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CytoSorbents Corporation (NASDAQ/CTSO)

January 19, 2020

BUY: The Good Doctor: Cytosorb Approved in Korea

CytoSorbents announced that the Korean Ministry of Food and Drug Safety (KMFDS) has approved CytoSorb for all equivalent European Union (E.U.) approved indications, including the reduction of cytokine storm, the reduction of bilirubin in liver disease, the reduction of myoglobin in trauma, and the removal of ticagrelor and rivaroxaban during urgent or emergent cardiothoracic surgery. It reminds us of how "state of the art" medicine is today in South Korea. The Good Doctor is based on a Korean drama.

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Investment Highlights

2020 Results. Treatments delivered exceeded 121,000, up from 80,000 at the end of 2019, Preliminary 2020 unaudited Total Revenue, which includes product sales and grant revenue, was approximately \$40.8 million versus \$24.9 million in 2019, Preliminary 2020 unaudited Product Sales increased 73% to roughly \$39.5 million, from \$22.8 million in 2019, driven by strength across all sales units. Preliminary Q4 2020 unaudited Total Revenue was approximately \$11.8 million versus \$7.4 million in Q4 2019. Initial Q4 2020 unaudited Product Sales rose 74% to approximately \$11.5 million, compared to \$6.6 million in Q4 2019. Preliminary blended product gross margins are expected to approach 80% for Q4 2020, mixing higher margin direct and lower margin distributor and partner sales. A healthy cash balance at the end of 2020 was more than \$71 million, following the repayment of the \$15 million term loan from Bridge Bank in Q4 2020.

COVID in Canada: CytoSorbents announced that Health Canada had granted Medical Device Authorization for the importation, sale, and emergency use of CytoSorb in hospitalized COVID-19 patients under Interim Order (IO) ID# 316575. CytoSorbents will collaborate with ebbtides medical, a specialty distributor of medical products throughout Canada, to ensure rapid and widespread availability of the therapy.

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 **\$8.73**
 Price Target **\$16.00**

Estimates	F2019A	F2020E	F2021E
Expenses (\$000s)	\$ 43,924	\$ 49,531	\$ 56,863
1Q March	\$ 9,475	\$ 11,186	\$ 13,078
2Q June	\$ 9,862	\$ 13,093	\$ 13,647
3Q September	\$ 11,723	\$ 12,506	\$ 14,784
4Q December	\$ 12,864	\$ 12,746	\$ 15,353
	F2019A	F2020E	F2021E
EPS (diluted)	\$ (0.62)	\$ (0.25)	\$ 0.27
1Q March	\$ (0.15)	\$ (0.10)	\$ 0.06
2Q June	\$ (0.11)	\$ (0.08)	\$ 0.06
3Q September	\$ (0.21)	\$ (0.02)	\$ 0.07
4Q December	\$ (0.14)	\$ (0.05)	\$ 0.07

EBITDA/Share	(\$0.63)	(\$0.26)	\$0.30
EV/EBITDA (x)	0.0	0.0	0.0

Stock Data		
52-Week Range	\$3.60	- \$11.74
Shares Outstanding (mil.)	43.2	
Market Capitalization (mil.)	\$377	
Enterprise Value (mil.)	\$357	
Debt to Capital	0%	
Book Value/Share	\$0.35	
Price/Book	36.7	
Average Three Months Trading Volume (K)	231	
Insider Ownership	11.4%	
Institutional Ownership	40.2%	
Short interest (mil.)	7.0%	
Dividend / Yield	\$0.00/0.0%	

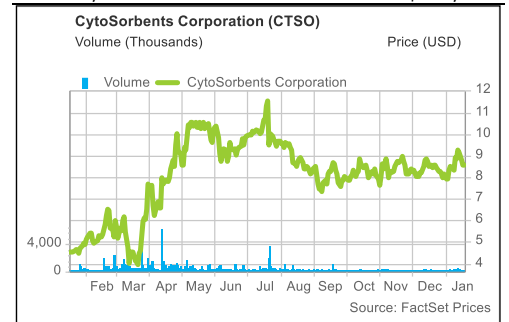


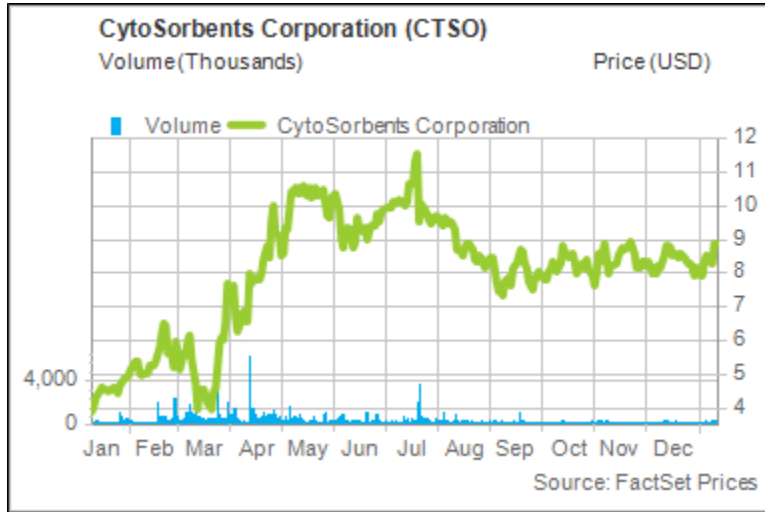
Exhibit 1. Income Statement

CTSO: Income Statement (\$000)																				
YE December 31	1Q19A	2Q19A	3Q19A	4Q19A	2019A	1Q20A	2Q20A	3Q20A	4Q20E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue:																				
CytoSorb Direct Sales (Germany, Austria, Switzerland)	4,576	5,850	5,728	6,612	22,766	5,050	5,500	6,930	7,000	24,480	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)	-	-	-	-	-	2,350	2,800	2,497	2,593	10,240	13,336	21,587	27,297	41,422	55,871	70,651	85,766	86,763	87,771	87,771
CytoSorb (Cardiac surgery EU)	-	-	-	-	-	710	1,160	780	810	3,460	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)	-	-	-	-	-	-	-	-	-	-	8,773	17,846	45,376	92,302	187,755	200,508	223,353	246,919	271,225	271,225
VetResQ	-	-	-	-	-	45	60	39	41	185	194	204	214	225	236	-	-	-	-	-
Other Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Product Sales	4,576	5,850	5,728	6,612	22,766	8,155	9,520	10,246	10,444	38,365	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	615	382	367	820	2,184	551	275	301	-	1,127	-	-	-	-	-	-	-	-	-	-
Other revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	5,191	6,232	6,095	7,432	24,950	8,706	9,795	10,547	10,444	39,492	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	1,738	1,834	1,696	2,096	7,364	2,385	3,250	2,890	2,946	11,471	13,882	20,659	33,966	50,788	77,490	93,982	104,970	113,371	119,002	119,002
	38%	29%	25%	25%	25%	29%	20%	28%	28%	28%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Research and Development	2,418	2,930	3,185	3,559	12,092	1,965	2,406	1,753	2,000	8,125	8,937	9,831	10,814	11,895	13,085	14,394	15,833	17,416	19,158	21,074
	53%	50%	56%	54%	53%	24%	25%	17%	19%	21%	13%	10%	9%	5%	3%	3%	3%	3%	3%	4%
Selling, General and Administrative	4,758	4,506	6,108	6,634	22,006	6,317	6,591	7,282	7,200	27,390	31,499	34,649	35,342	36,048	36,769	37,505	38,255	39,020	39,800	40,596
	104%	77%	107%	100%	97%	77%	69%	71%	69%	71%	45%	34%	21%	14%	9%	8%	7%	7%	7%	7%
Legal, financial and other counseling	561	592	733	576	2,462	519	846	580	600	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545
Total Expenses	9,475	9,862	11,723	12,864	43,924	11,186	13,093	12,506	12,746	49,531	56,863	67,683	82,667	101,277	129,889	148,425	161,603	172,352	180,505	183,216
Operating Income (Loss)	(4,284)	(3,630)	(5,628)	(5,432)	(18,974)	(2,480)	(3,298)	(1,960)	(2,302)	(10,040)	12,546	35,610	87,164	152,663	257,560	321,483	363,247	394,501	414,503	411,791
Interest income (expense), net	(205)	(214)	(302)	-	-	(306)	705	1,381	-	-	-	-	-	-	-	-	-	-	-	-
Gain (loss) on foreign currency transactions	(393)	297	(956)	(332)	(1,384)	(668)	(274)	(261)	-	-	-	-	-	-	-	-	-	-	-	-
Change in warrant liability	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other income (expense), net	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Income	(598)	83	(1,258)	(332)	(1,384)	(974)	431	1,120	-	-	-	-	-	-	-	-	-	-	-	-
Pretax Income	(4,882)	(3,547)	(6,886)	(5,764)	(20,358)	(3,454)	(2,867)	(840)	(2,302)	(10,040)	12,546	35,610	87,164	152,663	257,560	321,483	363,247	394,501	414,503	411,791
Income Tax Benefit (Provision)	-	-	-	1,092	1,092	-	-	-	(184)	(803)	1,255	4,273	13,075	27,479	54,088	77,156	101,709	130,185	136,786	135,891
Tax Rate	0%	5%	5%	5%	5%	8%	8%	8%	8%	8%	10%	12%	15%	18%	21%	24%	28%	33%	33%	33%
GAAP Net Income (Loss)	(4,882)	(3,547)	(6,886)	(4,672)	(19,266)	(3,454)	(2,867)	(840)	(2,118)	(9,237)	11,291	31,337	74,089	125,183	203,472	244,327	261,638	264,316	277,717	275,900
GAAP-EPS	(0.15)	(0.11)	(0.21)	(0.14)	(0.62)	(0.10)	(0.08)	(0.02)	(0.05)	(0.25)	0.27	0.75	1.76	2.96	4.80	5.74	6.12	6.16	6.44	6.38
GAAP-EPS (Dil)	(0.15)	(0.11)	(0.21)	(0.14)	(0.60)	(0.10)	(0.08)	(0.02)	(0.05)	(0.24)	0.27	0.75	1.76	2.96	4.80	5.74	6.12	6.16	6.44	6.38
Wgtd Avg Shrs (Bas) - '000s	31,931	32,267	32,366	32,450	32,253	33,981	36,483	41,593	41,635	38,423	41,739	41,906	42,074	42,243	42,412	42,582	42,752	42,924	43,096	43,268
Wgtd Avg Shrs (Dil) - '000s	31,931	32,267	32,366	32,450	32,253	33,981	36,483	41,593	41,635	38,423	41,739	41,906	42,074	42,243	42,412	42,582	42,752	42,924	43,096	43,268

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

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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	78%	3	14%
Market Perform (Neutral)	6	22%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	27	100%	3	11%

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