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CytoSorbents Corporation (NASDAQ/CTSO)

March 12, 2021

BUY: Another Strong Quarter

CytoSorbents reported 4th-quarter results, delivering another strong quarter, with revenues up sequentially to \$12M versus \$10M in the prior period. Management noted that the underlying core non-COVID-19 business in critical care and cardiac surgery grew 32% in 2020 over 2019 and accounted for 76% of Product Sales and COVID-19 revenues contributed \$9.4M. The company ended the year with \$74M in cash on the balance sheet.

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Investment Highlights

Clinical Priorities (adapted from the company's press release):

1. Leverage the Breakthrough Designation to remove ticagrelor (Brilinta) during urgent or emergent cardiothoracic surgery, and to implement the clinical and regulatory strategy to gain U.S. approval. Management expects to "imminently file" an investigational device exemption (IDE) application to conduct a well-designed and powered clinical trial in the U.S. to demonstrate the clinical benefit of the therapy, The STAR-T Trial (Safe and Timely Antithrombotic Removal of Ticagrelor).
2. Continue efforts to open the U.S. market for the removal of the direct oral anticoagulants (DOACs) in emergent or urgent cardiothoracic surgery. These include blockbuster anticoagulant medications such as the Factor Xa inhibitors – Eliquis®, Xarelto®, and Lixiana® and Savaysa®, as well as the direct thrombin inhibitors such as Pradaxa (dabigatran). The addressable market in the U.S. alone is estimated by the company to be \$500M.
3. The company has sponsored the CyTation trial in Germany for ticagrelor removal. The trial is open for enrollment, though the U.K. TISORB study has been impacted by COVID-19 restrictions in that country
4. The company plans to resume the U.S. REFRESH 2-AKI trial as soon as possible, pending COVID-19 restrictions.
5. In addition to the studies above, the company plans to initiate multiple other company-sponsored studies this year, including the multi-center, randomized, controlled PROCYSS (Prospective, Randomized, COntrolled Trial To Evaluate CYtoSorb For Shock Reversal in Septic Shock) trial in refractory septic shock in Germany anticipated to start in the third quarter, and the HepOnFire single arm pilot study in liver disease, expected to start in the fourth quarter. The results of the REMOVE endocarditis study are expected soon. Management plans to submit a publication on the results from ECMO and CytoSorb from the multi-center U.S. CTC registry and a review article summarizing the international experience in COVID-19 patients treated with CytoSorb and CRRT or hemoperfusion."

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 select a more aggressive 15%, we arrive at a \$26.00 target. If we select a mid-point (22.5%), we derive a \$16.00 target, which reflects the revised share count from the recent capital raise.

Risks. Market risks, Regulatory risks, Financial risks, and Commercialization risks.

Current Price \$8.57
Price Target \$15.00

Estimates	F2019A	F2020A	F2021E
Expenses (\$000s)	\$ 43,924	\$ 51,375	\$ 59,354
1Q March	\$ 9,475	\$ 11,186	\$ 13,651
2Q June	\$ 9,862	\$ 13,093	\$ 14,245
3Q September	\$ 11,723	\$ 12,506	\$ 15,432
4Q December	\$ 12,864	\$ 14,590	\$ 16,026

	F2019A	F2020A	F2021E
EPS (diluted)	\$ (0.62)	\$ (0.20)	\$ 0.21
1Q March	\$ (0.15)	\$ (0.10)	\$ 0.05
2Q June	\$ (0.11)	\$ (0.08)	\$ 0.05
3Q September	\$ (0.21)	\$ (0.02)	\$ 0.05
4Q December	\$ (0.14)	\$ 0.00	\$ 0.06

EBITDA/Share	(\$0.63)	(\$0.23)	\$0.23
EV/EBITDA (x)	0.0	0.0	0.0

Stock Data			
52-Week Range	\$3.60	-	\$11.74
Shares Outstanding (mil.)	43.3		
Market Capitalization (mil.)	\$371		
Enterprise Value (mil.)	\$351		
Debt to Capital	0%		
Book Value/Share	\$0.35		
Price/Book	4.3		
Average Three Months Trading Volume (K)	491		
Insider Ownership	11.4%		
Institutional Ownership	42.6%		
Short interest (mil.)	5.6%		
Dividend / Yield	\$0.00/0.0%		

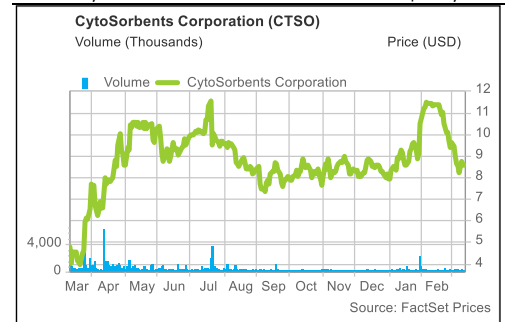


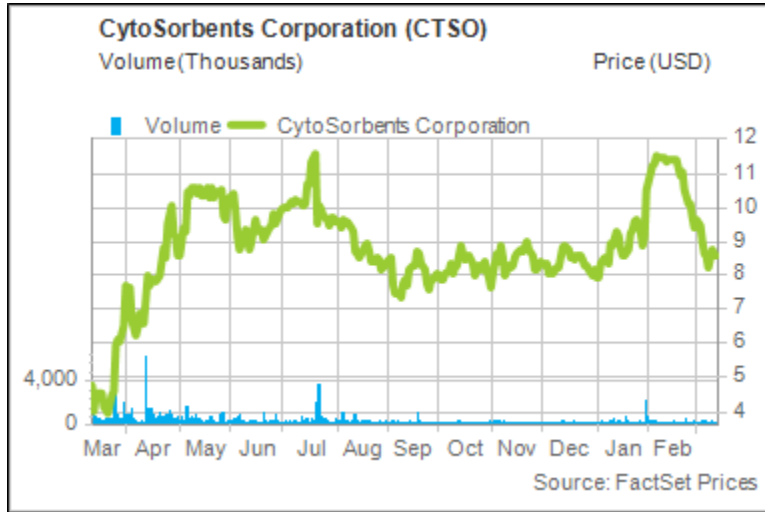
Exhibit 1. Income Statement

CTSO.: Income Statement (\$000)																
YE December 31	2019A	2020A	1Q21E	2Q21E	3Q21E	4Q21E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue:																
CytoSorb Direct Sales (Germany, Austria, Switzerland)	22,766	25,568	9,255	9,657	10,462	10,865	40,239	54,439	69,046	84,070	99,520	115,405	131,735	148,520	150,699	150,699
CytoSorb Distributor (Rest of EU)		10,240	3,067	3,201	3,467	3,601	13,336	21,587	27,297	41,422	55,871	70,651	85,766	86,763	87,771	87,771
CytoSorb (Cardiac surgery EU)		3,460	1,579	1,648	1,785	1,854	6,866	9,218	11,604	14,022	16,474	16,589	16,705	16,822	16,940	16,940
CytoSorb (Cardiac surgery US)		-	-	-	-	-	-	-	16,294	21,899	27,593	66,755	67,290	67,829	68,373	68,373
CytoSorb (sepsis US)		-	2,018	2,106	2,281	2,369	8,773	17,846	45,376	92,302	187,755	200,508	223,353	246,919	271,225	271,225
VetResQ		185	45	47	51	52	194	204	214	225	236	-	-	-	-	-
Other Sales		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Product Sales	22,766	39,453	15,964	16,658	18,046	18,740	69,409	103,293	169,831	253,939	387,449	469,908	524,849	566,853	595,008	595,008
Royalty (HemoDefend US)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grant revenue	2,184	1,552	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	24,950	41,005	15,964	16,658	18,046	18,740	69,409	103,293	169,831	253,939	387,449	469,908	524,849	566,853	595,008	595,008
Expenses:																
Costs of Goods Sold	7,364	11,053	3,193	3,332	3,609	3,748	13,882	20,659	33,966	50,788	77,490	93,982	104,970	113,371	119,002	119,002
	%COGS	25%	28%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Research and Development	12,092	8,810	2,229	2,326	2,520	2,617	9,691	10,660	11,726	12,898	14,188	15,607	17,168	18,885	20,773	22,850
	%R&D	53%	22%	14%	14%	14%	14%	10%	7%	5%	4%	3%	3%	3%	3%	4%
Selling, General and Administrative	22,006	28,464	7,529	7,856	8,511	8,838	32,734	36,007	36,727	37,462	38,211	38,975	39,755	40,550	41,361	42,188
	%SG&A	97%	72%	47%	47%	47%	47%	35%	22%	15%	10%	8%	8%	7%	7%	7%
Legal, financial and other counseling	2,462	3,048	701	732	792	823	3,048	3,048	3,048	3,048	3,048	3,048	3,048	3,048	3,048	3,048
Total Expenses	43,924	51,375	13,651	14,245	15,432	16,026	59,354	70,374	85,467	104,196	132,937	151,612	164,940	175,853	184,183	187,088
Operating Income (Loss)	(18,974)	(10,370)	2,313	2,413	2,614	2,715	10,054	32,920	84,364	149,743	254,512	318,296	359,909	391,000	410,824	407,920
Interest income (expense), net																
Gain (loss) on foreign currency transactions	(1,384)															
Change in warrant liability		1,406														
Other income (expense), net																
Total Other Income	(1,384)	1,406	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pretax Income	(20,358)	(8,964)	2,313	2,413	2,614	2,715	10,054	32,920	84,364	149,743	254,512	318,296	359,909	391,000	410,824	407,920
Income Tax Benefit (Provision)	1,092	1,127	231	241	261	271	1,005	3,950	12,655	26,954	53,448	76,391	100,774	129,030	135,572	134,614
Tax Rate	5%	8%	10%	10%	10%	10%	10%	12%	15%	18%	21%	24%	28%	33%	33%	33%
GAAP Net Income (Loss)	(19,266)	(7,837)	2,081	2,172	2,353	2,443	9,049	28,969	71,709	122,790	201,064	241,905	259,134	261,970	275,252	273,306
GAAP-EPS	(0.62)	(0.20)	0.05	0.05	0.05	0.06	0.21	0.67	1.64	2.80	4.57	5.47	5.84	5.88	6.15	6.09
GAAP-EPS (Dil)	(0.60)	(0.20)	0.05	0.05	0.05	0.06	0.21	0.67	1.64	2.80	4.57	5.47	5.84	5.88	6.15	6.09
Wgtd Avg Shrs (Bas) - '000s	32,253	38,818	43,259	43,302	43,346	43,389	43,324	43,498	43,672	43,847	44,023	44,199	44,376	44,554	44,732	44,911
Wgtd Avg Shrs (Dil) - '000s	32,253	38,818	43,259	43,302	43,346	43,389	43,324	43,498	43,672	43,847	44,023	44,199	44,376	44,554	44,732	44,911

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 – March 12, 2021 – Price Target \$16.00

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- 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.

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Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	21	72%	6	29%
Market Perform (Neutral)	8	28%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	29	100%	6	21%

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