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CytoSorbents Corporation (NASDAQ/CTSO)

March 9, 2022

BUY: Reports a Strong Quarter- Clinical Events Ahead

CytoSorbents reported total revenues of \$10.8M, or just under \$40M for the full year. The net loss in the quarter was just \$7.6M versus a cash balance of \$53.8M. Management guided to a 20% growth rate on core product sales. The focus now is on the STAR-T & STAR-D trials as a pathway for U.S. approval and commercialization.

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Investment Highlights

CytoSorbents Reported total revenue, including product sales and grant income, for Q4 2021 was \$10.8M. Core non-COVID-19 product sales for Q4 2021 were approximately \$8.0M or 82% of product sales. More than 162,000 cumulative CytoSorb devices have been utilized worldwide representing an increase of 34% compared to more than 121,000 devices utilized as of the end of 2020. More than 7,600 COVID-19 patients have been treated globally since the pandemic began. CytoSorb is now commercialized in more than 70 countries around the world, following the addition of Korea, Singapore, and Thailand, among others in 2021.

Why has the stock pulled back? It may be related to Covid. The perception that Covid would accelerate sales of Cytosorb coupled with the reality that Omicron is looking more like Nature's vaccine and will drive the pandemic to its endemic stage. We remain focused on progress with the STAR trials (D and T to follow soon).

STAR-T and STAR-D Pivotal Studies: The STAR-D trial targets Ticagrelor (& more): STAR-D (Safe and Timely Antithrombotic Removal – Direct Oral Anticoagulants [DOAC]) is a double-blind, randomized, controlled U.S. trial. It's important to note that the trial is being performed under the previously announced FDA Breakthrough Device Designation granted to the DrugSorb-ATR™ Antithrombotic Removal System for the removal of apixaban (Eliquis®, Bristol-Myers-Squibb/Pfizer) and rivaroxaban (Xarelto®, Janssen/Bayer) in a cardiopulmonary bypass circuit to reduce the likelihood of serious perioperative bleeding in urgent cardiothoracic surgery. The STAR-T trial is expected to enroll up to 120 patients across 20 sites and be completed by 2022.

Valuation. We use a series of therapeutic models across the various indications and geographies and project product revenues for the Company out to the year 2030. In our U.S. therapeutic models, we apply a 30% risk cut (70% success probability) that both U.S. approvals and our market share forecasts can be realized. For us, valuation becomes an interesting question when we discuss the appropriate "r" risk-rate to use in our three-model metrics, free cash flow to the Firm (FCFF), Discounted EPS, and Sum-Of-The-Parts (SOP) models, which are equal-weighted, averaged, and rounded to the nearest whole number. Typically for early-stage companies with no revenues, we use 30%, and for companies with established products and revenues, we use a lower 15%. CytoSorbents arguably is somewhere in the middle, as products are approved and selling in Europe but not yet in the U.S. If we select a conservative 30%, we derive a \$9.00 price target. If we choose a more aggressive 15%, we arrive at a \$26.00 target. We select 25% to balance risk versus reward to derive a \$16.00 target,

Risks to our price target include: market, regulatory, financial, and commercialization risks.



Source: CytoSorbents

Current Price			
Current Price			\$3.75
Price Target			
Price Target			\$16.00
Stock Data			
52-Week Range	\$3.18	-	\$9.80
Shares Outstanding (mil.)			43.5
Market Capitalization (mil.)			\$163
Enterprise Value (mil.)			\$143
Debt to Capital			0%
Book Value/Share			\$0.35
Price/Book			4.3
Average Three Months Trading Volume (K)			89
Insider Ownership			11.2%
Institutional Ownership			41.3%
Short interest (mil.)			3.2%
Dividend / Yield			\$0.00/0.0%

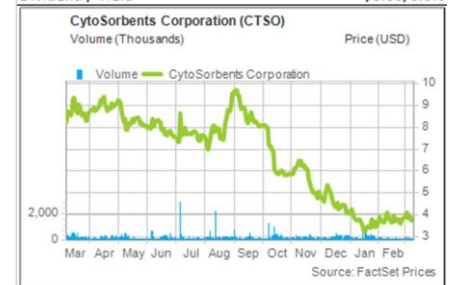


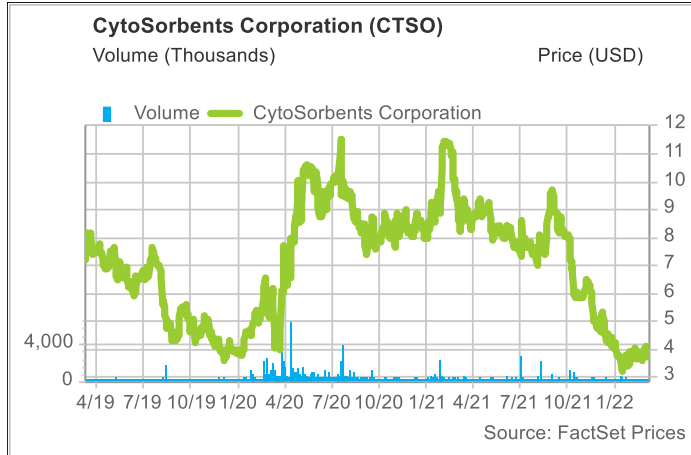
Exhibit 1. Income Statement

CTSO.: Income Statement (\$000)																
YE December 31	2019A	2020A	2021A	1Q22E	2Q22E	3Q22E	4Q22E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue:																
CytoSorb Direct Sales (Germany, Austria, Switzerland)	22,766	25,607	29,354	6,480	6,761	7,325	7,606	28,172	31,046	42,620	49,732	58,030	67,713	79,013	92,198	92,198
CytoSorb Distributor (Rest of EU)		10,240	10,498	2,638	2,752	2,982	3,096	11,468	13,649	15,878	18,472	21,490	25,001	29,085	33,837	33,837
CytoSorb (Cardiac surgery EU)		3,420							11,604	14,022	16,474	16,589	16,705	16,822	16,940	16,940
CytoSorb (Cardiac surgery US)		-	-	-	-	-	-	-	-	21,899	27,593	66,755	67,290	67,829	68,373	68,373
CytoSorb (other US)										38,459	78,231	190,960	283,238	395,071	602,722	602,722
VetResQ		185	194	47	49	53	55	204	214	225	236					
Other Sales																
Total Product Sales	22,766	39,452	40,047	9,164	9,563	10,359	10,758	39,844	56,513	133,103	190,738	353,824	459,947	587,820	814,070	814,070
Royalty (HemoDefend US)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grant revenue	2,184	1,552	3,062	-	-	-	-	-	-	-	-	-	-	-	-	-
Other revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	24,950	41,004	43,109	9,164	9,563	10,359	10,758	39,844	56,513	133,103	190,738	353,824	459,947	587,820	814,070	814,070
Expenses:																
Costs of Goods Sold	7,364	11,052	11,047	1,833	1,913	2,072	2,152	7,969	11,303	26,621	38,148	70,765	91,989	117,564	162,814	162,814
	%COGS	25%	28%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Research and Development	12,092	8,810	16,380	4,144	4,324	4,685	4,865	18,018	19,820	21,802	23,982	26,381	29,019	31,920	35,113	38,624
	%R&D	53%	22%	41%	45%	45%	45%	45%	35%	16%	13%	7%	6%	5%	4%	5%
Selling, General and Administrative	22,006	28,463	35,749	9,045	9,438	10,224	10,618	39,324	40,111	40,913	41,731	42,566	43,417	44,285	45,171	46,075
	%SG&A	97%	72%	89%	99%	99%	99%	99%	71%	31%	22%	12%	9%	8%	6%	6%
Legal, financial and other counseling	2,462	3,048	2,731	628	655	710	737	2,731	2,731	2,731	2,731	2,731	2,731	2,731	2,731	2,731
Total Expenses	43,924	51,373	65,907	15,650	16,330	17,691	18,371	68,042	73,964	92,066	106,592	142,442	167,156	196,501	245,828	250,243
Operating Income (Loss)	(18,974)	(10,369)	(22,799)	(6,486)	(6,768)	(7,331)	(7,613)	(28,198)	(17,451)	41,037	84,147	211,383	292,791	391,320	568,242	563,827
Interest income (expense), net																
Gain (loss) on foreign currency transactions	(1,384)	(1,201)	2													
Change in warrant liability		2,607	(2,569)													
Other income (expense), net																
Total Other Income	(1,384)	1,406	(2,567)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pretax Income	(20,358)	(8,964)	(25,366)	(6,486)	(6,768)	(7,331)	(7,613)	(28,198)	(17,451)	41,037	84,147	211,383	292,791	391,320	568,242	563,827
Income Tax Benefit (Provision)	1,092	1,127	(2,537)	(778)	(812)	(880)	(914)	(3,384)	(2,618)	7,387	17,671	50,732	81,982	129,136	187,520	186,063
Tax Rate	5%	8%	10%	12%	12%	12%	12%	12%	15%	18%	21%	24%	28%	33%	33%	33%
GAAP Net Income (Loss)	(19,266)	(7,837)	(22,829)	(5,707)	(5,955)	(6,452)	(6,700)	(24,814)	(14,833)	33,650	66,476	160,651	210,810	262,184	380,722	377,764
GAAP-EPS	(0.62)	(0.20)	(0.57)	(0.13)	(0.14)	(0.15)	(0.15)	(0.57)	(0.34)	0.77	1.51	3.63	4.74	5.87	8.49	8.39
GAAP-EPS (Dil)	(0.60)	(0.20)	(0.53)	(0.13)	(0.14)	(0.15)	(0.15)	(0.57)	(0.34)	0.77	1.51	3.63	4.74	5.87	8.49	8.39
Wgtd Avg Shrs (Bas) - '000s	32,253	38,819	43,358	43,520	43,564	43,607	43,651	43,586	43,760	43,936	44,112	44,288	44,466	44,644	44,823	45,002
Wgtd Avg Shrs (Dil) - '000s	32,253	38,819	43,358	43,520	43,564	43,607	43,651	43,586	43,760	43,936	44,112	44,288	44,466	44,644	44,823	45,002

Source: Dawson James estimates and company reports

Important Disclosures:

Price Chart:



Price target and rating changes over the past three years:

- Initiated – Buy – July 11, 2019 – Price Target \$15.00
- Update – Buy – August 12, 2019 – Price Target \$15.00
- Update – Buy – August 15, 2019 – Price Target \$15.00
- Update – Buy – August 19, 2019 – Price Target \$15.00
- Update – Buy – November 6, 2019 – Price Target \$15.00
- Update – Buy – February 19, 2020 – Price Target \$15.00
- Price Target Increase – Buy – March 9, 2020 – Price Target \$17.00
- Update – Buy – March 25, 2020 – Price Target \$17.00
- Update – Buy – April 13, 2020 – Price Target \$17.00
- Update – Buy – May 6, 2020 – Price Target \$17.00
- Update – Buy – June 9, 2020 – Price Target \$17.00
- Update – Buy – July 31, 2020 – Price Target \$15.00
- Update – Buy – August 12, 2020 – Price Target \$16.00
- Update – Buy – September 16, 2020 – Price Target \$16.00
- Update – Buy – October 14, 2020 – Price Target \$16.00
- Update – Buy – November 5, 2020 – Price Target \$16.00
- Update – Buy – December 2, 2020 – Price Target \$16.00
- Update – Buy – January 12, 2021 – Price Target \$16.00
- Update – Buy – January 19, 2021 – Price Target \$16.00
- Update – Buy – April 20, 2021 – Price Target \$16.00
- Update – Buy – May 6, 2021 – Price Target \$16.00
- Update – Buy – July 6, 2021 – Price Target \$16.00
- Update – Buy – September 1, 2021 – Price Target \$16.00
- Update – Buy – October 15, 2021 – Price Target \$16.00
- Update – Buy – November 9, 2021 – Price Target \$16.00
- Update – Buy – November 22, 2021 – Price Target \$16.00
- Update – Buy – January 18, 2022 – Price Target \$16.00
- Update – Buy – March 9, 2022 – Price Target \$16.00

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- 1) **Buy:** The analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months;
- 2) **Neutral:** The analyst believes the price of the stock is fairly valued for the next 12-18 months;
- 3) **Sell:** The analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

Current as of... 3-Mar-22

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	31	76%	4	13%
Market Perform (Neutral)	10	24%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	41	100%	4	10%

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