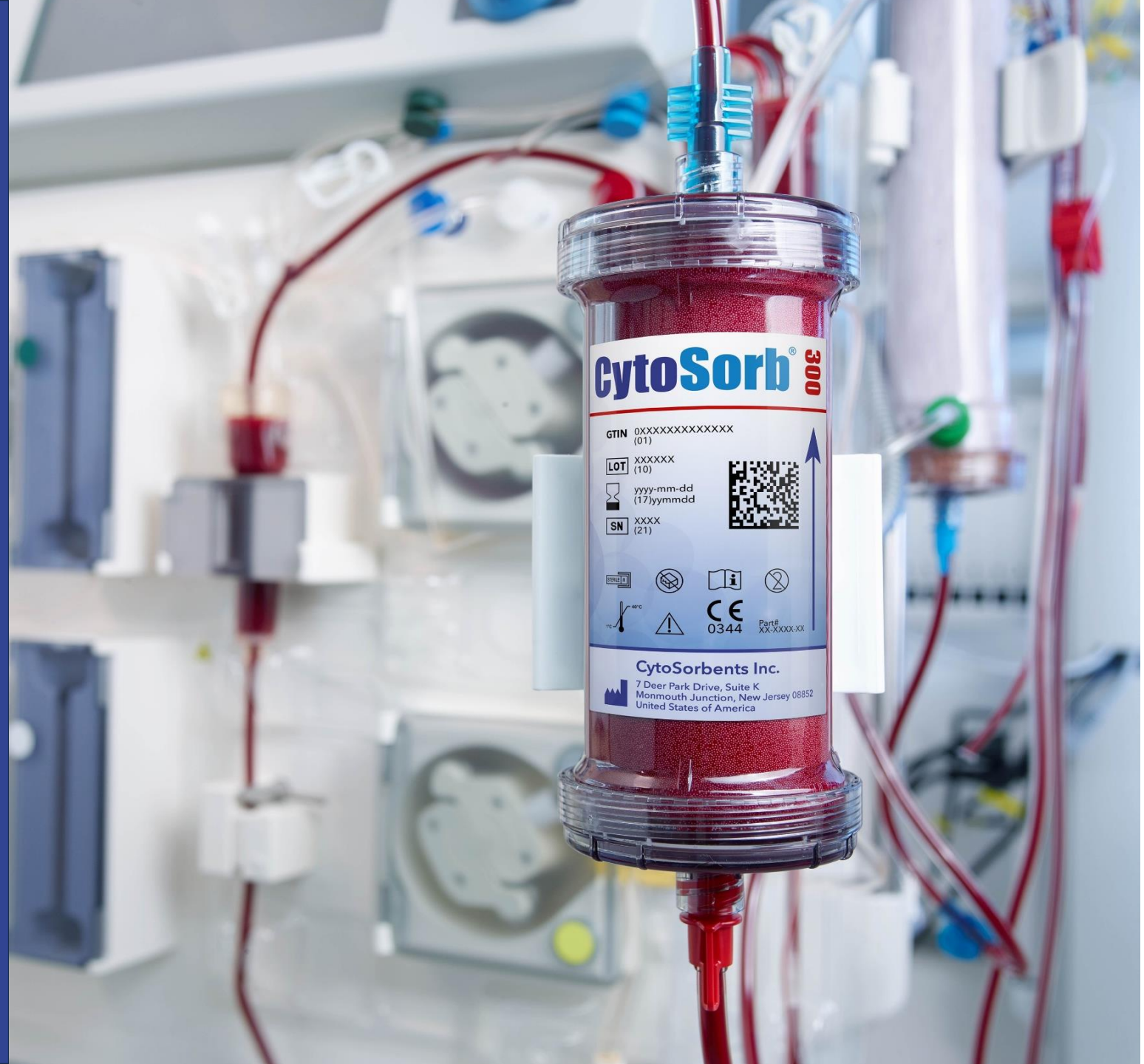


CytoSorbents™

Working to save lives **together.**

NASDAQ: CTSO

Life Sciences Forum

June 24, 2026

CytoSorbents™

Safe Harbor Statement

Statements in this presentation include forward-looking statements intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, statements about our plans, objectives, future targets and outlooks for our business, representations and contentions, and the outcome of our regulatory submissions, and are not historical facts and typically are identified by use of terms such as “may,” “should,” “could,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “continue” and similar words, although some forward-looking statements are expressed differently. You should be aware that the forward-looking statements in this presentation represent management’s current judgment and expectations, but our actual results, events and performance could differ materially from those in the forward-looking statements. Factors which could cause or contribute to such differences include, but are not limited to, our restructuring of our direct sales team and strategy in Germany, the impact of geopolitical events including the recent war in Iran, our ability to successfully obtain U.S. FDA and Health Canada regulatory approval and marketing authorization, our ability to complete our strategic workforce and cost reduction plan to reduce costs, optimize operations, and achieve operating cash-flow break-even in the second half of 2026, our ability to appropriately finance the Company, including our ability to meet our financial obligations and comply with the covenants under our existing debt agreement, and the risks discussed in our Annual Report on Form 10-K, filed with the SEC on March 30, 2026, as updated by the risks reported in our Quarterly Reports on Form 10-Q, and in the press releases and other communications to shareholders issued by us from time to time which attempt to advise interested parties of the risks and factors which may affect our business. We caution you not to place undue reliance upon any such forward-looking statements. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, other than as required under the Federal securities laws.

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

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 Overview

- U.S.-based medical device company (Nasdaq: CTSO) specializing in blood purification to treat life-threatening conditions in the intensive care unit and cardiac surgery with its proprietary, biocompatible, porous polymer bead technology

- CytoSorb, the first and most studied CE-mark approved extracorporeal cytokine adsorber in the European Union, is manufactured by CytoSorbents in the U.S. and distributed in more than 70 countries worldwide, **with 300,000+ human treatments cumulatively to date.** Approved for:
  - Cytokine Removal
  - Bilirubin and Myoglobin Removal
  - Ticagrelor and Rivaroxaban removal during cardiothoracic surgery

- 2025 Sales were $37.1M with 71% gross margins – High margin razorblade business model

- Strategic Partnerships with Fresenius Medical Care, B Braun, and Terumo Cardiovascular

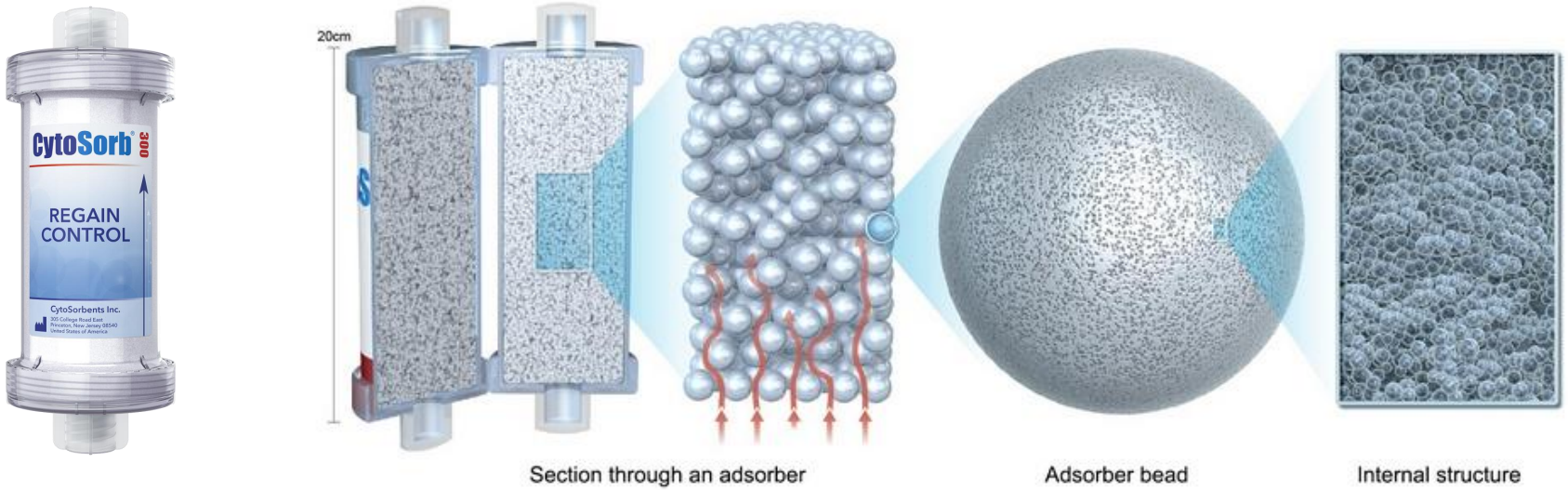
- U.S. government support for the technology with ~$50M in grants, contracts, other non-dilutive funds from NIH, NHLBI, DARPA, DHA, US Army, US Air Force, JPEO-CBD, USSOCOM, etc.

- Pursuing U.S. FDA and Health Canada approval of DrugSorb-ATR to reduce perioperative bleeding risk in patients on blood thinners during cardiac surgery

- Anticipating operating cash flow breakeven in 2H 2026 and future profitability

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

CytoSorbents™

We are an Innovation Leader in Acute Care Blood Purification

Commercially Available Products		
CytoSorb®	Sepsis | Critical care | Cardiac surgery	E.U., FDA EUA
ECOS-300CY®	Ex-vivo organ perfusion for transplant	E.U.
VETRESQ®	Veterinarian critical care	U.S.
PuriFi®	Hemoperfusion pump	E.U.
HotSwap™	Rapid device interchange system	E.U.

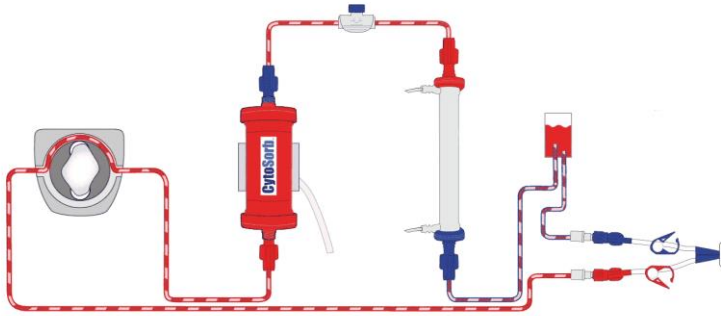
Pipeline Product	Application	Pre-Clinical	Pilot	Pivotal	Status
DrugSorb™ ATR	Removal of antithrombotic drugs	2 FDA Breakthrough Device Designations			US De Novo Submission – Late 2026/Early 2027
HemoDefend BGA	Universal Blood Products				FDA Pre-IDE feedback scheduled in July. Clinical trials expected 2027
CytoSorb-XL	Successor to CytoSorb				Pipeline
ContrastSorb	CT Imaging and interventional radiology procedures				Pipeline

CytoSorbents™

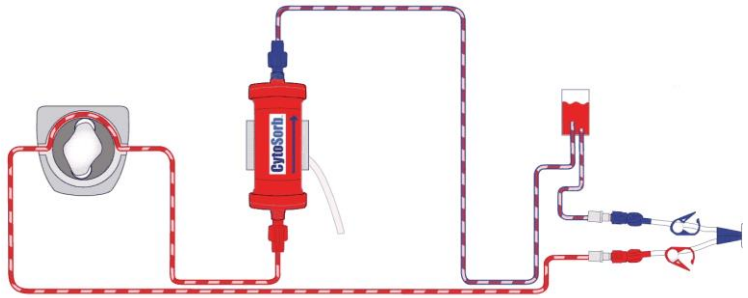
Products are “Plug and Play” Compatible

Compatible with Existing Blood Pump Infrastructure In Hospitals Today

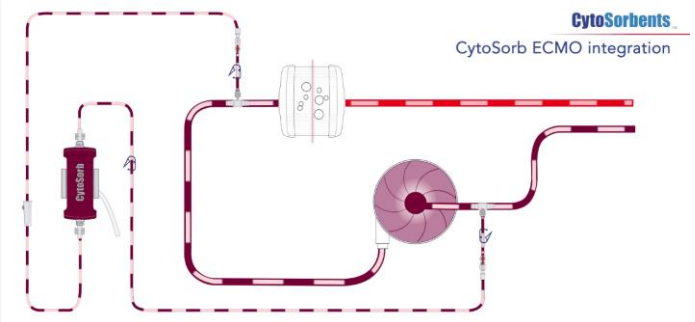
Dialysis or CRRT
(Continuous Renal Replacement Therapy)



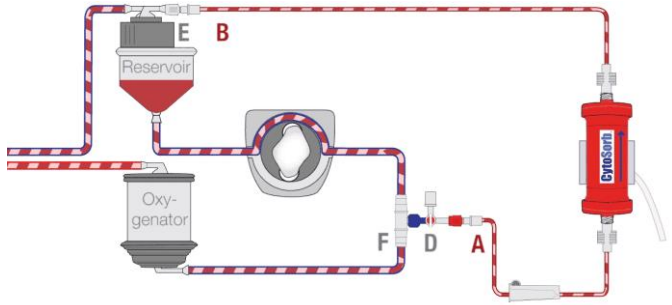
Hemoperfusion
(Standalone Treatment)



ECMO
(Extracorporeal Membrane Oxygenation)



CPB
(Cardiopulmonary Bypass)

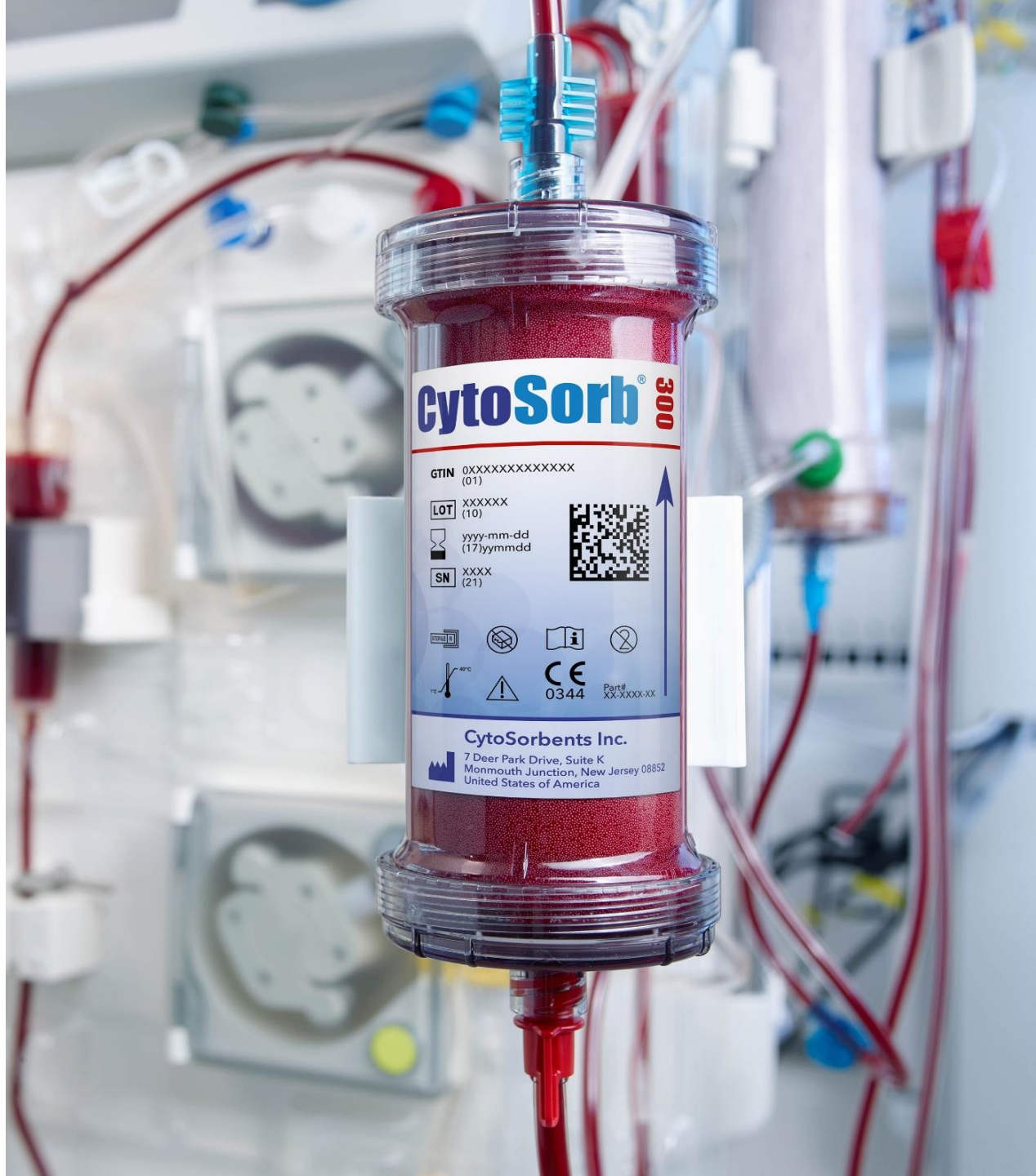


CytoSorbents™

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 removes 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

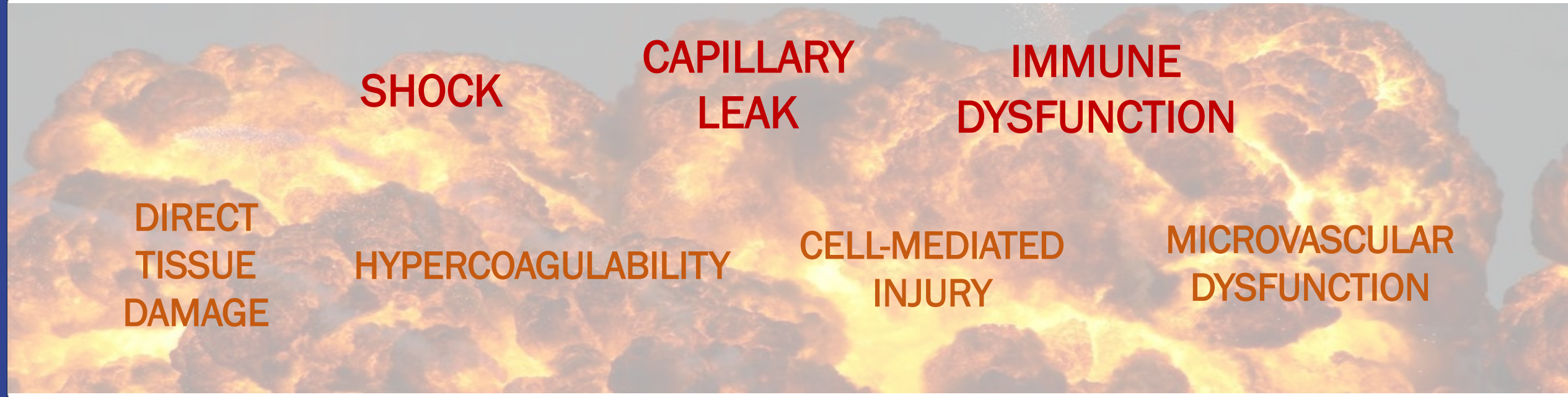
Urea, Ammonia
Electrolytes
Water
Water-soluble drugs

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

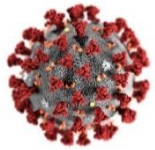
Removes the "fuel to the fire" of massive uncontrolled inflammation that is often associated with organ failure and death

Sepsis

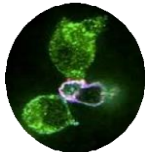
Surgical Complications

Influenza

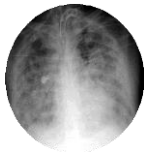
Burn Injury



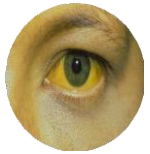
COVID-19



Cytokine Release Syndrome



Lung Injury



Liver Failure

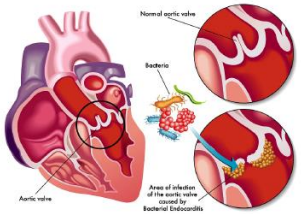
Trauma

Pancreatitis

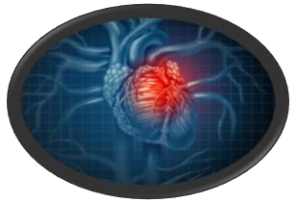
Cardiothoracic Surgery

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"



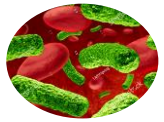
Infective Endocarditis



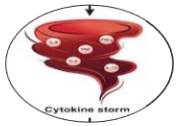
High Risk Procedures

CytoSorbents™

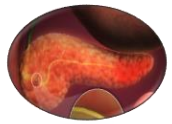
CytoSorb Has Much Larger ICU Opportunity than Dialysis

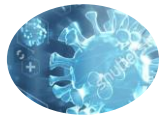

Sepsis, Septic Shock, Other Shock


Liver failure



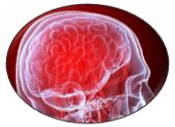
Cytokine storm/ Cytokine release syndrome

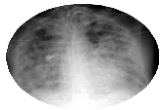

Pancreatitis


Infectious diseases (flu, COVID-19, other)

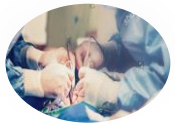

Burn injury


Post-surgical complications Organ transplant


Neuroinflammation


Acute Respiratory Distress Syndrome (ARDS)

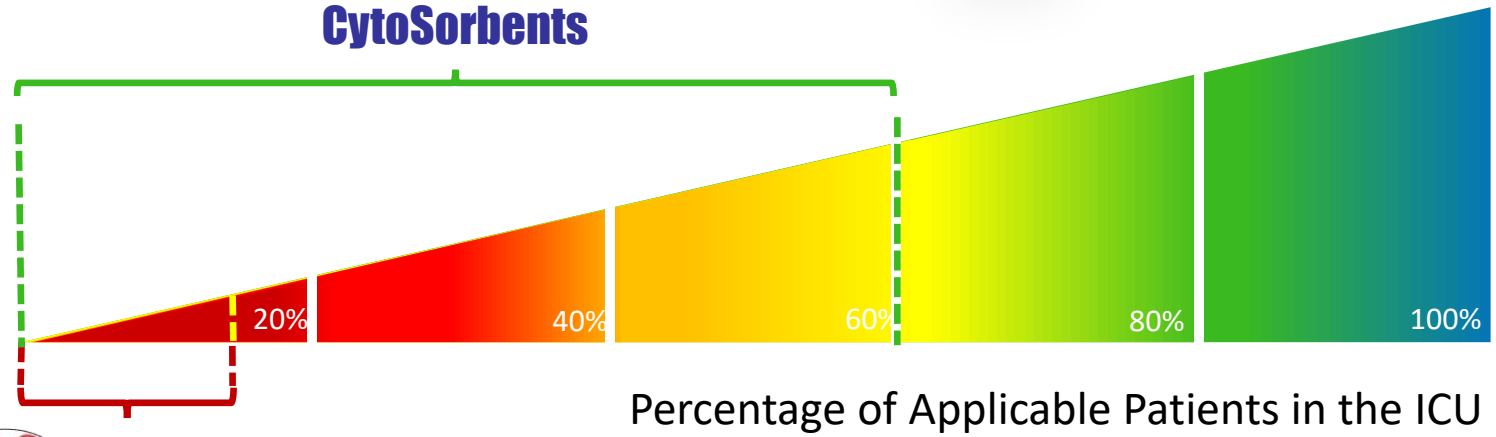

Trauma, Rhabdomyolysis


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.

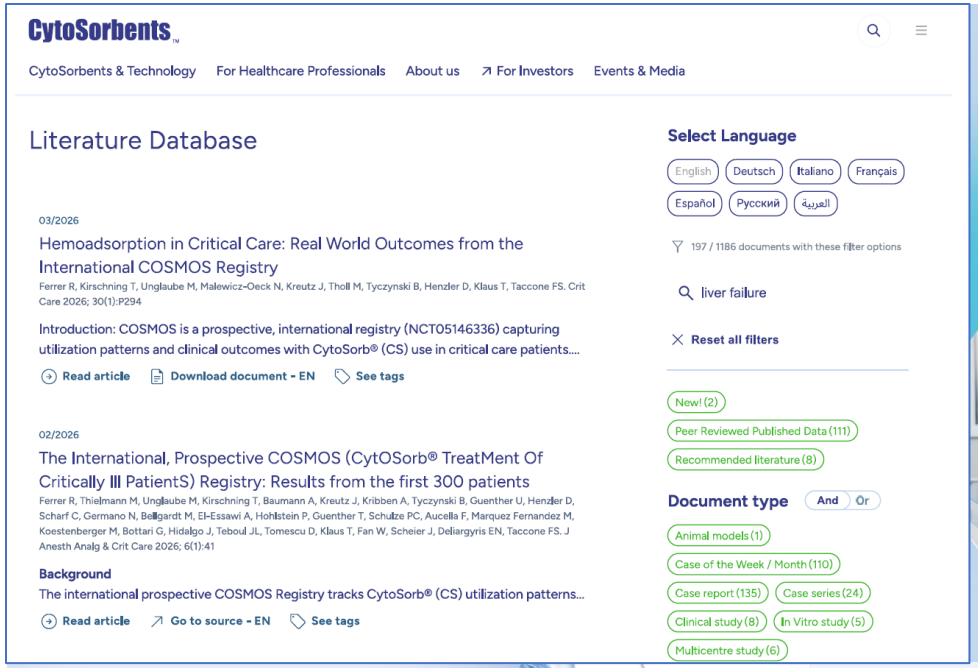
Compare this to the only 10-15% of patients who require dialysis in the ICU that generates billions of dollars in revenue for major dialysis companies.



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

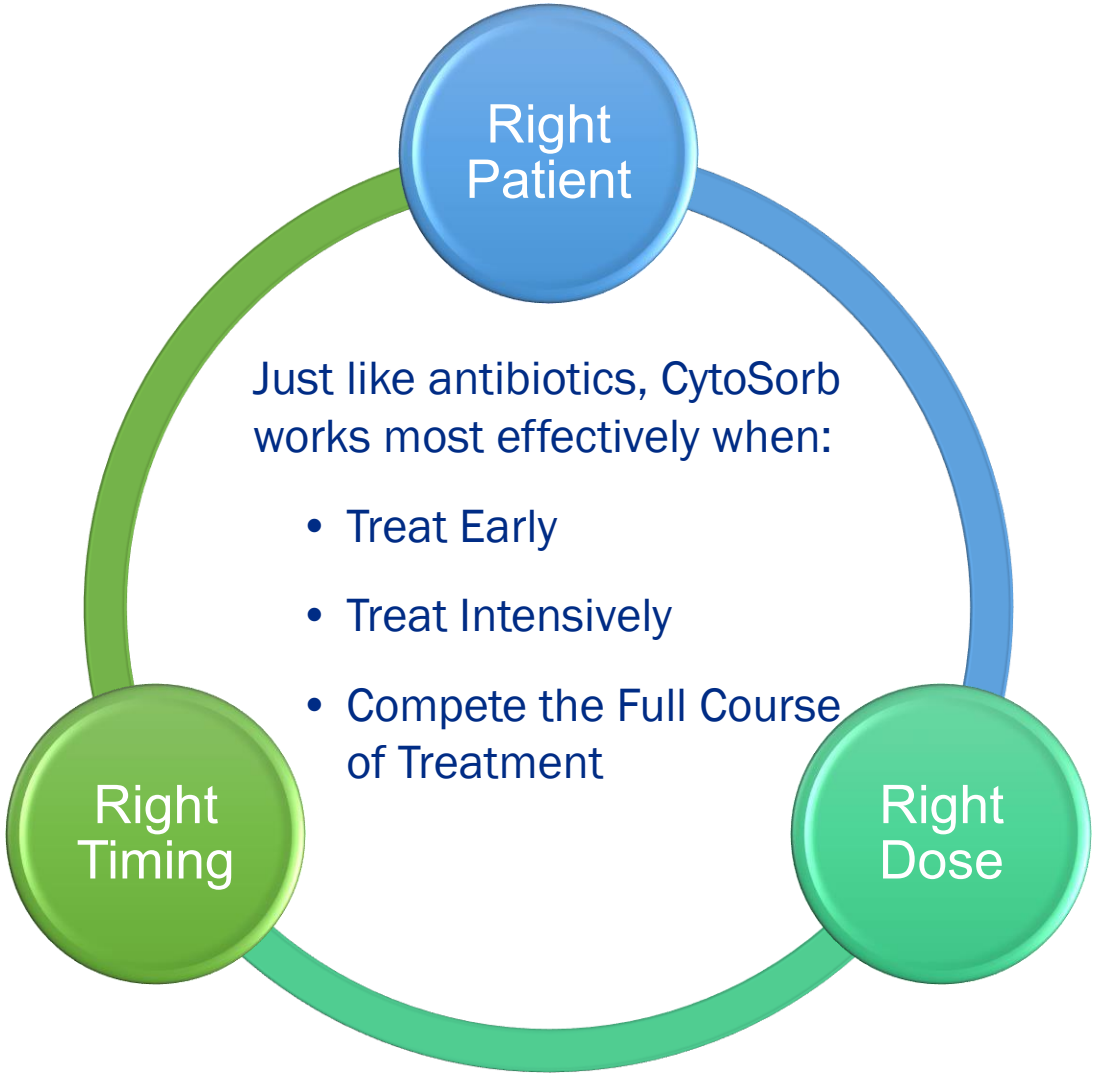
CytoSorbents™

CytoSorb Supported by a Wealth of Clinical Data



CytoSorbents™

The Key to Success: Right Patient, Right Timing, Right Dosing



CytoSorbents™

CytoSorbents is Leading a New Era in Sepsis Treatment

One in 5 deaths is related to sepsis. 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

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 and Cardiac Surgery

Tens of millions of patients globally take Direct Oral Anticoagulants (e.g, DOACs like Eliquis® and Xarelto®) and antiplatelet agents (e.g, Brilinta®) either chronically or acutely to reduce risk of heart attack, stroke, and other serious thrombotic complications

Each year, an estimated 1-2% will require emergent or urgent surgery, particularly cardiac surgery

- ~5-10% of emergency cardiac surgeries involve patients on chronic DOAC therapy
- ~5-10% of heart attack patients on antiplatelet agents are not eligible for a stent and require CABG surgery

Blood thinners significantly increase the risk of perioperative bleeding in cardiac surgery. Delay of surgery for multiple days for drug clearance is typically recommended to reduce this risk

There is a major unmet need in patients awaiting urgent cardiothoracic surgery

- Many patients cannot wait due to the need for emergency surgery
- Waiting for drug washout may increase the risk of poor patient outcomes (e.g. thrombotic events, clinical instability, and sudden death) and wastes valuable hospital resources

DrugSorb-ATR is an FDA Breakthrough Designated Device with the potential to address this pervasive and serious unmet medical need

DrugSorb-ATR is an investigational medical device in the U.S. and Canada and is not yet cleared or approved.
Brilinta® , Eliquis®, and Xarelto® are trademarks of AstraZeneca, Bristol-Myers Squibb, and Bayer, respectively

CytoSorbents™

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

The Pivotal STAR-T RCT Paper Is Now Published

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] Bradley Taylor, MD,[d] Elias A. Zias, MD,[e] David Liu, MD,[f] Adam N. Protos, MD,[g] Chris Rokkas, MD,[h] Marc Pelletier, MD,[i] Chun W. Choi, MD,[j] Tarit Saha, MD,[k] Frank W. Sellke, MD,[l] David J. Schneider, MD,[m] Vinod H. Thourani, MD,[n] James Douketis, MD,[o] Cyril David Mazer, MD,[p] Weihong Fan, MS,[q] Efthymios N. Deliargyris, MD,[q] and Charles Michael Gibson, MD,[r,s] on behalf of the Safe and Timely Antithrombotic Removal-Ticagrelor (STAR-T) Investigators

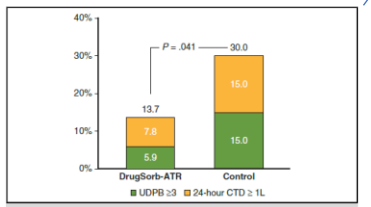
ABSTRACT

Objective: Patients on ticagrelor who are undergoing cardiac surgery before completing guideline-recommended washout are at high risk for severe bleeding. This study evaluated whether a novel drug removal device reduces bleeding in patients operated within 2 days from ticagrelor discontinuation.

Methods: Eligible patients were randomized 1:1 to intraoperative DrugSorb-ATR or sham control. Primary safety end point was adverse events at 30 days. Efficacy was assessed by composite end points comprising bleeding events using Universal Definition of Perioperative Bleeding (UDPB) and 24-hour chest tube drainage (CTD) in the overall and isolated coronary artery bypass grafting (CABG) populations with a hierarchical win ratio (WR) method.

Results: In total, 140 patients were randomized; 132 had surgery and received a study device; and 92% were isolated CABG. Mean age was 65 ± 5 years, and 15% were female. The primary safety end point was met, with similar adverse events reported between groups. The primary efficacy end point was not met in the overall or CABG populations (Win ratio [WR], 1.07; 95% CI, 0.72-1.58; $P = .748$ and WR, 1.33; 95% CI, 0.86-2.04; $P = .202$ respectively). The supplementary efficacy end point was met in the CABG population (WR, 1.59; 95% CI, 1.02-2.46, $P = .041$) with significant reductions also shown in large CTD bleeding events ($P = .016$) and major bleeding, a composite of severe bleeding events or 24-hour CTD ≥1 L ($P = .041$). The number needed to treat to prevent a major bleed was 6.

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. (J Thorac Cardiovasc Surg 2026;■:1-10)



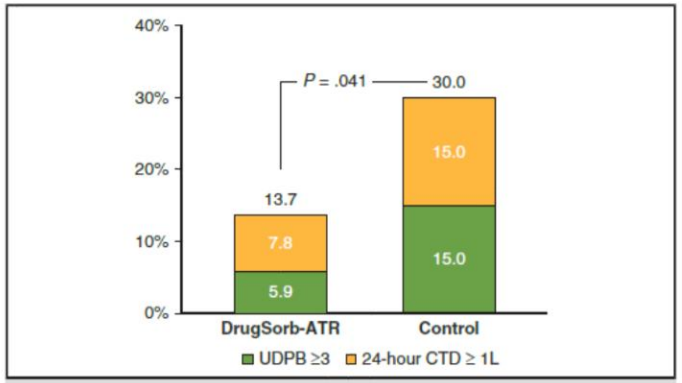
Major bleeding, a composite of severe bleeding events (UDPB ≥3) or 24-hour CTD ≥ 1 L.

CENTRAL MESSAGE

Intraoperative DrugSorb-ATR use for ticagrelor removal is safe and can reduce the severity of bleeding after isolated CABG in patients operated within 2 days of drug discontinuation.

PERSPECTIVE

Antithrombotic drug–related perioperative bleeding risk is a major clinical issue frequently resulting in surgical delays. The present study showed that the intraoperative use of a device that can remove ticagrelor from blood was safe and reduced severe bleeding events among patients undergoing CABG within 2 days of ticagrelor discontinuation.



Major bleeding, a composite of severe bleeding events (UDPB ≥3) or 24-hour CTD ≥ 1 L.

CENTRAL MESSAGE

Intraoperative DrugSorb-ATR use for ticagrelor removal is safe and can reduce the severity of bleeding after isolated CABG in patients operated within 2 days of drug discontinuation.

 Mack, M, et al. J Thorac Cardiovasc Surg. 2026. Online ahead of print

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

FDA Regulatory Update for DrugSorb-ATR and Brilinta®

- FDA Appeal Decision of the original De Novo submission (August 20, 2025)
  - Upheld the prior denial decision based on missing primary endpoint of STAR-T pivotal trial, and required additional information primarily based on real-world evidence (RWE) and clinical outcomes to support the Company's desired label claim that would require a new De Novo submission
  - However, there were two important positive outcomes of the appeal decision
    - FDA did not identify any issues with with device safety – key to the benefit-to-risk ratio that FDA uses to judge De Novo devices
    - Based on our understanding, FDA agreed to a focused review of a new De Novo submission on the remaining open items

- Based on additional discussions this year, FDA has requested that additional mechanistic data be included alongside RWE within the new De Novo submission, likely generated from a small experimental study, **not** a new clinical trial with clinical endpoints.

- We now have a pre-submission meeting scheduled with FDA in August to discuss options to generate these additional mechanistic data. Once the plan is agreed upon, we will expedite the work to obtain these data and file a new De Novo application submission as soon as possible (late 2026 or early 2027)

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

CytoSorbents™

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

Potential Second Shot on Goal: DOAC Removal

- We have previously discussed our intention to pursue an expanded label for DrugSorb-ATR to include removal of DOACs following an initial marketing approval. Meanwhile, real-world evidence and publications continue to grow for this indication

- We have now scheduled a separate pre-submission meeting with FDA in August to review the data currently available for the DOAC indication and determine what, if any, additional information may be required to support a parallel De Novo submission for DOAC removal

- This strategy is consistent with our second FDA Breakthrough Device Designation for DrugSorb-ATR to remove DOACs during cardiac surgery

- Tens of millions of patients are on chronic or lifelong DOAC therapy for diseases such as atrial fibrillation, DVT, pulmonary embolism, and peripheral vascular disease. Eliquis® (#7 pharmaceutical in the world with $14.4B in global 2025 sales) and Xarelto® ($5.1B global 2025 sales) are the market leaders

- Meanwhile real-world evidence using our technology to reduce the perioperative bleeding risk in cardiac surgery due to Brilinta and DOACs continues to build globally

Eliquis® and Xarelto® are trademarks of Bristol-Myers Squibb and Bayer, respectively

CytoSorbents™

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

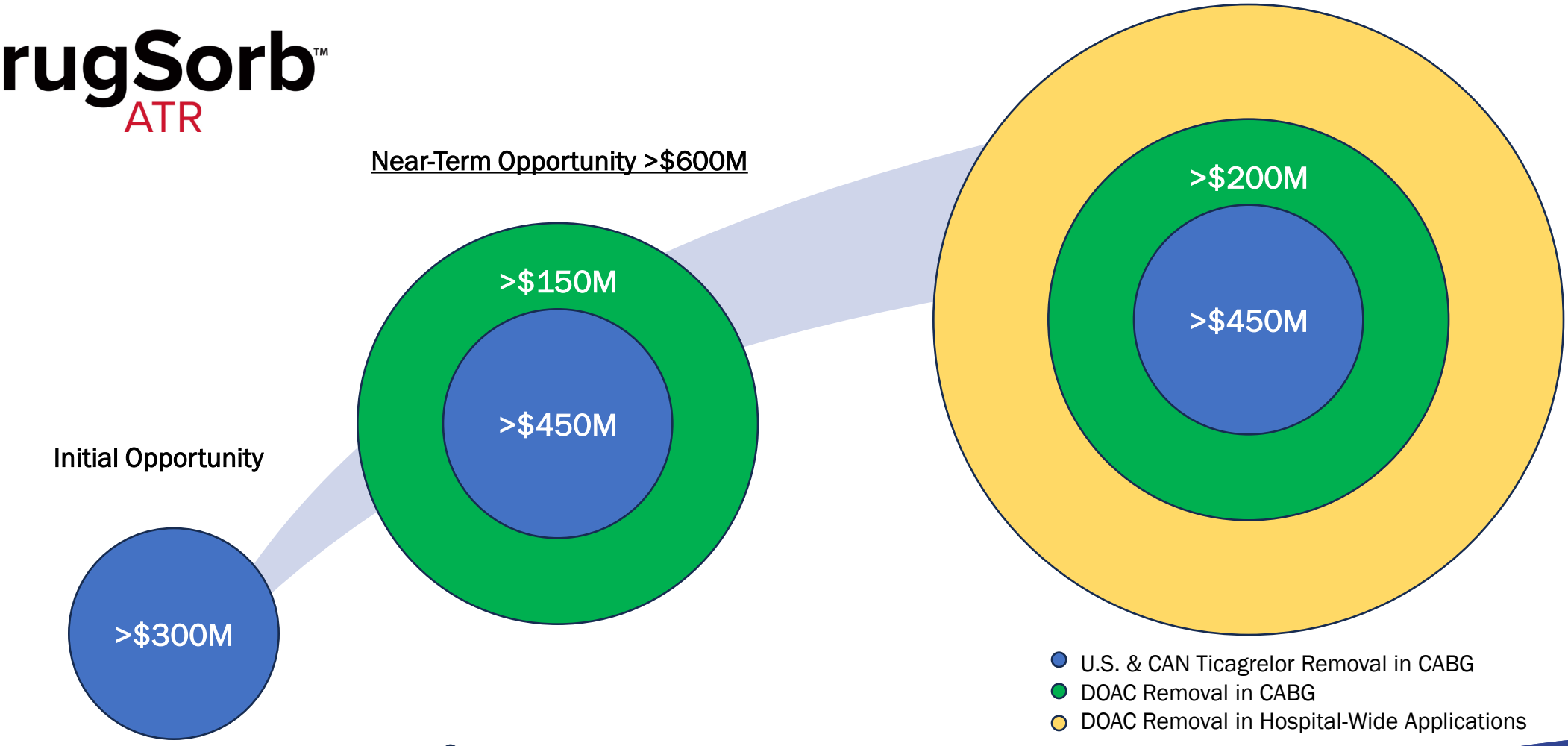
Large Total Addressable Market

DrugSorb™ ATR

Initial Opportunity

Near-Term Opportunity >$600M

Future Opportunity
$1-2 Billion



- U.S. & CAN Ticagrelor Removal in CABG

- Expansion of U.S. & CAN Ticagrelor Removal in CABG
- DOAC Removal in CABG

- U.S. & CAN Ticagrelor Removal in CABG
- DOAC Removal in CABG
- DOAC Removal in Hospital-Wide Applications

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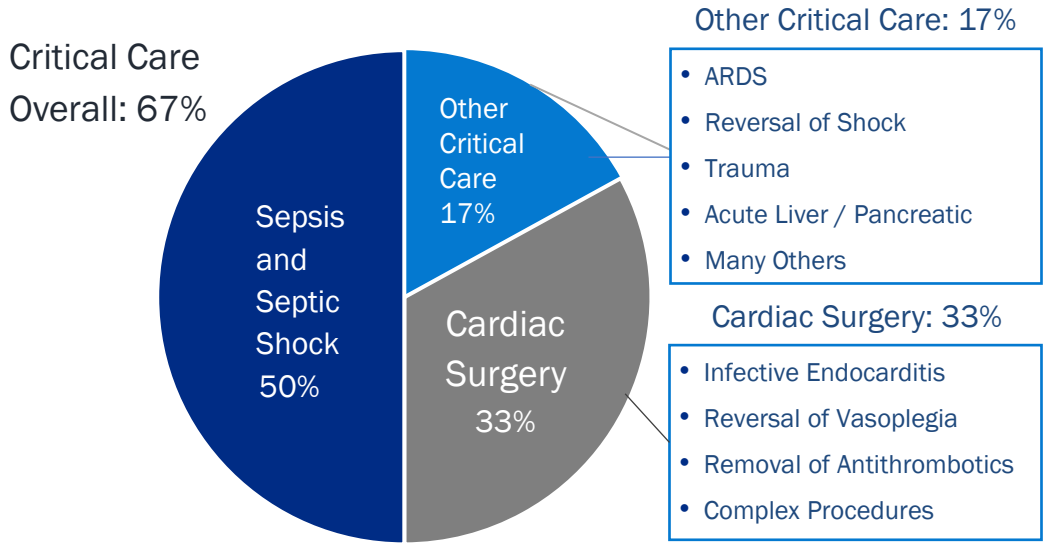
Financial Performance

CytoSorbents™

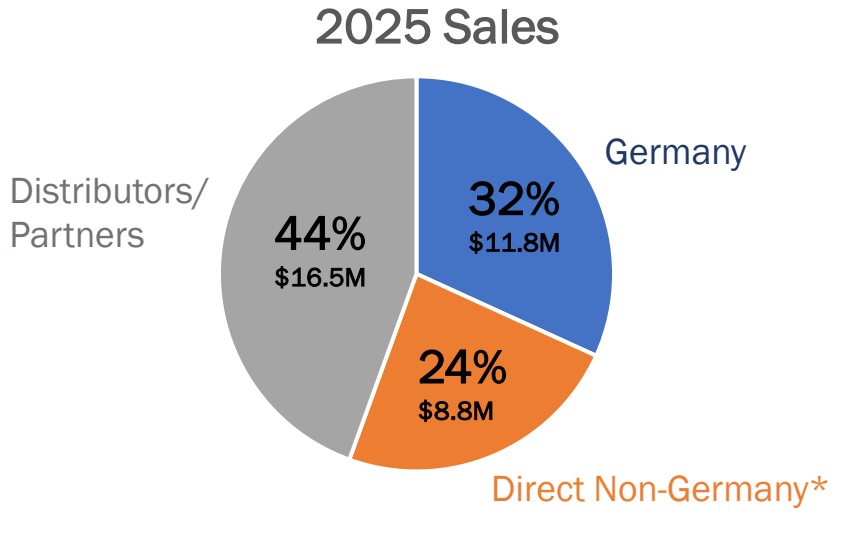
CytoSorb Commercialization Focus

- 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

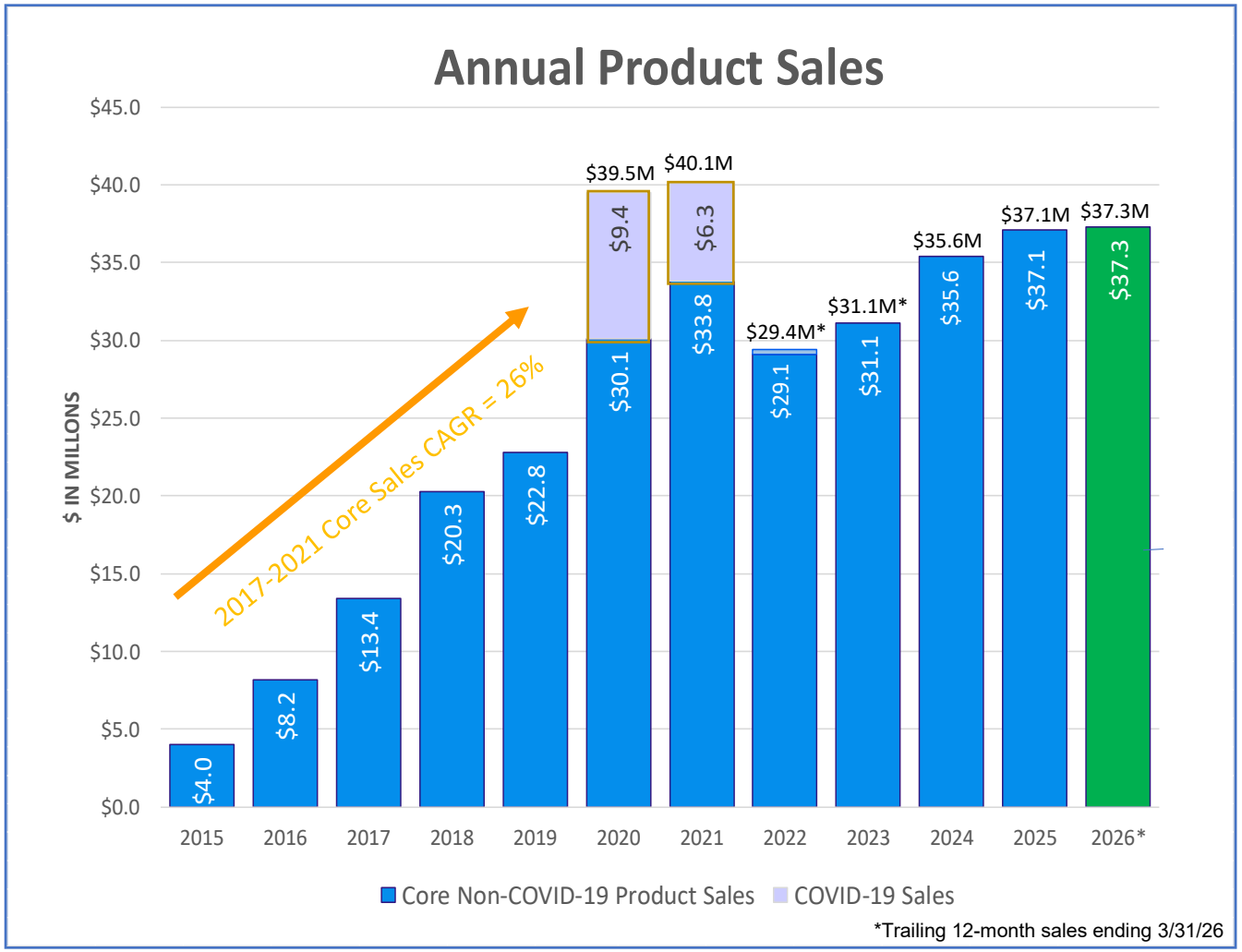


Revenue By Geography



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

A History of Strong Annual Sales Growth



Q1 2026 Performance

- Q1 2026 Sales were $8.9M, +2% vs $8.7M a year ago. Trailing 12-month sales were $37.3M
  - 13% growth in Direct Sales outside Germany
  - Germany did well in midst of restructuring, achieving sales just slightly below last year with fewer people
  - Distributor sales were flat, but would have been higher by $0.5M due to delayed orders and the ripple effect caused by the US-Iran war
- Q1 2026 Product Gross Margins were 69% compared to 71% a year ago due to an intentional slowing of production to burn off inventory. Offset by significant productivity gains, process improvements and cost reductions
- Goal is to return to double digit growth

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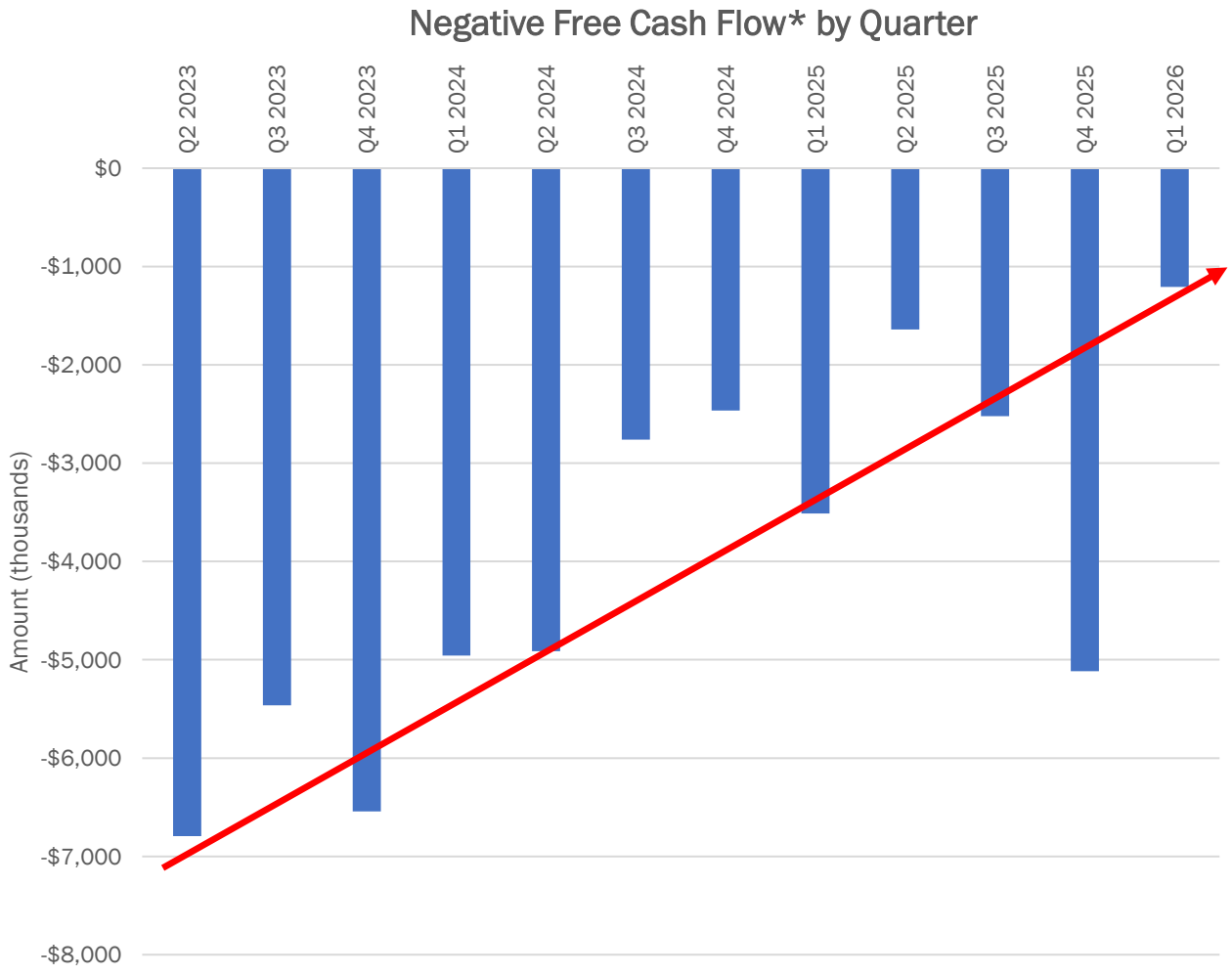
Driving to Cash Flow Breakeven in 2H 2026



- Making good progress in driving improved negative free cash flow through efficiency development, cash management, and cost reductions
- We now expect to be operating cash flow break even in the second half of 2026
- Ended Q1 2026 with $6.4 million in cash, cash equivalents and restricted cash* compared to $7.8 million (12/31/25)
- $1.1 million cash burn in Q1 2026, net of $0.3 million of restructuring-related payments in the quarter

* *Negative Free Cash Flow = Net cash used in operating activities plus net cash used in investing activities*

CytoSorbents™

A Clear and Compelling Value Proposition

We believe CytoSorbents is significantly undervalued and have a sound plan to build and maximize shareholder value

- ✓ CytoSorb is an established, international core business in critical care and cardiac surgery with $37.3M in high margin product sales (ttm) 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 overall sales growth to double digits
- ✓ A commitment to bringing DrugSorb-ATR to the North American market with two planned De Novo submissions pending completion of interactive discussions with the FDA
- ✓ Goal is to drive to cash flow breakeven in 2H 2026 and turn the corner to profitability in 2027

CytoSorbents™

CytoSorbents Corporation

NASDAQ: CTSO

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