CytoSorbents Corporation (NASDAQ: CTSO)

A Leader in Critical Care Immunotherapy

Q3 2019 Earnings Conference Call

November 5, 2019

Conference Call Participants

Dr. Phillip Chan, MD, PhD	Chief Executive Officer and President
Vincent Capponi, MS	Chief Operating Officer
Kathleen Bloch, MBA, CPA	Chief Financial Officer
Dr. Eric Mortensen, MD, PhD	Chief Medical Officer
Dr. Christian Steiner, MD	Senior Vice President Sales and Marketing
Christopher Cramer, MS, MBA	Vice President of Business Development

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

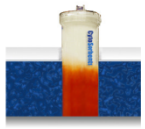
- 73,000+ CytoSorb treatments delivered, up from 51,000 a year ago
- Trailing 12-month (TTM) total revenue was $23.6M, including product sales and grant income, versus $21.1M a year ago
- Blended product gross margin expanded to 77% in Q3 2019
- Orders from 2 of 3 distributor/partners discussed in Q1 2019
- Extended CytoSorb distribution to total of 58 countries with Latin America expansion to Brazil, Colombia, and Costa Rica
- Received renewal of CytoSorb CE Mark through May 2024 and Annual ISO 13485 certification through September 2022
- Significant clinical study progress, including near completion of REMOVE trial, REFRESH 2-AKI trial progress, first study to treat CRS and CRES in CAR T-Cell immunotherapy, and new U.K. TISORB Trial

Financial Highlights

Q3 2019 Comparative Revenue Results

	Quarter Ended Sep 30, 2019		Quarter Ended Sep 30, 2018		% Incr.
Product revenue	$ 5,728,463		$ 5,102,748		12.3%
Grant and other income	366,544		640,225		(42.7)%
Total revenue	$ 6,095,007		$ 5,742,973		6.1%

- Q3 2019 CytoSorb® sales were $5.7M, an increase of 12.3% over $5.1M in Q3 2018
- If the Euro to Dollar average exchange rate were unchanged from Q3 2018, CytoSorb© product sales would have been approximately $6.0M in Q3 2019, a 17% increase
- Total revenue in Q3 2019, which includes both product sales and grant revenue, increased 6.1% to approximately $6.1M. compared to $5.7M in Q3 2018
- Q3 2019 gross profit was ~$4.4M, an approximately 19% increase from ~$3.7M in Q2 2018
- Q3 2019 product gross margins were ~77%, compared to 72% for Q3 2018, primarily as a result of efficiency improvements in manufacturing



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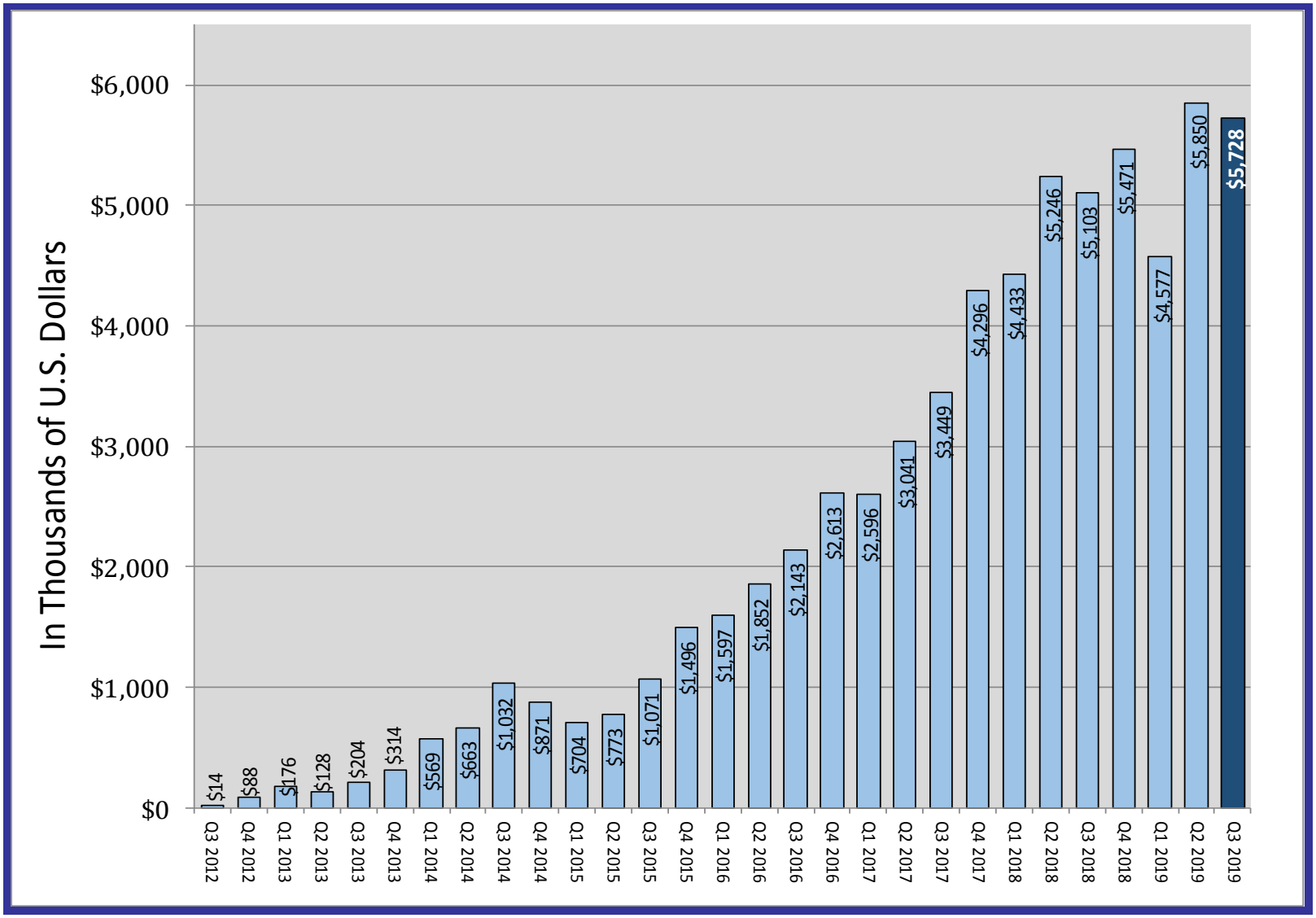
Comparative 9-Month Revenue Results

	9 Months Ended Sep 30, 2019		9 Months Ended Sep 30, 2018		% Incr.
Product revenue	$16,155,459		$14,781,599		9.3%
Grant and other income	$1,363,703		$1,641,464		(16.9)%
Total revenue	$17,519,162		$ 16,423,063		6.7%

- For the first nine months of 2019, CytoSorb® product sales were approximately $16.2M, a 9.3% increase over product sales of $14.8M for the same period a year ago
- If the Euro to dollar exchange rate were unchanged from 2018, nine months' 2019 product sales would have been approx. $977K higher than reported, or approximately $17.1M.
- Grant revenue was approximately $1.4M for the first nine months in 2019
- Total revenue for the first nine months in 2019 was $17.5M, which includes both product sales and grant revenue, as compared to $16.4M for the same period in 2018, an increase of 6.7%

Quarterly Product Sales



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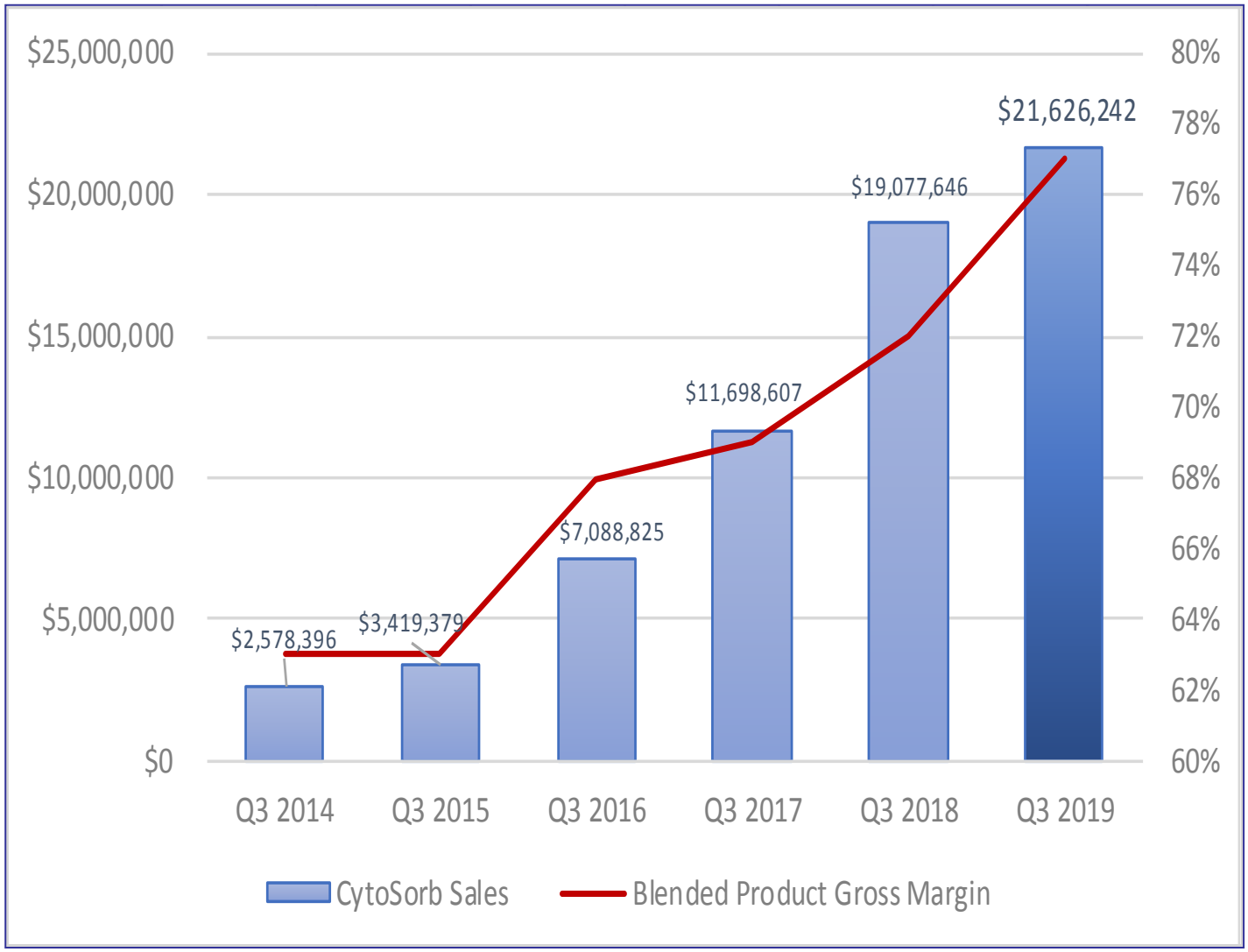
Product Sales (TTM) and Blended Gross Margins



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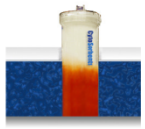
Working Capital and Cap Table

	Working Capital as of								
	9/30/2019	6/30/19	3/31/19	12/31/2018	9/30/2018	6/30/2018	3/31/18	12/31/17	12/31/16
Current Assets:									
Cash and short-term investments	$15,978	$16,342	$19,647	$22,369	$24,911	$25,282	21,090	$ 17,322	$ 5,245
Grants and accounts receivable, net	3,448	3,450	3,267	3,943	3,643	2,903	2,352	2,206	1,433
Inventories	1,768	1,463	1,214	833	779	769	680	796	834
Prepaid expenses and other current assets	1,157	960	700	1,119	617	1,826	393	415	316
Total current assets	22,351	22,215	24,828	28,264	29,950	30,780	24,515	20,739	7,828
Current Liabilities:									
Accounts payable	2,072	2,150	1,841	1,486	1,859	1,253	2,139	1,244	1,330
Accrued expenses and other current liabilities	3,691	3,432	2,815	4,386	2,402	2,238	1,847	2,604	2,115
Current maturities of long-term debt	3,125	2,667	1,666	667		-		4,000	833
Lease liability - current portion	414	400	389						
Deferred revenue	-	-	-	-				-	-
Total current liabilities	9,302	8,649	6,711	6,539	4,261	3,491	3,986	7,848	4,278
Net Working Capital	$ 13,049	$13,566	$ 18,117	$ 21,725	$ 25,689	$ 27,289	20,529	$ 12,891	$ 3,550

Cap Table 9/30/2019

	Fully Diluted Common Shares
Common Stock	32,422,263
Options	4,855,229
Warrants	30,000
Restricted Stock Unit Awards	183,754
Total	37,491,246



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Forecast CytoSorbents 2020: Faster Growth Ahead

Investing Heavily for Growth

- Direct sales are ~75% of our product sales, with higher product gross margins
- Doubled the number direct sales countries from 5 to 10 in 2019, adding Poland, Sweden, Netherlands, Norway and Denmark, to Germany, Austria, Switzerland, Belgium and Luxembourg with a combined population of 190M
- Expanded countries to 58, with registration pending at major countries including Brazil, Mexico, South Korea and Colombia that add more than 440M people
- Since September 2018, added 50 people or ~50% increase in headcount to 155, with many key hires in the past 3-6 months.
- Significantly strengthened the commercial organization
  - Doubled customer facing sales reps and specialists, particularly in Germany
  - Subdivided management of direct sales
  - New leadership and expansion of distributor and partner sales
  - New head of marketing who will report to Christian Steiner, SVP of Sales and Marketing
  - Bolstered manufacturing, quality, clinical, and reimbursement personnel
- Manpower will enable more focused targeting of key accounts, with modest impact this year, but is expected to be a major catalyst for strong growth in 2020

Demand for CytoSorb Continues to Grow

- CytoSorb sales are driven primarily by re-orders with ~85% of our invoices from repeat customers
- The average number of CytoSorb cartridges per invoice continues at many accounts continue to rise, demonstrating increased usage and adoption
- Usage is increasing because CytoSorb is helping physicians “regain control” of their very sick patients, particularly in controlling complications of inflammation
- Clinical data generation continues to be robust with more than 120 publications in peer-reviewed scientific and medical journals
- Clinicians have honed in on key areas where CytoSorb works well such as sepsis, cardiac surgery, and liver failure
- New applications and new data are expected to drive more rapid adoption and broader based usage

CytoSorb Survival Benefit in Septic Shock

Retrospective study evaluating primary endpoint of 28-day mortality in 116 septic shock patients

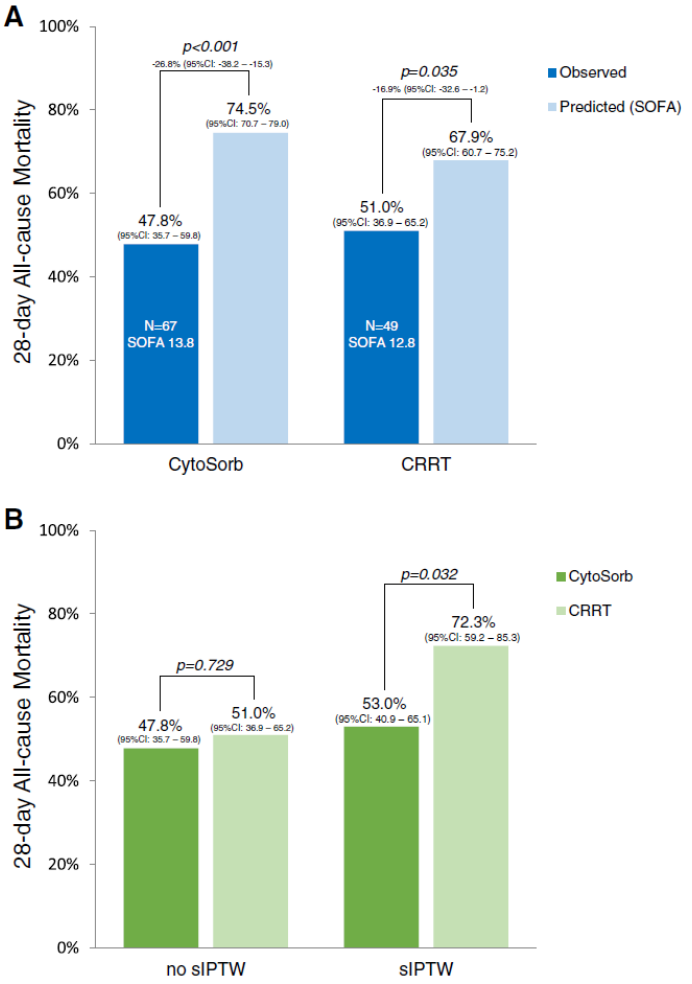
- Continuous renal replacement (CRRT) alone (n=49)
  - CRRT with CytoSorb (n=67)

- Before treatment, CytoSorb patients were sicker
- SOFA score: 13.8 Treatment vs 12.8 control
- Predicted mortality: 75% vs 68% control

- Patients were weighted for stabilized inverse probability of treatment weights (sIPTW), commonly used in observational studies to adjust for differences in baseline characteristics

- CytoSorb treatment showed decreased mortality of 53% vs 72% control by sIPTW analysis

- Data suggest 19 patients in every 100 patients with septic shock on CRRT might be saved with CytoSorb



MAASSTAD ZIEKENHUIS
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Erasmus MC
University Medical Center Rotterdam

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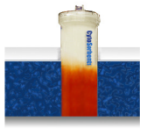
- Brouwer, WP., et. al., "Hemoadsorption with CytoSorb shows a decreased observed versus expected 28-day all-cause mortality in ICU patients with septic shock: a propensity-score-weighted retrospective study", Crit Care, 2019;23:317.

Antithrombotic Drug Removal Is Important

- Anti-thrombotic drugs, such as Eliquis®, Xarelto®, Pradaxa®, Brilinta®, Plavix® and others are blockbuster products with collective sales of more than $20 billion
  - More than 6 million people Used extensively to reduce stroke and cardiac risk in patients following a heart attack or stent placement, patients with atrial fibrillation, peripheral artery disease, etc.
  - However, approximately 4% of patients will have an acute cardiac event due to their underlying disease that will require either urgent or emergency cardiac surgery
  - Because these drugs reduce the ability to clot, approximately 30% of patients that undergo emergency surgery will suffer severe or massive bleeding peri-operatively
- A recent study from St. Georg Hospital in Hamburg, Germany, evaluated 55 patients on either ticagrelor (Brilinta®) and rivaroxaban (Xarelto®) that underwent emergency cardiac surgery. Of these, 39 were treated with CytoSorb intraoperatively in an investigational application
  - Patients not using CytoSorb had significant bleeding complications
  - CytoSorb significantly:
    - Reduced need for red blood cell ($p=0.01$) and platelet ($p=0.05$) transfusions
    - Reduced surgical drainage ($p=0.004$)
    - Reduced the need for rethoracotomy (0% vs 37.5% control, $p<0.001$)
    - Reduced length of operation ($p=0.004$)
    - Reduced time in ICU ($p=0.01$) and hospital stay ($p=0.02$)
- A separate cost-effectiveness analysis concluded a savings of approximately $5,000 per case due to these clinical benefits



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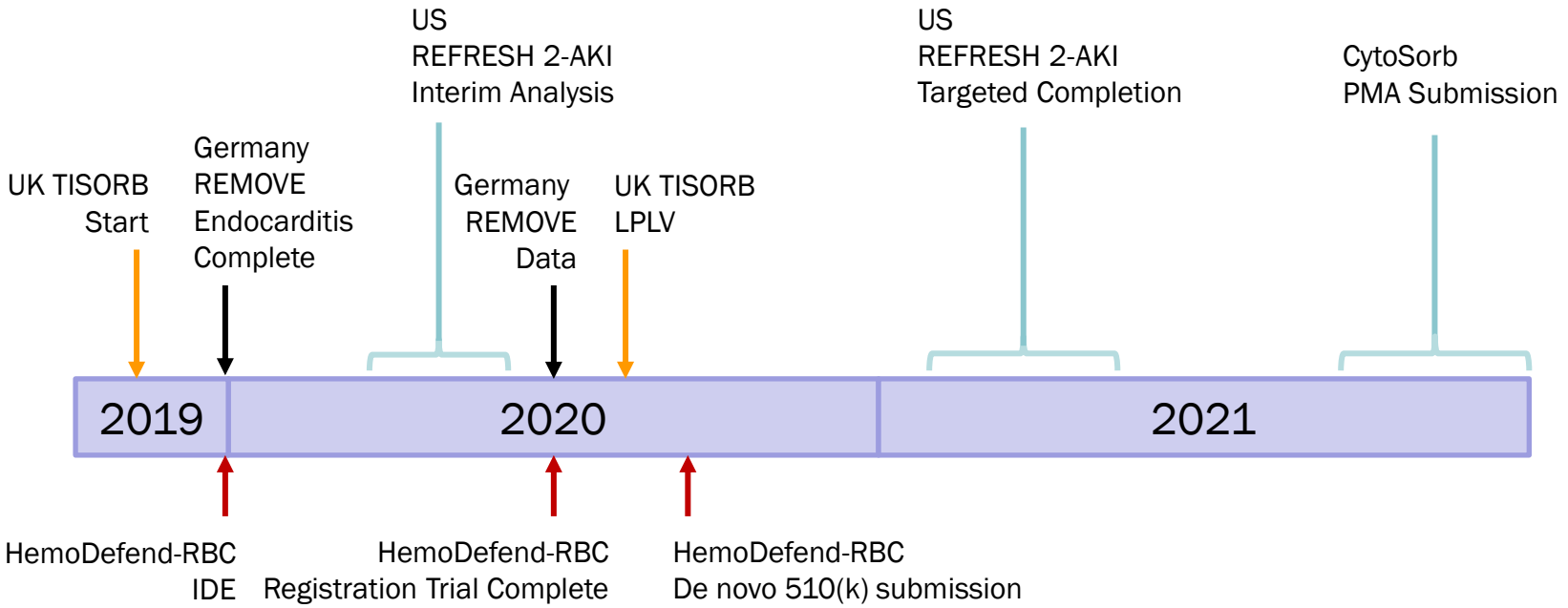
- Hassan, K., et. al.,"CytoSorb Adsorption During Emergency Cardiac Operations in Patients at High Risk of Bleeding," Ann Thoracic Surg, 108:45-51.

Projected Near-term Data Catalysts



- Germany REMOVE Endocarditis RCT at target enrollment of 250 patients. Enrolling up to 15 additional patients to account for potential dropouts, expected by year end
- U.S. REFRESH 2-AKI RCT at 144 patients enrolled out of target 400 patients. Interim analysis at 200 patients expected Q1-Q2 2020
- U.K. TISORB study initiated, with completion expected in Q3 2020
- HemoDefend IDE filing expected by year end. Potential for approval in 2020

Guidance

- CytoSorbents has not historically given specific financial guidance on quarterly results until the quarter has been completed. However:
- We expect Q4 2019 product sales to exceed Q4 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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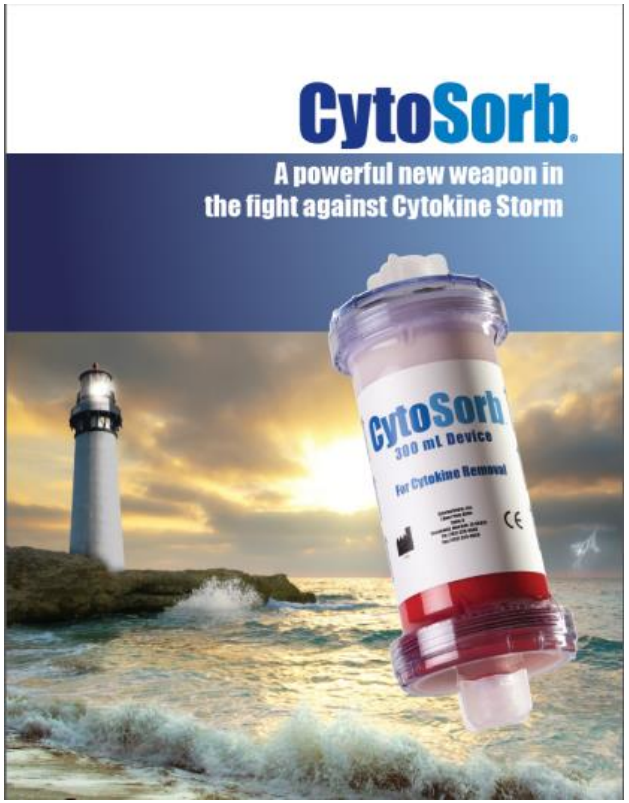

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