## Conference Call Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Phillip Chan, MD, PhD</td>
<td>Chief Executive Officer and President</td>
</tr>
<tr>
<td>Vincent Capponi, MS</td>
<td>Chief Operating Officer</td>
</tr>
<tr>
<td>Kathleen Bloch, MBA, CPA</td>
<td>Chief Financial Officer</td>
</tr>
<tr>
<td>Dr. Eric Mortensen, MD, PhD</td>
<td>Chief Medical Officer</td>
</tr>
<tr>
<td>Dr. Christian Steiner, MD</td>
<td>Senior Vice President Sales and Marketing</td>
</tr>
<tr>
<td>Christopher Cramer, MS, MBA</td>
<td>Vice President of Business Development</td>
</tr>
</tbody>
</table>

**Moderator:** Jeremy Feffer – LifeSci Advisors
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 Form 10-K filed with the Securities and Exchange Commission on March 7, 2019 and other reports and documents filed from time to time by us, which are available online at www.sec.gov.
Operational Highlights

- 67,000+ CytoSorb treatments delivered, up from 46,000 a year ago

- Trailing 12-month total revenue was $23.2M, including product sales and grant income, versus $19.2M a year ago

- Q2 2019 product sales were $5.9M compared to $5.3M a year ago
  - Achieved the highest quarterly product sales, driven by record direct sales and a rebound in distributor sales
  - Had the average Euro to dollar exchange rate remained unchanged, would have exceeded $6M ($6.2M) for the first time
  - A major distributor began reordering in Q2 2019. But even without these orders, products sales would still be a quarterly record

- Worked closely with Fresenius Medical Care and submitted CytoSorb registration in Mexico and South Korea
  - Expect an update on progress by end of the year
  - Meanwhile, have jointly initiated commercialization planning and pre-launch activities including conference, marketing, and KOL events

- Healthy cash balance of approximately $20M (7/31/19)
U.S. REFRESH I Paper Published

- Published in Seminars in Thoracic and Cardiovascular Surgery – a journal of the American Association for Thoracic Surgery (AATS)

- Confirmed safety of CytoSorb in complex cardiac surgery and top-line results that were reported previously on the statistically significant reduction of activated complement in all patients and plasma free hemoglobin in patients undergoing valve replacement surgery on CPB ≥ 3 hours

The Achilles heel of complex cardiac surgery has long been the deleterious effects of prolonged cardiopulmonary bypass characterized by the cascade of hemolysis, release of plasma free hemoglobin, activation of inflammatory mediators, and end organ dysfunction. The holy grail of research in this subject would be to find something able to mitigate or eliminate the mediators responsible for these potentially catastrophic downstream effects of prolonged cardiopulmonary bypass. Gleason et al. have eloquently explored the use of hemoadsorption technology specifically designed to reduce plasma free hemoglobin during prolonged cardiopulmonary bypass in a multicenter, randomized control trial.
U.S. REFRESH 2-AKI Pivotal Trial

- 400 patient RCT PMA multi-center adaptive trial targeting reduction of post-operative AKI using CytoSorb during complex cardiac surgery
- 109 patients (27%) have been enrolled at 24 active trial sites
- Actively adding new sites, and increasing awareness of study to accelerate enrollment
- Targeting enrollment of 200 patients by Q1 2020, followed by an interim analysis
- Completion of enrollment targeted by end of 2020
REMOVE Endocarditis Trial

- 250 patient RCT funded by the German government: Safety and efficacy of CytoSorb to improve organ dysfunction when used intraoperatively during valve replacement for infective endocarditis

- SAB and DSMB recommended continuation of trial following an interim analysis on the first 50 patients focused on inflammatory mediators (e.g. cytokines)

- Trial is nearly 90% complete, with 222 patients enrolled at 15 active centers

- Enrollment is expected to complete before the end of this year

- As a government sponsored, multi-center study, we cannot influence the timeline but believe that topline data by mid-2020 is feasible
HemoDefend Update

• Point-of-care filter rapidly and efficiently removes non-infectious contaminants from transfused pRBCs that can cause transfusion reactions

• Funded up to $4.7M by NHLBI (NIH) and USSOCOM

• Compatible with pathogen reduction technologies

• 100M pRBC transfusions administered annually worldwide
  • Initially intended for patients receiving multiple units of blood including trauma, gastrointestinal bleed, high risk surgery, cancer, blood disorders

• Pivotal trial design
  • Post-transfusion recovery and survival assay for autologous blood
  • Goal of FDA IDE submission this year following requisite bench testing for efficacy
  • Meanwhile, CRO and clinical trial sites have been selected
  • Following IDE approval, clinical trial is expected to be complete within 3 - 6 months
Financial Highlights
Q2 2019 Comparative Revenue Results

<table>
<thead>
<tr>
<th></th>
<th>Quarter Ended June 30, 2019</th>
<th>Quarter Ended June 30, 2018</th>
<th>% Incr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product revenue</td>
<td>$ 5,850,417</td>
<td>$ 5,245,555</td>
<td>11.5%</td>
</tr>
<tr>
<td>Grant and other income</td>
<td>382,109</td>
<td>509,883</td>
<td>(25.1)%</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$ 6,232,526</td>
<td>$ 5,755,438</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

- Q2 2019 CytoSorb® sales were a record $5.9M, a 11.5% increase over $5.2M in Q2 2018
- Total revenue in Q2 2019 increased 8.3% to $6.2M, which includes both product sales and grant revenue, compared to $5.8M in Q2 2018
- Q2 2019 gross profit was ~$4.4M, a 11% increase from ~$4M for Q2 2018
- Q2 2019 product gross margins were ~76%, compared to 74% for Q2 2018, primarily as a result of manufacturing efficiency improvements
## Comparative 6-Month Revenue Results

<table>
<thead>
<tr>
<th></th>
<th>6 Months Ended June 30, 2019</th>
<th>6 Months Ended June 30, 2018</th>
<th>% Incr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product revenue</td>
<td>$10,426,996</td>
<td>$9,678,852</td>
<td>7.7%</td>
</tr>
<tr>
<td>Grant and other income</td>
<td>$997,159</td>
<td>$1,001,239</td>
<td>(0.4)%</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$11,424,155</td>
<td>$10,680,091</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

- CytoSorb® product sales for 1H 2019 were $10.4M, a 7.7% increase over product sales of $9.7M for the same period a year ago.

- Grant revenue was approximately $997K for the 1H 2019.

- Total revenue for 1H 2019, which includes both product sales and grant revenue, was $11.4M as compared to $10.7M for 1H 2018, an increase of 7%.
Quarterly Product Sales

In Thousands of U.S. Dollars

- Q4 2012 $14
- Q3 2013 $28
- Q2 2013 $31
- Q1 2013 $76
- Q4 2013 $126
- Q3 2014 $204
- Q2 2014 $314
- Q1 2014 $663
- Q4 2014 $1,032
- Q3 2015 $704
- Q2 2015 $1,071
- Q1 2015 $1,496
- Q4 2015 $1,852
- Q3 2016 $2,143
- Q2 2016 $2,596
- Q1 2016 $2,613
- Q4 2016 $3,041
- Q3 2017 $3,449
- Q2 2017 $3,041
- Q1 2017 $4,296
- Q4 2017 $5,103
- Q3 2018 $5,471
- Q2 2018 $5,246
- Q1 2018 $5,433
- Q4 2018 $6,577
- Q3 2019 $5,850
- Q2 2019 $5,850
- Q1 2019 $5,850
Trailing Twelve Months Product Sales

![Graph showing Trailing Twelve Month Product Sales]

- Q2 2014: $1,750,196
- Q2 2015: $3,379,681
- Q2 2016: $6,017,168
- Q2 2017: $10,393,062
- Q2 2018: $17,423,559
- Q2 2019: $21,000,527

Trend Line
Loan Amendment – Bridge Bank

- July 31, 2019 executed Loan Amendment with Bridge Bank, providing the Company with an additional $5M in term loan debt

- Provides non-dilutive working capital allowing us to aggressively pursue our clinical trial objectives and to rapidly grow worldwide product sales

- Interest only period extended six months and potentially (if the Company meets certain predetermined objectives) 12 months until October 2020, increasing near-term working capital by another $4 million as a result of deferred principal payments
## Working Capital and Cap Table

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and short-term investments</td>
<td>$16,342</td>
<td>$19,647</td>
<td>$22,369</td>
<td>$24,911</td>
<td>$25,282</td>
<td>$21,090</td>
<td>$17,322</td>
</tr>
<tr>
<td>Grants and accounts receivable, net</td>
<td>3,450</td>
<td>3,267</td>
<td>3,943</td>
<td>3,643</td>
<td>2,903</td>
<td>2,352</td>
<td>2,206</td>
</tr>
<tr>
<td>Inventories</td>
<td>1,463</td>
<td>1,214</td>
<td>833</td>
<td>779</td>
<td>769</td>
<td>680</td>
<td>796</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>960</td>
<td>700</td>
<td>1,119</td>
<td>617</td>
<td>1,826</td>
<td>393</td>
<td>415</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>22,215</td>
<td>24,828</td>
<td>28,264</td>
<td>29,950</td>
<td>30,780</td>
<td>24,515</td>
<td>20,739</td>
</tr>
<tr>
<td><strong>Current Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>2,150</td>
<td>1,841</td>
<td>1,486</td>
<td>1,859</td>
<td>1,253</td>
<td>2,139</td>
<td>1,244</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>3,536</td>
<td>2,815</td>
<td>4,386</td>
<td>2,402</td>
<td>2,238</td>
<td>1,847</td>
<td>2,604</td>
</tr>
<tr>
<td>Current maturities of long-term debt</td>
<td>833</td>
<td>1,666</td>
<td>667</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,000</td>
</tr>
<tr>
<td>Lease liability - current portion</td>
<td>400</td>
<td>389</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>6,919</td>
<td>6,711</td>
<td>6,539</td>
<td>4,261</td>
<td>3,491</td>
<td>3,986</td>
<td>7,848</td>
</tr>
<tr>
<td><strong>Net Working Capital</strong></td>
<td>$15,296</td>
<td>$18,117</td>
<td>$21,725</td>
<td>$25,689</td>
<td>$27,289</td>
<td>$20,529</td>
<td>$12,891</td>
</tr>
</tbody>
</table>

### Cap Table 6/30/2019

<table>
<thead>
<tr>
<th>Fully Diluted Common Shares</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>32,303,231</td>
</tr>
<tr>
<td>Options</td>
<td>3,566,354</td>
</tr>
<tr>
<td>Warrants</td>
<td>30,000</td>
</tr>
<tr>
<td>Restricted Stock Unit Awards</td>
<td>63,552</td>
</tr>
<tr>
<td></td>
<td>35,963,137</td>
</tr>
</tbody>
</table>
Guidance

- CytoSorbents has not historically given specific financial guidance on quarterly results until the quarter has been completed. However:
  - We expect Q3 2019 product sales to exceed Q3 2018 product sales
  - We expect that 2H 2019 product sales will exceed 1H 2019 product sales
  - We reiterate our guidance that we expect to achieve blended product gross margins of 80% on a quarterly basis this year
Q&A Session

CytoSorbents Corporation

NASDAQ: CTSO

Investor Relations:

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jeremy@lifessciadvisors.com

A Leader in Critical Care Immunotherapy