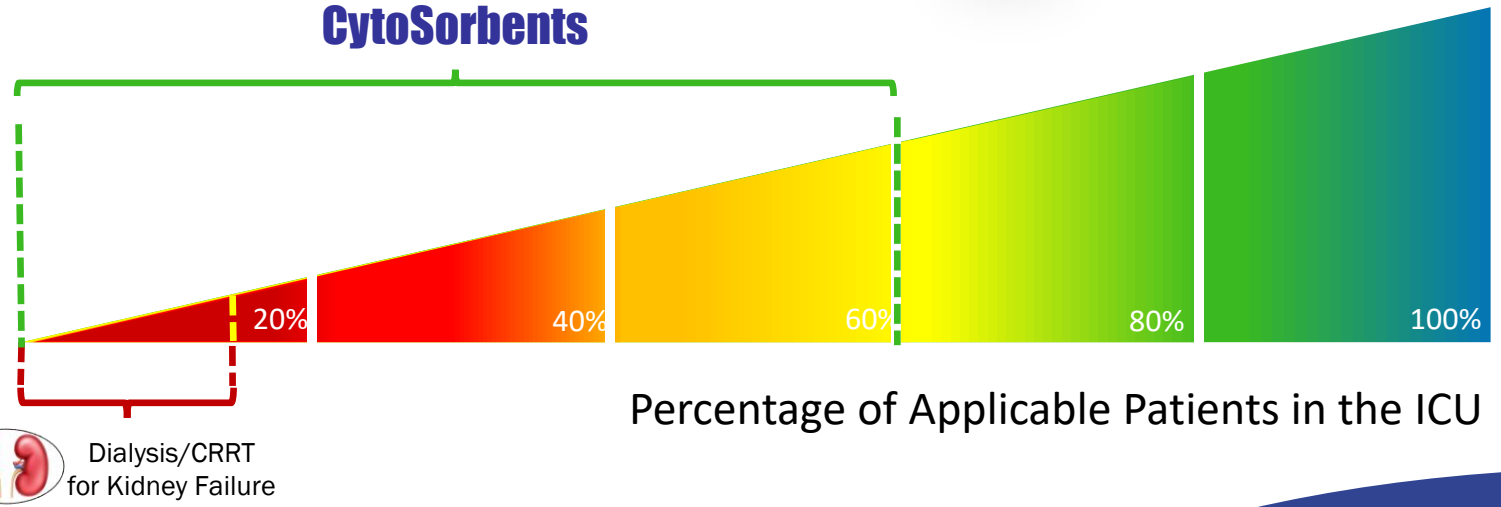


High risk surgical procedures, aortic surgery, Infective endocarditis

Drug overdose
Blood thinner toxicity

CytoSorb, by removing cytokines and inflammatory toxins, can be used to help reduce severe inflammation that plays a dangerous role in 40-60% of patients in the ICU.

Compare this to the only 10-15% of patients who require dialysis in the ICU that generates billions of dollars in revenue for major dialysis companies.



FRESENIUS MEDICAL CARE · Vantive · B BRAUN SHARING EXPERTISE · AsahiKASEI · NIKKISO · NIPRO · JMS

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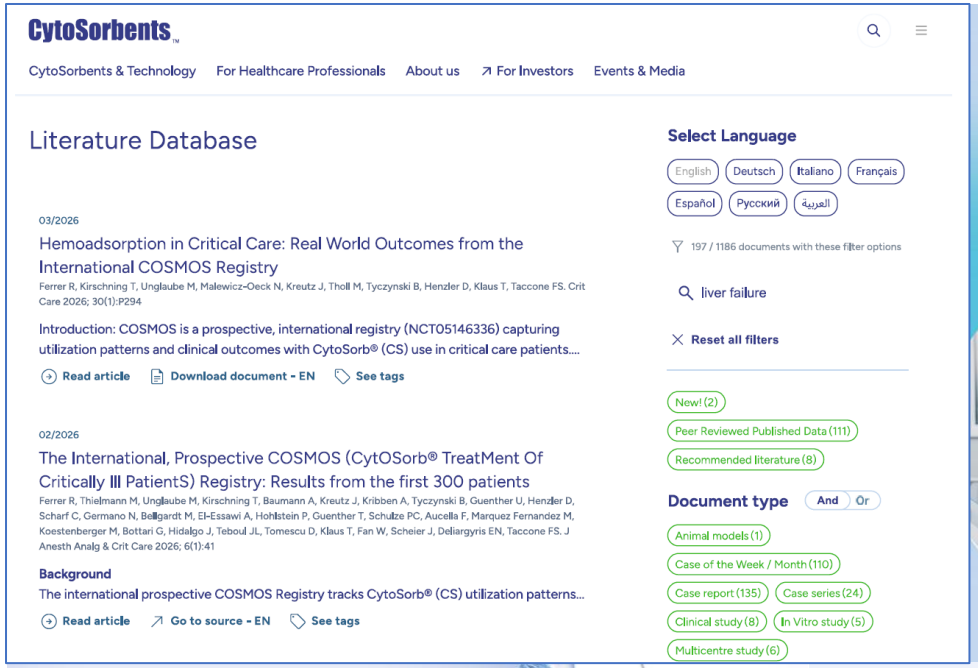
CytoSorb Supported by a Wealth of Clinical Data



CytoSorbents™

Plan to Leverage Many New Publications

- A lot of publication activity has been highlighted in recent press releases in many of our focus areas including sepsis and septic shock, acute liver failure, cardiogenic shock, rhabdomyolysis, heart transplantation, endocarditis, and blood thinner removal
    - Highlights the broad awareness and usage of CytoSorb. Corroborated by a recent published multinational survey of more than 442 physicians, where more than 75% of respondents said they use blood purification, primarily in septic shock, with broad-spectrum hemoadsorption such as CytoSorb as the most commonly-used modality (43%)
    - Our goal is to more effectively leverage this growing body of clinical evidence generated by leading clinicians worldwide to better educate users on treating the “Right Patient, at the Right Time, with the Right Dose”. We believe treatment success drives conviction, which in turn drives usage in more patients and more applications
    - We are intent on changing the way critically ill patients are treated today, and improving patient outcomes in the future

CytoSorbents™

CytoSorb is EU CE mark approved but not yet cleared or approved in the U.S./Canada

CytoSorbents is Leading a New Era in Sepsis Treatment

For more than a decade, CytoSorbents has collaborated with clinicians and scientists around the world to advance the treatment of sepsis and septic shock by complementing traditional antibiotics with the broad-spectrum capability of CytoSorb

Antibiotics treat the infection

CytoSorb treats the deadly inflammatory response by removing the “fuel to the fire” that causes a system crash

CytoSorbents™

CytoSorb is EU CE mark approved but not yet cleared or approved in the U.S./Canada

CytoSorbents™

Working to save lives together.

Turning the Tide of Sepsis and Septic Shock:

Real World Insights with CytoSorb

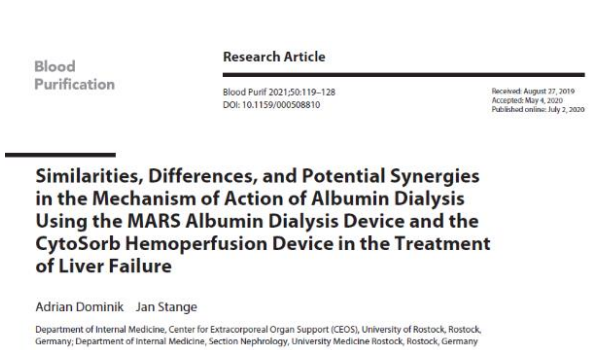
September 10, 2025

Link to webinar replay: https://cyto.news/webinar-sepsis/sep10

Extracorporeal Liver Support with CytoSorb

CytoSorb is E.U. approved to remove bilirubin in patients with acute liver disease and is being used today as an advanced liver support therapy

- Reduces bilirubin and bile acids more effectively and with greater capacity than other therapies
- Specializes in the reduction of inflammatory mediators and cytokine storm, often a major trigger or exacerbating factor in acute or acute-on-chronic liver disease
- Easy-to-use: Uses standard CRRT or HP machine, easy prime, sets up in minutes, no babysitting the machine


Blood Purification

Research Article

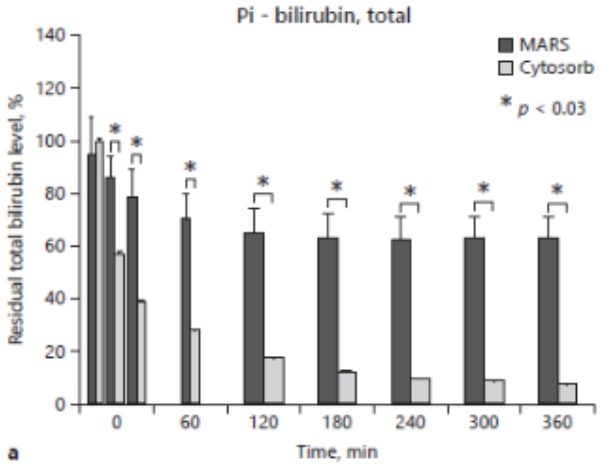
Blood Purif 2021;50:119–128
DOI: 10.1159/000508810

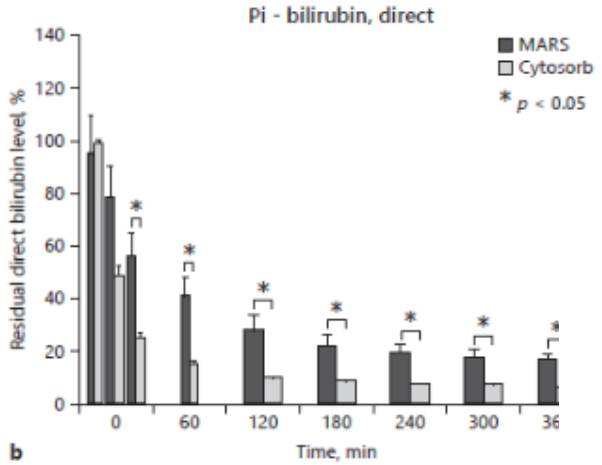
Received: August 27, 2019
Accepted: May 4, 2020
Published online: July 2, 2020

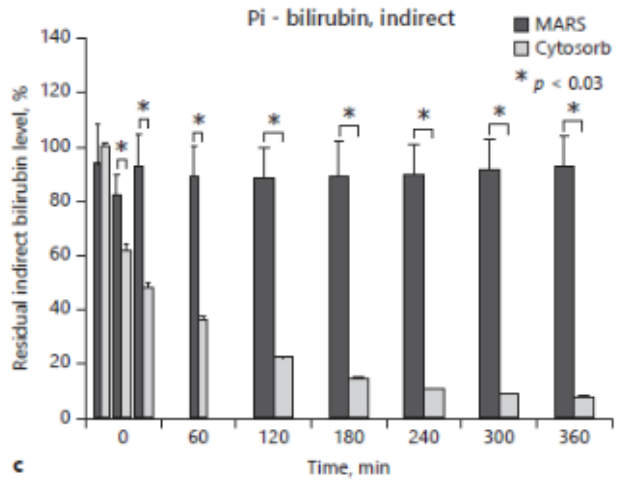
Similarities, Differences, and Potential Synergies in the Mechanism of Action of Albumin Dialysis Using the MARS Albumin Dialysis Device and the CytoSorb Hemoperfusion Device in the Treatment of Liver Failure

Adrian Dominik Jan Stange

Department of Internal Medicine, Center for Extracorporeal Organ Support (CEOS), University of Rostock, Rostock, Germany; Department of Internal Medicine, Section Nephrology, University Medicine Rostock, Rostock, Germany







CytoSorb is EU CE mark approved but not yet cleared or approved in the U.S./Canada

CytoSorb Efficiently Removes Myoglobin in Rhabdomyolysis

- Rhabdomyolysis is a serious, potentially life-threatening complication of trauma or ischemic injury (e.g. post-tourniquet syndrome, compartment syndrome, other critical illnesses such as sepsis) involving the rapid breakdown of damaged skeletal muscle, releasing toxic myoglobin into the bloodstream

- Myoglobinemia can cause acute renal failure by causing acute tubular necrosis from pigment nephropathy, obstruction from tubular cast formation, and ischemic injury from renal vasoconstriction

- CytoSorb removes myoglobin rapidly and efficiently while also removing cytokines and other inflammatory toxins associated with trauma and critical illness, with the goal of protecting the kidneys

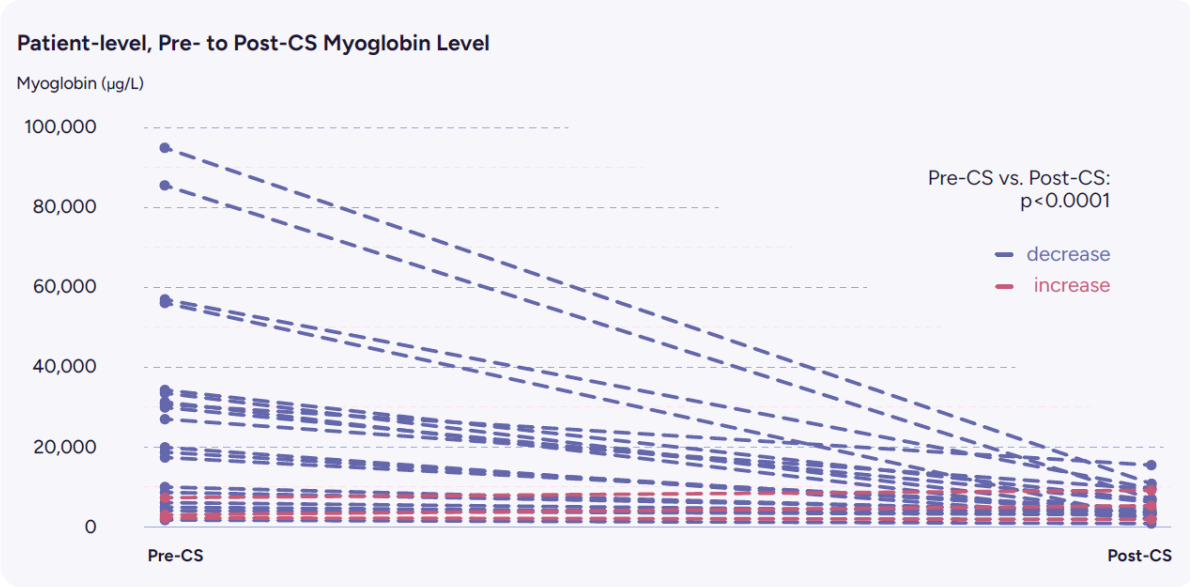


Figure 1. Patient-level myoglobin changes from pre-CS to post-CS Therapy.

Kreutz, J., et al, Poster Presentation 2026

CytoSorbents™

CytoSorb is EU CE mark approved but not yet cleared or approved in the U.S./Canada

The Opportunity of

DrugSorb™ ATR

DrugSorb-ATR is an investigational device that is not yet cleared/approved by FDA, Health Canada, or by any other Global Regulatory Agency and is not commercially available for sale

CytoSorbents™

Blood Thinners Can Cause Serious Perioperative Bleeding

- Millions of people are on blood thinners to reduce their risk of heart attack and stroke
- However, if urgent, unscheduled surgery is required, they risk serious perioperative bleeding
- For example, acute heart attack patients commonly receive “super-aspirin” blood thinners like Brilinta® (ticagrelor) to improve clinical outcomes.
- But Brilinta® (ticagrelor; AstraZeneca) can cause serious and potentially life-threatening bleeding in patients that need to undergo urgent coronary artery bypass graft (CABG) surgery
- Only drug washout for 3-5 days can reduce the risk of serious bleeding. However:
  - Frequently, surgery cannot wait - patients now risk major bleeding
  - Delaying surgery in a patient who is still having a heart attack risks complications like sudden death, and is expensive and an inefficient use of hospital resources
- DrugSorb-ATR is an FDA Breakthrough Device intended to address this pervasive and serious unmet medical need in the U.S. and Canada that puts tens of thousands of patients at risk each year and addresses a >$1B market opportunity over time

CytoSorbents™

DrugSorb-ATR is an investigational device in the U.S. and Canada and not yet cleared/approved

Brilinta® and the Use Case for DrugSorb™ ATR

DrugSorb™ ATR

The ultimate goal of DrugSorb-ATR is to allow patients to get the critical surgery they need without delay while reducing or preventing bleeding complications

CytoSorbents™

DrugSorb-ATR is an investigational device in the U.S. and Canada and not yet cleared/approved

Seeking De Novo Authorization for DrugSorb-ATR

- U.S. & Canadian randomized controlled pivotal STAR-T trial established DrugSorb-ATR as a De Novo 510(k) eligible device, DrugSorb-ATR must show that its probable benefits outweigh its probable risks to gain market clearance

- Our initial De Novo submission was reviewed by FDA last year with the resolution of most issues but was denied citing the need for additional information to support efficacy and our proposed label indication. That said, following an appeal, there were three important outcomes from our discussions with FDA

  1) FDA raised no safety concerns with DrugSorb-ATR, significantly reducing the "risk" side of the De Novo assessment. Importantly, under FDA Breakthrough Device, De Novo, and Least Burdensome guidelines, FDA has established a precedent to provide market approval for safe/low risk devices and allow post-market data collection (e.g. registry) to answer remaining questions on efficacy

  2) FDA recommended a new De Novo submission to provide new real-world evidence and analyses to further support DrugSorb-ATR's effectiveness in clinical practice that were either not available or not eligible to be submitted with the first submission due to FDA regulations

  3) FDA indicated agreement that a new De Novo review would focus on the remaining open items from the prior submission, which is expected to streamline the process.

CytoSorbents™

FDA Regulatory Update

- In late-January 2026, we held a formal Pre-Submission Meeting with FDA and continue to actively engage with FDA to clarify and confirm the requirements for a new De Novo submission

- As these interactive discussions are ongoing, we expect to provide an update on the anticipated timing of a new De Novo submission that is expected to include robust analyses of real-world evidence that FDA has not seen before, once final requirements are established

- Following submission, a regulatory decision is typically expected within a 150-day review period, although the timeline may be accelerated or extended based on the nature and scope of FDA interactions during the review process

Meanwhile, STAR-T RCT Is Now Published In Press

The Journal of Thoracic and Cardiovascular Surgery is the leading U.S. peer-reviewed cardiothoracic surgery journal

The Journal of Thoracic and Cardiovascular Surgery JTCVS

PERIOPERATIVE MANAGEMENT · Articles in Press, January 23, 2026

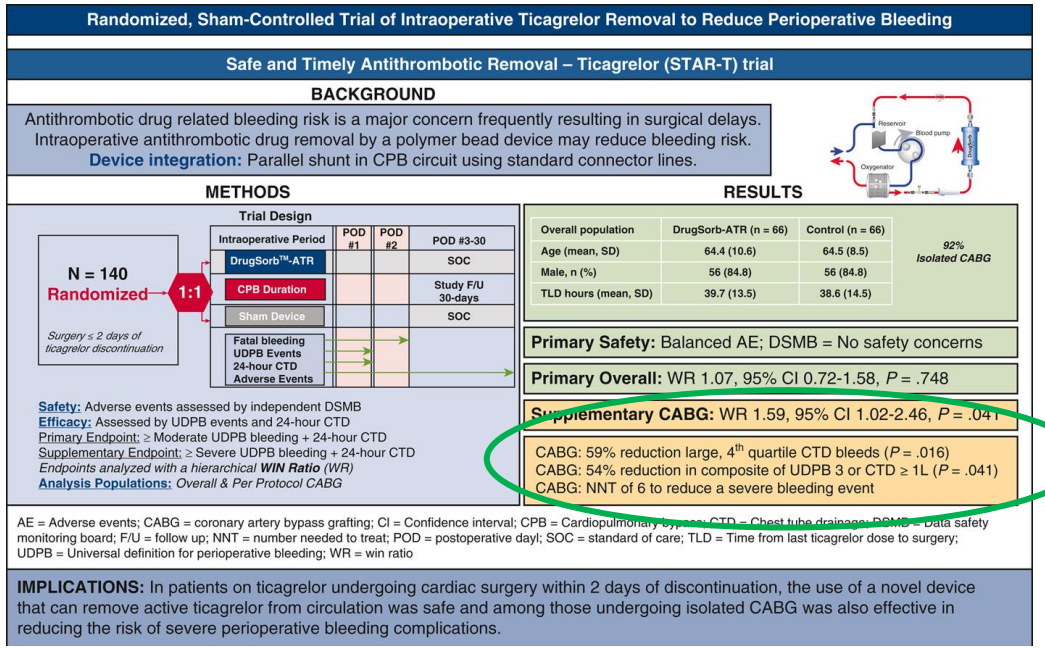
Randomized, sham-controlled trial of intraoperative ticagrelor removal to reduce perioperative bleeding

Michael J. Mack, MD [a] · Richard Whitlock, MD [b] · Michael W.A. Chu, MD [c] · ... · Efthymios N. Deliargyris, MD [q] · Charles Michael Gibson, MD [r,s] on behalf of the Safe and Timely Antithrombotic Removal-Ticagrelor (STAR-T) Investigators ... Show more

Affiliations & Notes · Article Info · Linked Articles (1)

Conclusions

Intraoperative use of DrugSorb-ATR is safe in patients operated within 2 days of ticagrelor discontinuation. Although the primary end point was not met in the overall population, there were significant reductions in severe bleeding events in the prespecified CABG population.



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DrugSorb-ATR is an investigational device in the U.S. and Canada and not yet cleared/approved

As Real World Evidence Builds

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Early CABG with intraoperative hemoadsorption in patients on ticagrelor: Real-world data from the international Safe and Timely Antithrombotic Removal (STAR) registry

Robert F. Storey [a,b,*,1], Kambiz Hassan [c,1], Anna L. Meyer [d,1], Thomas Eberle [e,1], Nikolaas deNeve [f,1], Matthias Thielmann [g,1], Martin H. Bernardi [h,1], Nandor Marczin [i,j], Ulf Guenther [k,1], Bernd Panholzer [l,1], Heinrich Maechler [m,1], Steven Hunter [n,1], Marijana Matejic-Spasic [o,1], Daniel Wendt [o,p,1], Efthymios N. Deliargyris [q,1], Michael Schmoeckel [r,1]

5. Conclusion

In conclusion, this interim report of the ongoing STAR registry suggests that intraoperative hemoadsorption in patients on ticagrelor undergoing isolated CABG before completing the recommended 3-day washout is simple, safe and may mitigate the expected high risk of serious bleeding complications. This novel intervention has the potential to improve on the current standard of care by allowing timely surgery without a high risk of perioperative bleeding.

Schmoeckel *et al. Journal of Cardiothoracic Surgery* (2025) 20:74
https://doi.org/10.1186/s13019-024-03326-1

Journal of Cardiothoracic Surgery

RESEARCH Open Access

Direct-acting oral anticoagulant removal by intraoperative hemoadsorption in CABG and/or single valve surgery: interim analysis of the International Safe and Timely Antithrombotic Removal (STAR) registry

Michael Schmoeckel[1,15*], Matthias Thielmann[2], Keti Vitanova[3], Thomas Eberle[4], Nandor Marczin[5], Kambiz Hassan[6], Andreas Liebold[7], Sandra Lindstedt[8], Georg Mächler[9], Marijana Matejic-Spasic[10], Daniel Wendt[10,11], Efthymios N. Deliargyris[12] and Robert F. Storey[13,14]

Results A total of 62 patients were included from 7 institutions in Austria, Germany, Sweden, and the UK (mean age 69.9 ± 7.5years, 71% male). Approximately half were on apixaban and the other half was split between rivaroxaban and edoxaban with 21% of patients also on aspirin. Surgery occurred at a median time of 28.9 h since the last DOAC dose with single valve surgery accounting for 2/3 of cases. Mean CPB duration was 118.6 ± 46.4 min. Severe bleeding (UDPB ≥ 3) occurred in 4.8%, and BARC-4 bleeding occurred in 3.2% of the patients. Only one patient (1.6%) required reoperation for bleeding control. The mean 24-hour CTD was 771.3 ± 482.79mL. No device-related adverse events were reported.

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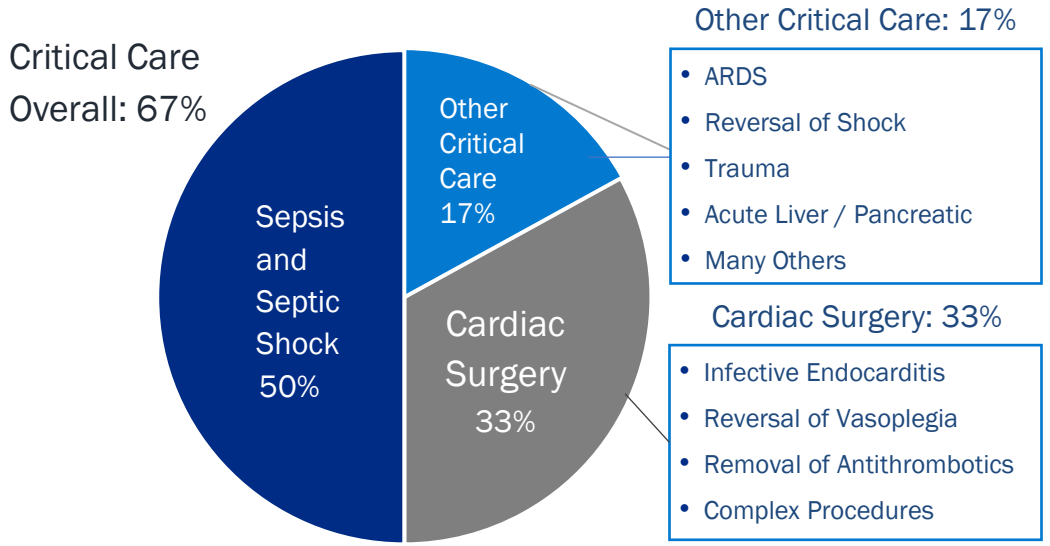
Financial Performance

CytoSorbents™

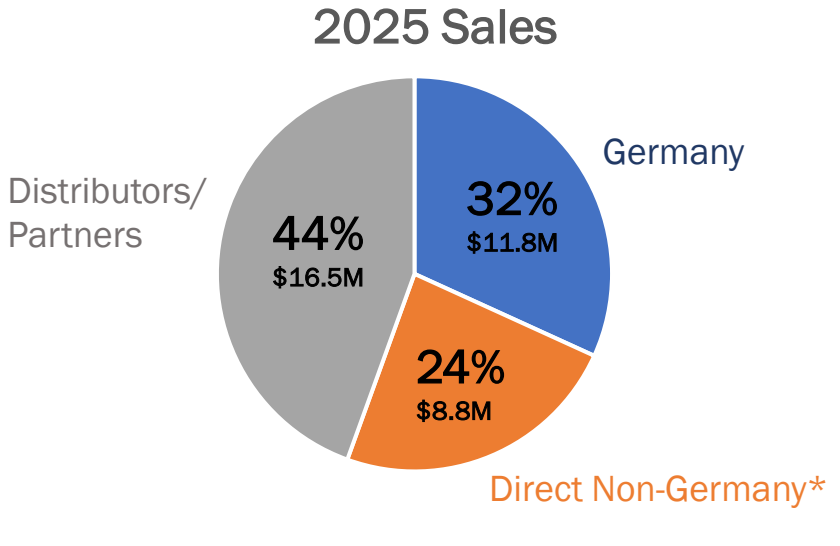
CytoSorb Commercialization Focus

- We sell CytoSorb in more than 70 countries worldwide with more than 300,000 treatments to date
- Sell Direct in Germany and 9 other countries & through Distributors and partners in the remainder

Estimated Revenue By Market

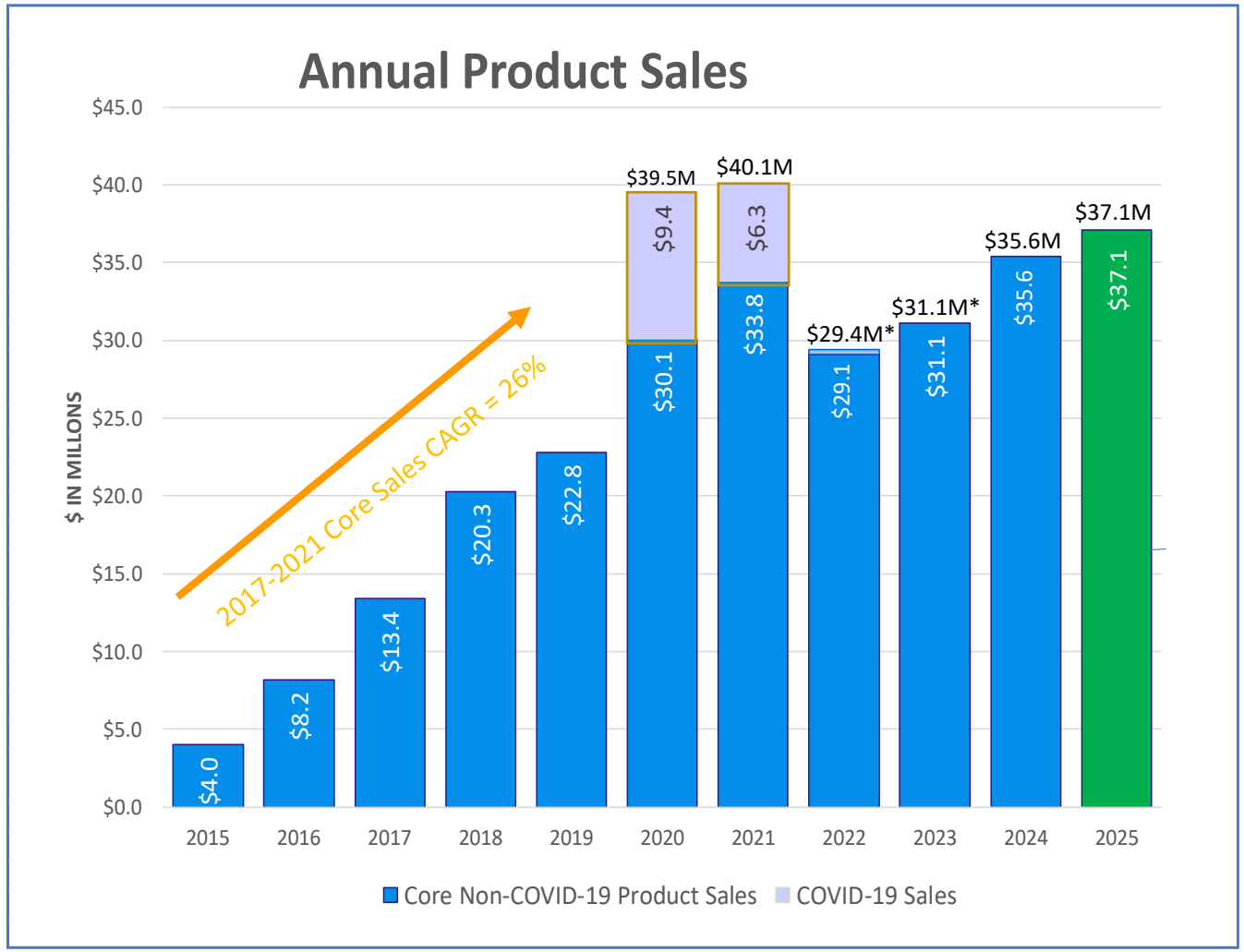


Revenue By Geography



* Austria, Switzerland, Poland, Netherlands, England, Wales, North Ireland, Scotland, Ireland

Targeting Continued Annual Revenue Growth



Revenue

- 2025 full year revenue was $37.1M, +4% vs $35.6M in 2024

Gross Margins

- Q4 2025: 74 vs. 70% in Q4 2024 and up sequentially from 70% in Q3 2025
- Full year 2025 71% vs 70% in prior year

CytoSorbents™

Driving to Cash Flow Breakeven

- Ended 2025 with $7.8 million in cash and cash equivalents
- Implemented a previously announced strategic workforce and cost reduction program in Q4 2025, with expectation of a significantly decreased cash burn in the first half of 2026.
  - *Workforce reduction of >10%*
  - *Other reductions across production and operating expenses,*
  - *Provide sufficient liquidity for key growth initiatives*
- Amended credit facility on November 13, 2025 provided an additional $2.5 million of cash and an extension of the interest-only period to December 31, 2026; and provides for an additional $2.5 million of cash and a further extension of the interest only period to June 30, 2027 with DrugSorb®-ATR FDA marketing approval
- We expect to be cash-flow breakeven in the second half of 2026

CytoSorbents™

A Clear and Compelling Value Proposition

We believe we have a sound plan to build and maximize shareholder value

- ✓ CytoSorb is an established, international core business in critical care and cardiac surgery with $37.1M in high margin product sales and an excellent “razorblade” business model with expectations for strong future growth due to:
  - Significant critical care and cardiac surgery market opportunity worldwide, targeting major unmet medical needs, with new products helping to drive usage and the value proposition
  - A wealth of clinical data that we are leveraging in the market
  - Active measures to restore Germany back to growth
- ✓ A commitment to bringing DrugSorb-ATR to the North American market with a planned De Novo submission pending completion of interactive discussions with the FDA
- ✓ Goal is to drive to cash flow breakeven in 2H 2026 and have taken significant steps with our amended credit facility and workforce and cost reduction plan to advance this target

CytoSorbents™

CytoSorbents Corporation

NASDAQ: CTSO

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