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CytoSorbents Corporation (NASDAQ/CTSO)

November 22, 2021

BUY: "One Stop Shopping" STAR-D

We spoke with management at some length after the 3Q results were reported. We have been following the Company for many years, and we felt its time to review our assumptions and timeline. Our model changes reflect this discussion. The net result is no change to our price target (\$16.00). We see multiple trials and their associated catalysts poised to play out over the next two years, that should transform the Company as CytoSorb and all its uses ("One Stop Shopping") are validated through trial results.

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Investment Highlights

"One Stop Shopping": The story at CytoSorb has shifted around a little bit over the past few years, and as a result, we have revised our model. The net effect is no change to our valuation or price target. **So, what changed?** We adjust our model to reflect the potential of the STAR-D trial, which represents "one-stop shopping" in terms of blood thinner removal before cardiac surgery. For example, Ticagrelor today has close to half of the blood thinner market. We expect its market share to grow versus cheaper but irreversible platelet aggregation inhibitors such as Plavix (inexpensive), particularly as Ticagrelor's patent expires in 2024.

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.

Acute Coronary Syndrome – A significant percentage of patients (5-10%) are not eligible for PCI procedure (percutaneous Coronary Intervention) and, as such, need to have platelet aggregation therapy reversed prior to surgery, at 50,000 patients, this market segment alone represents up to \$250M.

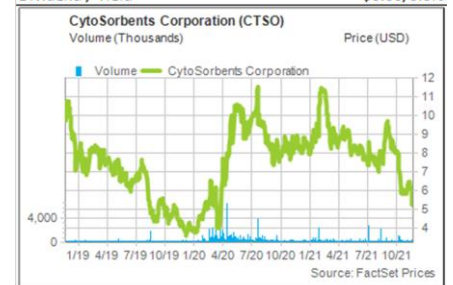
Valuation. We use a series of therapeutic models across the various indications and geographies and project product revenues for the Company out to the year 2030. In our U.S. therapeutic models, we apply a 30% risk cut (70% success probability) that both U.S. approvals and our market share forecasts 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

Stock Data		
52-Week Range	\$5.00 -	\$11.68
Shares Outstanding (mil.)	43.5	
Market Capitalization (mil.)	\$220	
Enterprise Value (mil.)	\$201	
Debt to Capital	0%	
Book Value/Share	\$0.35	
Price/Book	4.3	
Average Three Months Trading Volume (K)	176	
Insider Ownership	11.7%	
Institutional Ownership	45.6%	
Short interest (mil.)	3.0%	
Dividend / Yield	\$0.00/0.0%	



Valuation: Below are our valuation models. These are driven by our therapeutic models. The most significant change to our models is the inclusion of the U.S. platelet aggregation inhibitors removal marketplace and adjustments to the timeline across all our models. We see sales "breaking out" by 2024 as CytoSorb enters the U.S. marketplace for "removal" of platelet aggregation inhibitors.

Exhibit 1. Free Cash Flow to the Firm (FCFF) Model

Average \$	16
Price Target \$	15
Year	2022

DCF Valuation Using FCF (mln):

units ('000)	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(17,830)	(20,358)	(8,964)	(15,460)	(17,839)	(6,290)	53,076	97,145	225,430	307,988	407,775	586,075	583,171
Tax Rate	0%	5%	8%	10%	12%	15%	18%	21%	24%	28%	33%	33%	33%
EBIT (1-t)	(17,830)	(19,340)	(8,247)	(13,914)	(15,698)	(5,346)	43,522	76,744	171,327	221,752	273,209	392,671	390,725
CapEx	(493)	(698)	(768)	(845)	(929)	(1,022)	(1,124)	(1,237)	(1,361)	(1,497)	(1,646)	(1,811)	(1,992)
Depreciation	391	582	495	1,875	-	-	-	-	-	-	-	-	-
Change in NWC	-	-	-	-	-	-	-	-	-	-	-	-	-
FCF	(17,932)	(19,457)	(8,520)	(12,883)	(16,627)	(6,368)	42,398	75,507	169,967	220,255	271,563	390,860	388,733
PV of FCF	(43,780)	(38,001)	(13,312)	(16,104)	(16,627)	(5,095)	27,135	38,660	69,618	72,173	71,189	81,969	65,219
Discount Rate	25.0%												
Long Term Growth Rate	1%												
Terminal Cash Flow	1,635,916												
Terminal Value YE2030	274,461												
NPV	678,702												
NPV-Debt	-												
Shares out ('000)	44,963	2030E											
NPV Per Share	15												

Source: Dawson James estimates

Exhibit 2. Discounted EPS Model

Current Year	2022
Year of EPS	2030
Earnings Multiple	15
Discount Factor	25.0%
Selected Year EPS	8.69
NPV	21.87

Source: Dawson James estimates

		Discount Rate and Earnings Multiple Varies, Year is Constant						
		21.87	5%	10%	15%	20%	25%	30%
Earnings Multiple	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	29.41	20.27	14.20	10.10	7.29	5.33	
	10	58.82	40.54	28.41	20.21	14.58	10.65	
	15	88.22	60.81	42.61	30.31	21.87	15.98	
	20	117.63	81.08	56.81	40.42	29.16	21.31	
	25	147.04	101.35	71.02	50.52	36.45	26.63	
	30	176.45	121.62	85.22	60.63	43.74	31.96	
	35	205.86	141.89	99.43	70.73	51.03	37.28	

Exhibit 3. Sum of the Parts Model

CytoSorbents	LT Gr	Discount Rate	Yrs to Mkt	% Success	Peak Sales (MMs)	Term Val
CytoSorb - Sepsis Direct Sales (EU)	1%	25.0%	0	70%	\$92	\$384
NPV						\$3
CytoSorb - Sepsis Distributor (EU)	1%	25.0%	0	70%	\$34	\$141
NPV						\$1
CytoSorb (Cardiac surgery US)	1%	25.0%	2	50%	\$68	\$285
NPV						\$1.12
CytoSorb (Cardiac surgery EU)	1%	25.0%	0	70%	\$17	\$71
NPV						\$0.6
CytoSorb (Removal)	1%	25.0%	4	50%	\$603	\$2,511
NPV						\$6.3
Net Margin						55%
MM Shrs OS (2030E)						45
Total						\$13

Source: Dawson James estimates

Exhibit 4. Therapeutic Models

	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CytoSorb - Direct Sales (Germany, Austria, Switzerland)													
EU population	506,327,109	507,441,029	508,557,399	509,676,225	510,797,513	511,921,267	513,047,494	514,176,199	515,307,386	516,441,062	517,577,233	518,715,903	519,857,078
Germany population	81,202,563	81,632,936	82,065,591	82,500,539	82,937,791	83,377,362	83,819,262	84,263,504	84,710,100	85,159,064	85,610,407	86,064,142	86,520,282
Austria population	8,446,189	8,448,723	8,451,257	8,453,793	8,456,329	8,458,866	8,461,404	8,463,942	8,466,481	8,469,021	8,471,562	8,474,103	8,476,646
Switzerland population	8,098,152	8,115,158	8,132,200	8,149,277	8,166,391	8,183,540	8,200,726	8,217,947	8,235,205	8,252,499	8,269,829	8,287,196	8,304,599
Critical care population (Sepsis included)	498,509	500,804	503,110	505,428	507,759	510,101	512,455	514,822	517,200	519,591	521,994	524,410	526,838
Percent of patients with access to hospitals with Cytosorb	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total patients	249,254.60	250,401.88	251,555.07	252,714.20	253,879.30	255,050.41	256,227.55	257,410.75	258,600.06	259,795.49	260,997.08	262,204.88	263,418.89
Market penetration	1.2%	1.7%	1.8%	1.9%	2.3%	2.6%	3.0%	3.5%	4.0%	4.6%	5.3%	6.1%	7.0%
Total addressable patients	2,991	4,257	4,528	4,802	5,839	6,746	7,794	9,004	10,403	12,018	13,885	16,042	18,534
Estimated units per patient	5	5	5	5	5	5	5	5	5	5	5	5	5
Total filter needed	14,955	21,284	22,640	24,008	29,196	33,730	38,969	45,021	52,014	60,092	69,426	80,209	92,668
Cost of therapy	\$ 1,030	\$ 1,041	\$ 1,051	\$ 1,062	\$ 1,072	\$ 1,083	\$ 1,094	\$ 1,105	\$ 1,116	\$ 1,127	\$ 1,138	\$ 1,149	\$ 1,161
Change in price	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Revenue ('000)	\$ 15,408	\$ 22,148	\$ 23,795	\$ 25,485	\$ 31,302	\$ 36,525	\$ 42,620	\$ 49,732	\$ 58,030	\$ 67,713	\$ 79,013	\$ 92,198	\$ 107,584
Risk factor													
Total revenue ('000)	\$ 15,408	\$ 22,148	\$ 23,795	\$ 25,485	\$ 31,302	\$ 36,525	\$ 42,620	\$ 49,732	\$ 58,030	\$ 67,713	\$ 79,013	\$ 92,198	\$ 107,584
CytoSorb - Distributor (Rest of EU)													
EU population (Germany, Austria & Switzerland excluded)	408,580,205	409,244,211	409,908,351	410,572,616	411,237,001	411,901,499	412,566,103	413,230,806	413,895,600	414,560,479	415,225,435	415,890,462	416,555,551
Critical care population (Sepsis included)	2,083,759	2,087,145	2,090,533	2,093,920	2,097,309	2,100,698	2,104,087	2,107,477	2,110,868	2,114,258	2,117,650	2,121,041	2,124,433
Percent of patients with access to hospitals with Cytosorb	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Total patients	833,503.62	834,858.19	836,213.04	837,568.14	838,923.48	840,279.06	841,634.85	842,990.84	844,347.02	845,703.38	847,059.89	848,416.54	849,773.32
Market penetration	0.2%	0.3%	0.4%	0.5%	0.6%	0.7%	0.8%	0.9%	1.0%	1.1%	1.2%	1.3%	1.4%
Total addressable patients	1,667	2,505	3,345	4,188	4,995	5,839	6,746	7,794	9,004	10,403	12,018	13,885	16,042
Estimated units per patient	5	5	5	5	5	5	5	5	5	5	5	5	5
Total filter needed	8,335	12,523	16,724	20,939	25,197	29,497	33,839	38,221	42,641	47,099	51,596	56,133	60,711
Cost of therapy	\$ 618	\$ 624	\$ 631	\$ 637	\$ 643	\$ 650	\$ 656	\$ 663	\$ 669	\$ 676	\$ 683	\$ 690	\$ 697
Change in price	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Revenue ('000)	\$ 5,153	\$ 7,819	\$ 10,546	\$ 13,336	\$ 16,192	\$ 19,124	\$ 22,138	\$ 25,232	\$ 28,413	\$ 31,681	\$ 35,037	\$ 38,493	\$ 42,050
Risk factor													
Total revenue ('000)	\$ 5,153	\$ 7,819	\$ 10,546	\$ 13,336	\$ 16,192	\$ 19,124	\$ 22,138	\$ 25,232	\$ 28,413	\$ 31,681	\$ 35,037	\$ 38,493	\$ 42,050
CytoSorb Cardiac Surgery US													
US population	327,296,502	329,587,577	331,894,690	334,217,953	336,557,479	338,913,381	341,285,775	343,674,775	346,080,499	348,503,062	350,942,583	353,399,182	355,872,976
Cardiac surgery	1,009,027	1,012,054	1,015,090	1,018,136	1,021,190	1,024,254	1,027,326	1,030,408	1,033,499	1,036,600	1,039,710	1,042,829	1,045,957
Market penetration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total addressable patients	-	-	-	-	-	-	4,109	5,152	6,206	7,274	8,352	9,441	10,541
Estimated units per patient	-	-	-	3	3	3	3	3	3	3	3	3	3
Total filter needed	-	-	-	3	3	3	3	3	3	3	3	3	3
Cost of therapy	-	\$ 2,500	\$ 2,513	\$ 2,525	\$ 2,538	\$ 2,550	\$ 2,563	\$ 2,576	\$ 2,589	\$ 2,602	\$ 2,615	\$ 2,628	\$ 2,641
Change in price	-	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Revenue ('000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,284	\$ 39,419	\$ 47,564	\$ 55,718	\$ 63,881	\$ 72,052	\$ 80,232
Risk factor													
Total revenue ('000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,284	\$ 39,419	\$ 47,564	\$ 55,718	\$ 63,881	\$ 72,052	\$ 80,232
CytoSorb Cardiac Surgery EU													
Cardiac surgery	1,509,018	1,512,036	1,515,050	1,518,060	1,521,126	1,524,189	1,527,217	1,530,271	1,533,332	1,536,399	1,539,471	1,542,550	1,545,635
Market penetration	0.09%	0.1%	0.2%	0.3%	0.4%	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Total addressable patients	1,358	1,512	2,273	4,554	6,085	7,621	9,163	10,712	12,268	13,834	15,411	17,000	18,599
Estimated units per patient	3	3	3	3	3	3	3	3	3	3	3	3	3
Total filter needed	4,074	4,536	6,818	13,663	18,254	22,863	27,490	32,136	36,800	41,483	46,186	50,909	55,642
Cost of therapy	\$ 500	\$ 500	\$ 500	\$ 503	\$ 505	\$ 508	\$ 510	\$ 513	\$ 515	\$ 518	\$ 520	\$ 523	\$ 526
Change in price	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Revenue ('000)	\$ 2,037	\$ 2,268	\$ 3,409	\$ 6,866	\$ 9,218	\$ 11,604	\$ 14,022	\$ 16,474	\$ 18,961	\$ 21,484	\$ 24,044	\$ 26,641	\$ 29,275
Risk factor													
Total revenue ('000)	\$ 2,037	\$ 2,268	\$ 3,409	\$ 6,866	\$ 9,218	\$ 11,604	\$ 14,022	\$ 16,474	\$ 18,961	\$ 21,484	\$ 24,044	\$ 26,641	\$ 29,275
CytoSorb Other US													
US population	327,296,502	329,587,577	331,894,690	334,217,953	336,557,479	338,913,381	341,285,775	343,674,775	346,080,499	348,503,062	350,942,583	353,399,182	355,872,976
Patients on Blood Thinners	8,182,413	8,239,689	8,297,367	8,355,449	8,413,937	8,472,835	8,532,144	8,591,869	8,652,012	8,712,577	8,773,565	8,834,980	8,896,824
Patients who need "immediate surgery" requiring removal 5 to 10%	409,121	411,984	414,868	417,772	420,697	423,642	426,607	429,593	432,600	435,628	438,676	441,745	444,834
Market penetration	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	1.0%	2.0%	4.0%	5.0%	6.0%	8.0%	9.0%
Total addressable patients	-	-	-	5	5	2,118	4,266	8,592	20,765	30,494	42,113	63,612	90,071
Estimated units per patient	-	-	-	5	5	5	5	5	5	5	5	5	5
Total filter needed	-	-	-	5	5	10,591	21,330	42,959	103,824	152,470	210,566	318,059	400,357
Cost of therapy	-	\$ 2,500	\$ 2,513	\$ 2,525	\$ 2,538	\$ 2,550	\$ 2,563	\$ 2,576	\$ 2,602	\$ 2,654	\$ 2,680	\$ 2,706	\$ 2,734
Change in price	-	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Revenue ('000)	\$ -	\$ -	\$ -	\$ -	\$ 27,010	\$ 54,942	\$ 111,759	\$ 227,801	\$ 455,602	\$ 683,403	\$ 911,204	\$ 1,139,005	\$ 1,366,806
Risk factor													
Total revenue ('000)	\$ -	\$ -	\$ -	\$ -	\$ 27,010	\$ 54,942	\$ 111,759	\$ 227,801	\$ 455,602	\$ 683,403	\$ 911,204	\$ 1,139,005	\$ 1,366,806
HemoDefend (US)													
Patients receive blood transfusions	15,226,127	15,302,258	15,378,769	15,455,663	15,532,941	15,610,606	15,688,659	15,767,102	15,845,937	15,925,167	16,004,793	16,084,817	16,165,241
Market penetration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	4.0%	6.0%	6.0%	6.0%	6.0%
Total addressable patients	-	-	-	-	-	-	156,887	473,013	633,837	955,510	960,288	965,089	969,914
Estimated units needed per patient	-	2	2	2	2	2	2	2	2	2	2	2	2
Total units needed	-	2	2	2	2	2	2	2	2	2	2	2	2
Cost of therapy	\$ 505	\$ 510	\$ 515	\$ 520	\$ 526	\$ 531	\$ 536	\$ 541	\$ 547	\$ 552	\$ 558	\$ 563	\$ 569
Change in price	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Revenue ('000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 168,204	\$ 512,205	\$				

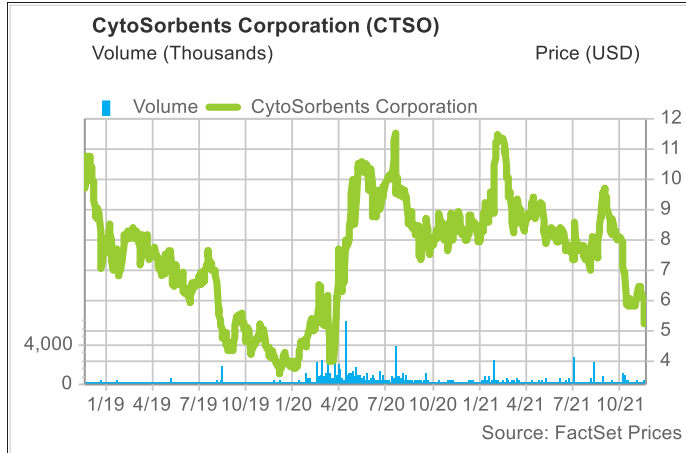
Exhibit 5. Income Statement

CTSQ - Income Statement (\$000)																				
YE December 31	2019A	2020A	1Q21A	2Q21A	3Q21A	4Q21E	2021E	1Q22E	2Q22E	3Q22E	4Q22E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue:																				
CytoSorb Direct Sales (Germany, Austria, Switzerland)	22,766	25,607	7,000	8,214	6,100	6,000	27,314	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	3,098	3,100	2,800	1,500	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)		-	-	-	-	-	-	-	-	-	-	-	-	92,302	187,755	200,508	291,330	395,071	552,495	552,495
VetResQ		185	45	46	1	52	194	47	49	53	55	204	214	225	236	-	-	-	-	-
Other Sales		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Product Sales	22,766	39,452	10,143	11,360	8,901	7,552	38,007	9,164	9,563	10,359	10,758	39,844	56,513	186,946	300,262	363,372	468,040	587,820	763,843	763,843
Royalty (HemoDefend US)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grant revenue	2,184	1,552	455	664	859	-	1,978	-	-	-	-	-	-	-	-	-	-	-	-	-
Other revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	24,950	41,004	10,598	12,024	9,760	7,552	39,985	9,164	9,563	10,359	10,758	39,844	56,513	186,946	300,262	363,372	468,040	587,820	763,843	763,843
Expenses:																				
Costs of Goods Sold	7,364	11,052	2,751	2,710	2,463	2,049	9,973	1,833	1,913	2,072	2,152	7,969	11,303	37,389	60,052	72,674	93,608	117,564	152,769	152,769
	%COGS	25%	27%	27%	27%	27%	27%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Research and Development	12,092	8,810	2,282	3,699	4,262	2,617	9,691	2,452	2,558	2,772	2,878	10,660	11,726	12,898	14,188	15,607	17,168	18,885	20,773	22,850
	%R&D	53%	22%	22%	33%	48%	25%	27%	27%	27%	27%	27%	21%	7%	5%	4%	4%	3%	3%	3%
Selling, General and Administrative	22,006	28,463	7,710	9,821	7,777	8,838	32,733	8,281	8,641	9,362	9,722	36,006	36,726	37,461	38,210	38,974	39,753	40,549	41,360	42,187
	%SG&A	97%	72%	76%	86%	87%	86%	90%	90%	90%	90%	90%	65%	20%	13%	11%	8%	7%	5%	6%
Legal, financial and other counseling	2,462	3,048	708	717	665	823	3,048	701	732	792	823	3,048	3,048	3,048	3,048	3,048	3,048	3,048	3,048	3,048
Total Expenses	43,924	51,373	13,451	16,947	15,166	14,326	55,445	13,267	13,844	14,987	15,574	57,682	62,802	90,796	115,498	130,303	153,577	180,045	217,949	220,854
Operating Income (Loss)	(18,974)	(10,369)	(2,853)	(4,923)	(5,407)	(6,774)	(15,460)	(4,103)	(4,281)	(4,638)	(4,816)	(17,839)	(6,290)	96,150	184,764	233,069	314,462	407,775	545,894	542,990
Interest income (expense), net	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain (loss) on foreign currency transactions	(1,384)	(1,201)	(10)	(13)	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in warrant liability	2,607	-	(1,306)	243	(1,013)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other income (expense), net	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Income	(1,384)	1,406	(1,316)	247	247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pretax Income	(20,358)	(8,964)	(4,168)	(4,676)	(6,407)	(6,774)	(15,460)	(4,103)	(4,281)	(4,638)	(4,816)	(17,839)	(6,290)	96,150	184,764	233,069	314,462	407,775	545,894	542,990
Income Tax Benefit (Provision)	1,092	1,127	-	-	-	(677)	(1,546)	(492)	(514)	(557)	(578)	(2,141)	(943)	17,307	38,800	55,937	88,049	134,566	180,145	179,187
Tax Rate	5%	8%	10%	10%	10%	10%	10%	12%	12%	12%	12%	12%	15%	18%	24%	28%	33%	33%	33%	33%
GAAP Net Income (Loss)	(19,266)	(7,837)	(4,168)	(4,676)	(6,407)	(6,097)	(13,914)	(3,611)	(3,768)	(4,081)	(4,238)	(15,698)	(5,346)	76,843	145,963	177,132	226,413	273,209	365,749	363,803
GAAP-EPS	(0.62)	(0.20)	(0.10)	(0.11)	(0.15)	(0.14)	(0.49)	(0.08)	(0.09)	(0.09)	(0.10)	(0.36)	(0.12)	1.80	3.31	4.00	5.10	6.13	8.17	8.09
GAAP-EPS (Dil)	(0.60)	(0.20)	(0.10)	(0.11)	(0.15)	(0.14)	(0.32)	(0.08)	(0.09)	(0.09)	(0.10)	(0.36)	(0.12)	1.80	3.31	4.00	5.10	6.13	8.17	8.09
Wgtd Avg Shrs (Bas) - '000s	32,253	38,819	43,243	43,317	43,396	43,439	43,349	43,483	43,526	43,570	43,613	43,548	43,723	43,898	44,074	44,250	44,427	44,605	44,784	44,963
Wgtd Avg Shrs (Dil) - '000s	32,253	38,819	43,243	43,317	43,396	43,439	43,349	43,483	43,526	43,570	43,613	43,548	43,723	43,898	44,074	44,250	44,427	44,605	44,784	44,963

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

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Rating Definitions:

- 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... 15-Nov-21

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	25	69%	5	20%
Market Perform (Neutral)	11	31%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	36	100%	5	14%

Analyst Certification:

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