CytoSorbents™

WORKING TO SAVE LIVES

CytoSorbents Corporation

Q2 2023 Earnings Conference Call

August 1, 2023

Conference Call Participants

Moderator: Taylor Devlin
CytoSorbents Corporation

Phillip Chan, MD, PhD
Chief Executive Officer

Vincent Capponi, MS
President and
Chief Operating Officer

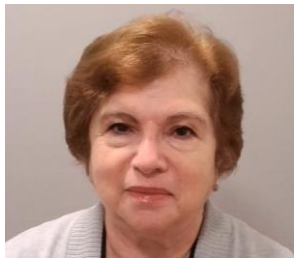
Kathleen Bloch, MBA, CPA
Interim Chief Financial Officer

Efthymios "Makis" Deliargyris
MD, FACC, FESC, FSCAI
Chief Medical Officer

Christian Steiner, MD
Executive VP Sales & Marketing

Managing Director
CytoSorbents Europe GmbH

Christopher Cramer, MS, MBA
Senior VP
Business Development



Irina Kulinets, PhD
Senior VP
Global Regulatory Affairs

CytoSorbents™
WORKING TO SAVE LIVES

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 2022 Form 10-K filed with the Securities and Exchange Commission on March 9, 2023, and other reports and documents filed from time to time by us, which are available online at www.sec.gov.

Operational Update

Phillip Chan, MD, PhD
Chief Executive Officer

Recent Operational Highlights

- Pivotal STAR-T trial completed enrollment ahead of internal projections, with strong performance amongst our 30 clinical trial centers in the U.S. and Canada
  - Followed the second independent Data & Safety Monitoring Board (DSMB) evaluation in June on unblinded safety data on 80 patients, recommending completion of the trial without modification
- Q2 2023 total revenue was $9.4M, including product sales of $8.1M vs $7.3M in product sales a year ago, representing the 3rd consecutive quarter of sequential product sales growth
- Product gross margins grew 700 basis points to 74% from 67% a year ago
- Exceeded 212,000 cumulative human treatments delivered across 75 countries worldwide
- Appointed Alex D'Amico as new CFO to start August 7, 2023
  - 20 years of broad finance, SEC reporting, M&A, fundraising, and accounting experience
  - Kathy Bloch will stay on as a consultant and help manage the transition
- Introduced Michael Bator as new Chairman of the Board at the Annual Meeting in June
  - BOD director since 2015. Founder and Partner of Quartz Advisory Group – a capital markets investment bank, and former Managing Director of Healthcare Research at Jennison Associates
- Announced theranostic collaboration with Humedics – 1 year joint marketing agreement where CytoSorb and LiMAx® liver function test would be promoted together for liver disease treatment

Focused on Three Major Objectives for 2023

Opening the U.S. and Canadian markets with DrugSorb-ATR

Return to Sales Growth

Reduced Cash Burn and Tight Control Over Expenses

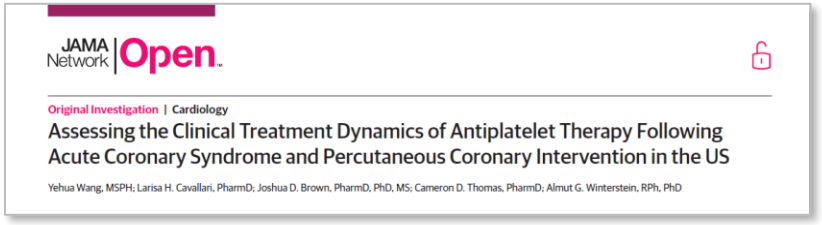
1 Opening the U.S. and Canadian markets with DrugSorb-ATR

- DrugSorb-ATR and STAR-T (Safe and Timely Antithromobotic Removal of Ticagrelor) remains the core focus of our clinical efforts, and the vehicle expected to open the U.S. and Canadian markets.
  - Leverages 2 FDA Breakthrough Device Designations for DrugSorb-ATR to remove blood thinning medications in patients undergoing cardiothoracic surgery
- Following independent DSMB review of the first 80 patient safety data in the STAR-T trial and recommendation to continue trial without modifications, **STAR-T enrollment has now completed**
  - Validates decision to forgo interim analysis
  - Expect the trial to complete imminently, following the last 30-day patient follow-up
- We believe near-term milestones are rapidly approaching
  - Database lock expected in next several months, followed by statistical data analysis
  - Topline data targeted by year end
  - If positive, regulatory submission to US FDA and Health Canada is expected to follow
  - Presentation of data a major cardiovascular conference is planned
  - Pending visibility, begin executing on pre-commercialization strategy and begin building a direct sales and marketing infrastructure in 2024

1 Dynamics that May Expand Ticagrelor Market Share

- Patients with acute coronary syndrome often get dual anti-platelet therapy
  - Aspirin plus Brilinta® (ticagrelor), Plavix® (clopidogrel), or Effient® (prasugrel)
- Brilinta has superior antithrombotic efficacy, but Plavix is generic and cheap
- Brilinta is expected to go generic in 2024 (ticagrelor) with multiple competitors with tentatively approved ANDAs. Price of ticagrelor is expected to fall, potentially enabling market share gains against clopidogrel and branded Effient

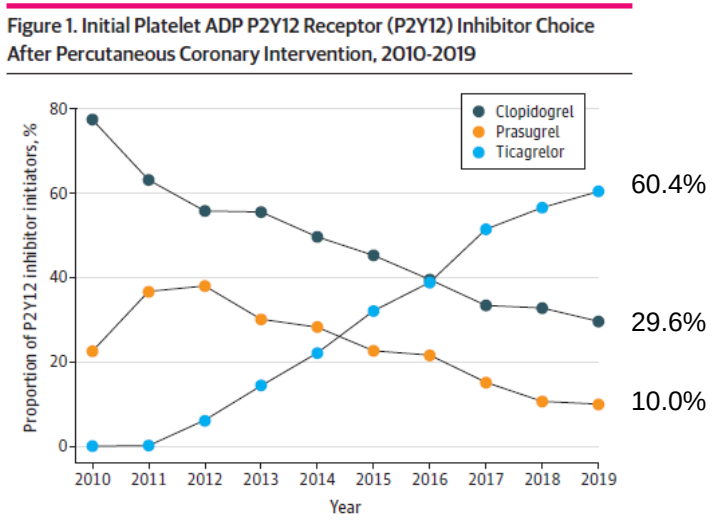
- Recent publication highlights U.S. prescribing physician preference for Rx ticagrelor vs other antiplatelet agents following acute coronary syndrome and percutaneous coronary intervention (PCI; e.g. stent) in >62,000 patients between 2010-2019


JAMA Network | Open

Original Investigation | Cardiology

Assessing the Clinical Treatment Dynamics of Antiplatelet Therapy Following Acute Coronary Syndrome and Percutaneous Coronary Intervention in the US

Yehua Wang, MSPH; Larisa H. Cavallari, PharmD; Joshua D. Brown, PharmD, PhD, MS; Cameron D. Thomas, PharmD; Almut G. Winterstein, RPh, PhD



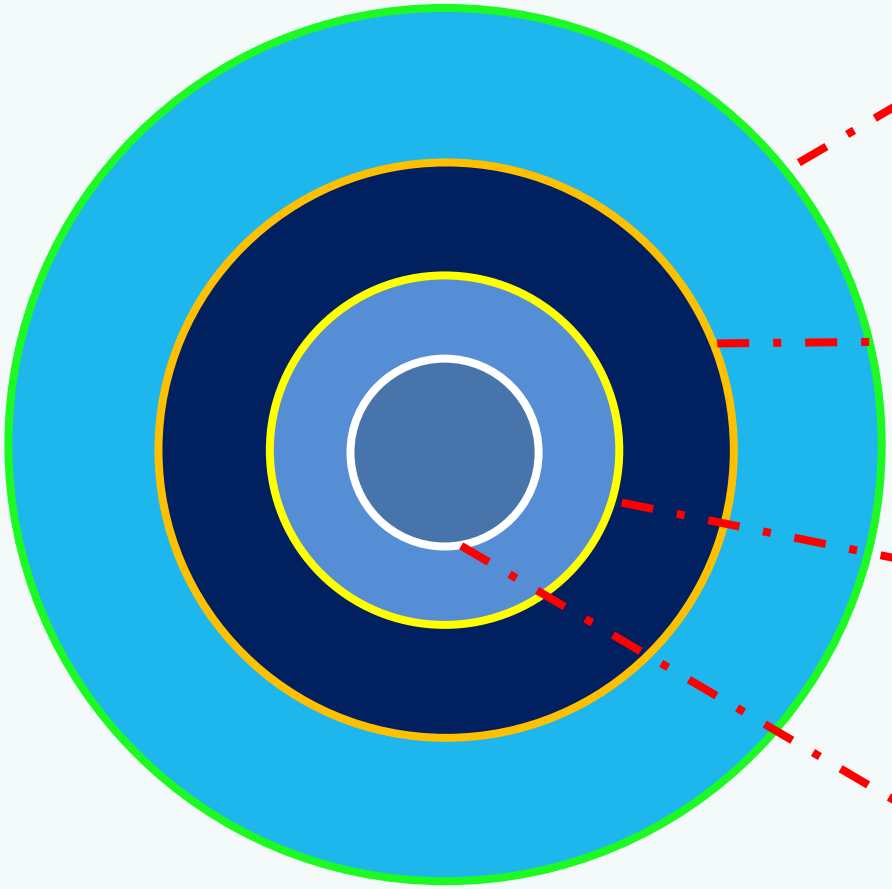
- Approval of DrugSorb-ATR would make ticagrelor the only one of these antiplatelet drugs reversible during CABG surgery – a potentially powerful marketing advantage to take market share

CytoSorbents™

WORKING TO SAVE LIVES

JAMA Netw Open. 2023;6(4):e238585. doi:10.1001/jamanetworkopen.2023.8585.

Addressable U.S. Market For Current and Potential Future Indications for Antithrombotic Removal by DrugSorb-ATR



Eliquis®, Xarelto® and Brilinta® All surgery — **$2.0B**

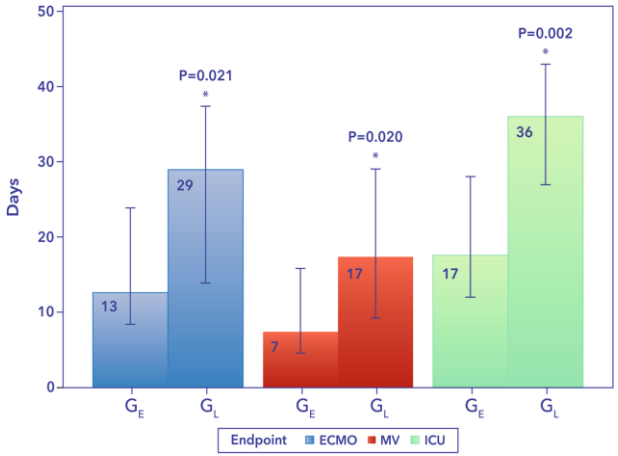
Eliquis®, Xarelto® and Brilinta® Cardiac surgery — **$1.0B**

Brilinta® Cardiac surgery (Future) — **$500M**

Brilinta® Cardiac surgery (Today) — **$250M**

2 Return to Sales Growth

- Third consecutive quarter of sequential product sales growth with 10% quarterly product sales growth year-over-year
- Seeing continued gradual recovery of hospital markets post-COVID with continued strong customer engagement and enthusiastic response to our new data and marketing strategy
- Product gross margins rose 700 basis points to 74%, reflecting volume production from our new Princeton manufacturing facility, a trend consistent with prior guidance of returning to 75-80% product gross margins on a quarterly basis this year
- Emphasizing "Right patient, right timing, right dose" and "hit hard, hit early" marketing messages, that incorporates our evolving understanding of how best to treat patients with CytoSorb. Recent publications such as the CTC Registry support this approach



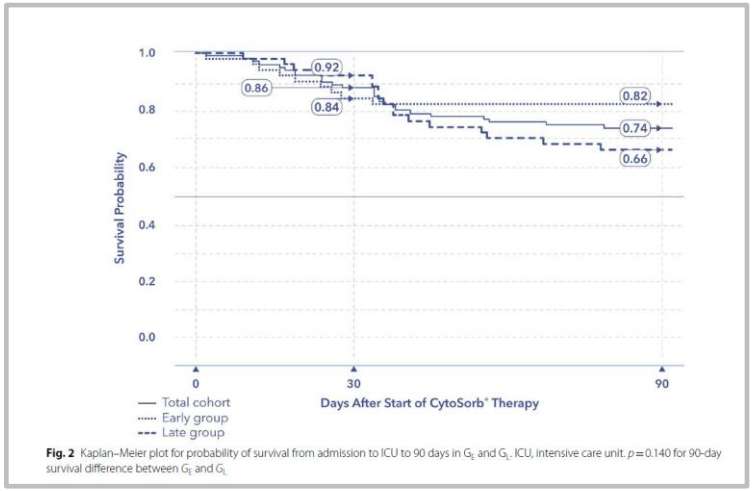


Fig. 2 Kaplan–Meier plot for probability of survival from admission to ICU to 90 days in G_E and G_L. ICU, intensive care unit. $p = 0.140$ for 90-day survival difference between G_E and G_L

CytoSorbents™
WORKING TO SAVE LIVES

Hayanga, et al. *Critical Care.* 2023. [doi.org/10.1186/s13054-023-04517-3]

Financial Highlights

Kathleen Bloch, MBA, CPA
Interim Chief Financial Officer

Comparative Quarterly Revenue Results

	Quarter Ended June 30, 2023		Quarter Ended June 30, 2022		% Incr.
Product revenue	$8,072,412		$7,330,735		10.1%
Grant and other income	1,348,409		1,164,823		15.8%
Total revenue	$9,420,821		$8,495,558		10.9%

- Total revenue, including product sales and grant income was $9.4M in Q2 2023, increased approximately 11% as compared to $8.5M for Q2 2022
- Product sales for Q2 2023 were $8.1M as compared to $7.3M in sales in Q2 2022, an increase of 10% as compared to Q2 of 2022
- Grant income was $1.3M in Q2 2023 as compared to $1.2 in Q2 2022
- Q2 2023 product gross margins were 74% as compared to 67% for Q2 2022

Comparative First Half Revenue Results

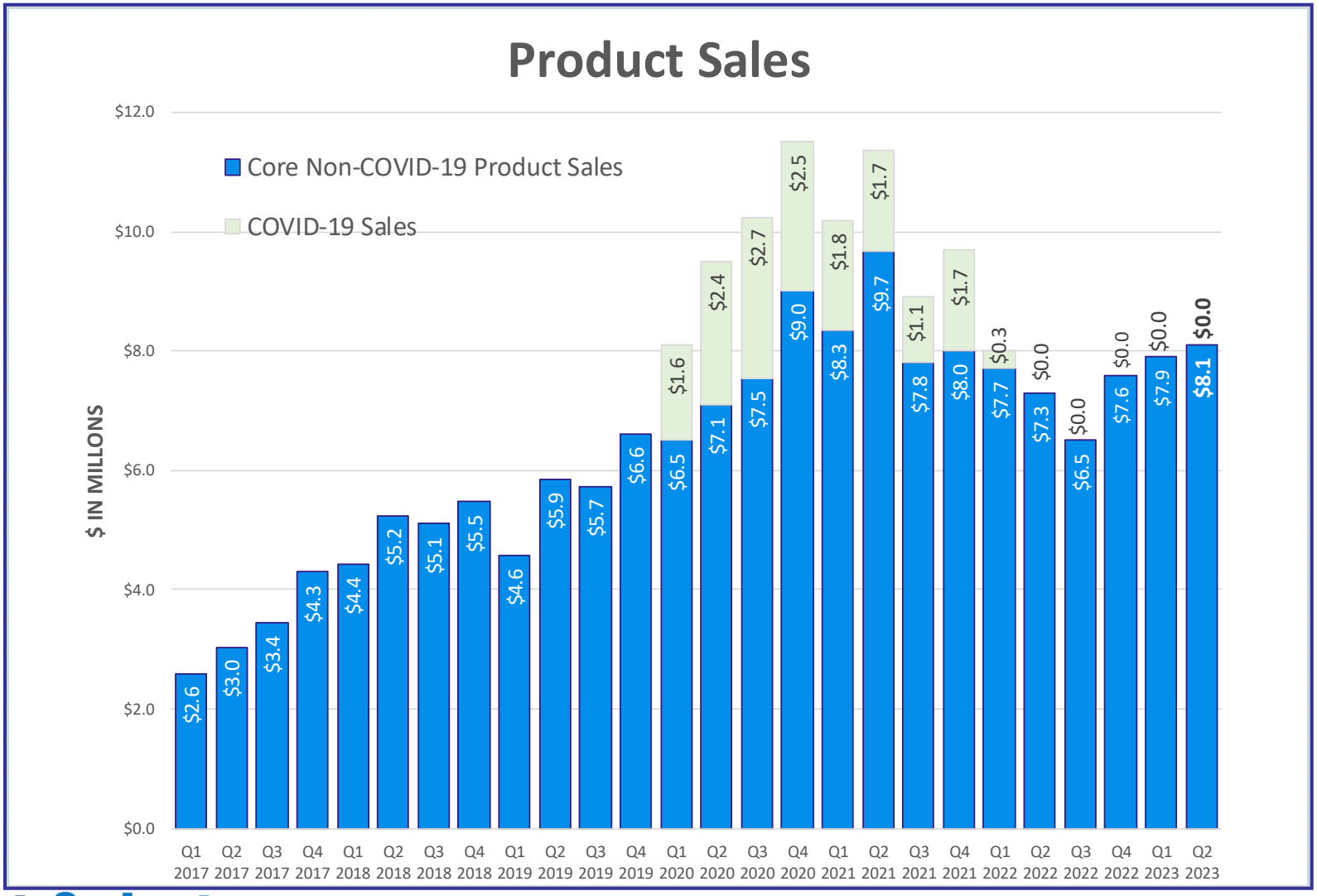
	First Half Ended June 30, 2023		First Half Ended June 30, 2022		Y-Y % Increase
Product revenue	$15,982,451		$15,255,192		4.8%
Grant and other income	2,887,866		1,931,790		49.5%
Total revenue	$18,870,317		$17,186,982		9.8%

- Total revenue for 1H 2023, which includes both product sales and grant revenue, was $18.9M as compared to $17.2M for 1H 2022, an increase of 10%
- Product sales for 1H 2023 were approximately $16M, approximately a 5% increase over product sales of $15.3M for the same period a year ago
- Grant revenue was $2.9M for the first half of 2023, as compared to $1.9M in the first half of 2022

TTM Product Sales & Blended Gross Margin

CytoSorbents™
WORKING TO SAVE LIVES

Historical Quarterly Product Sales



CytoSorbents™
WORKING TO SAVE LIVES

2023 Cash Burn

- Cash balance as of 6/30/2023 was approximately $14.8M, which included restricted cash of approximately of $1.7M.
- Our quarterly cash burn during the first half of 2023 averaged approximately $4.5M, down significantly from the average quarterly cash burn in the first half of 2022 of approximately $11.0M.
- We continue to maintain tight controls over cash adhering to a strict 2023 budget that prioritizes spending in key programs and pipeline projects.
- Our spending is fully aligned with our strategic priorities in particular our STAR-T clinical trial designed to obtain US FDA marketing approval.

Concluding Remarks

Phillip Chan, MD, PhD

Chief Executive Officer

Today: CytoSorb Drives our Growth

- CytoSorb forms the Company's foundation
  - E.U. approved and sold around the world
  - Generated ~$200M in sales since launch
  - High margin razorblade business model with industry top-tier 80+% blended product gross margins
  - Strong validation by customers, partners, and government agencies
  - Current sales supports near-breakeven, less clinical trial costs, which we believe helps to de-risk the Company and the investment opportunity

We believe CytoSorb represents the fuel for future strong anticipated growth targeting the $20-30B worldwide TAM of major unmet medical needs in critical care, cardiac surgery, as well as liver and kidney disease

We believe this gives CytoSorbents the potential upside of a biotechnology company, with the lower risk profile of a high margin medical device company with sales

Soon: CytoSorb & DrugSorb™ ATR = Dual Growth Engines

- We are racing to the finish of STAR-T, where we are rapidly nearing the completion of the study, expected imminently, with top-line data expected later this year
- Should STAR-T be successful and DrugSorb-ATR achieves U.S. FDA and Health Canada regulatory approval, we intend to commercialize DrugSorb-ATR in both the U.S. and Canada – a potentially ***major second engine of growth***, working in tandem with CytoSorb to drive sales
- DrugSorb-ATR may open an expected initial U.S. and Canadian TAM of $300M for Brilinta® alone, where we expect significant penetration, given the major unmet need indicated by our FDA Breakthrough Designation

- If successful, this could transform CytoSorbents into a dual U.S. and international growth company that current and prospective institutional and retail shareholders, are excited about and have been waiting for, and that can create significant value.

CytoSorbents™

Q&A Session

CytoSorbents Corporation

NASDAQ: CTSO

Company Contact
Dr. Phillip Chan
pchan@cytosorbents.com