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Athersys Inc. (NASDAQ/ATHX) Buy-Rated

March 26, 2021

Athersys Ends the Year with \$51M in Cash

Athersys expects to see top-line results for the TREASURE (ischemic stroke) and the ONE-BRIDGE (ARDS) study. The MATRICS-1 study (treatment in severe trauma patients) saw the first patient enrolled (4Q).

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Current Price	\$2.72
Price Target	\$7.00

Estimates	F2019A	F2020A	F2021E
Expenses (\$000s)	\$ 51,121	\$ 79,772	\$ 51,047
1Q March	\$ 14,705	\$ 15,949	\$ 11,741
2Q June	\$ 14,163	\$ 18,421	\$ 12,251
3Q September	\$ 11,981	\$ 22,214	\$ 12,762
4Q December	\$ 10,272	\$ 23,188	\$ 14,293

	F2019A	F2020A	F2021E
EPS (diluted)	\$ (0.29)	\$ (0.42)	\$ (0.22)
1Q March	\$ (0.09)	\$ (0.10)	\$ (0.05)
2Q June	\$ (0.06)	\$ (0.10)	\$ (0.05)
3Q September	\$ (0.08)	\$ (0.11)	\$ (0.05)
4Q December	\$ (0.06)	\$ (0.11)	\$ (0.06)

EBITDA/Share	(\$0.29)	(\$0.42)	(\$0.22)
EV/EBITDA (x)	1,676	1,172	2,255

Stock Data			
52-Week Range	\$1.13	-	\$4.38
Shares Outstanding (mil.)	197.7		
Market Capitalization (mil.)	\$537		
Enterprise Value (mil.)	\$493		
Debt to Capital	0%		
Book Value/Share	\$0.19		
Price/Book	8.4		
Average Three Months Trading Volume (K)	984		
Insider Ownership	10.0%		
Institutional Ownership	29.6%		
Short interest (mil.)	12.3%		
Dividend / Yield	\$0.00/0.0%		



Highlights

Fourth-Quarter Results: Athersys spent \$18.6M in R&D (driven by clinical costs), combined with SG&A for a net loss of \$22M, leaving the company with approximately \$51M in cash. In our opinion, plenty of runway through the next series of events. There continued to be discussions about additional partners (potentially Europe), which could bring in resources,

Clinical Progress Is Maturing. Athersys is working hard to complete current trials in stroke and trauma, as well as the COVID-19 ARDS trial. The goal remains to complete the MASTERS-2 study this year. Partner Healios is also working to complete the TREASURE study (stroke trial) this year and its ONE-BRIDGE ARDS study.

MACOVIA. The U.S. trial is well underway and enrolling patients. The trial is an open-label, single active treatment arm planned to evaluate MultiStem at two dose levels in patients with moderate to severe ARDS associated with COVID-19. The primary efficacy endpoint for the MACOVIA study will compare the number of ventilator-free days through day 28 among MultiStem and placebo treatment groups. Secondary objectives of the study are to evaluate 60-day all-cause mortality, time in the intensive care unit, pulmonary function, tolerability, and quality of life (QoL) among survivors through one year of follow-up.

Valuation. Our therapeutic models assume a probability of success (PoS) factor across the various other indications. In addition to this, we also apply a 30% risk rate (r) in our Free Cash Flow to the Firm (FCFF), discounted EPS, and Sum-Of-The-Parts (SOP) models. Our price target is derived from these three models, equally weighting and averaged to the nearest whole number. The result is a one-year price target of \$7.00 per share. We caution that models can't predict clinical trial outcomes, but we do suggest that upon success, the company is undervalued.

Risks to our thesis include the following: (1) clinical trial; (2) commercial; (3) employee; (4) financial; (5) intellectual property; (6) partnership; and (7) regulatory. We review these and other risks in the risk section of this report.

Modeling Assumptions

1. The MultiStem program is the main platform for the company, and we view it as the driver of the company's success. We assume Athersys continues developing the MultiStem program in neurological, cardiovascular, and inflammation and immunological disease areas and that these programs, like the MultiStem platform itself, are prioritized.
2. For the stroke (neurological) indication, we model approximately 800,000 stroke patients in the U.S. and 340,000 in Japan, with 87% of those classified as ischemic, growing at a rate of 0.1% annually since 2017. By factoring in mortality risk, cortical stroke prevalence, and the effective therapeutic treatment window, we arrive at an addressable market population.
3. Hemorrhagic stroke. Success in ischemic stroke sets the stage for Athersys to develop MultiStem in the small side of the stroke market, Hemorrhagic strokes. Here too, the inflammatory response contributes to additional secondary damage. While the complexities of ischemic stroke are challenging, hemorrhagic can be even more complex, and with even fewer options for patients. As such, it makes sense to develop for this indication only after the ischemic market is realized.
4. For the ADRS (immune) indication, we model the addressable population based on the NHLI estimate figure of 70 per 100,000 in the U.S., denoting an approximate 230,000 patients in 2017 growing at 3.1% annually.
5. For the AMI (cardiovascular) indication, we only model for new heart attacks as we believe they are more likely to be amenable to the trophic and anti-inflammatory effects of MultiStem. We anticipate the annual growth rate and mortality rate quoted by the American Heart Association continue to be high, at 11.1% and 15.5%, respectively, a reflection of the increasing obesity epidemic in the U.S. Considering the lengthy nature of cardiovascular trials, we do not begin to model sales until 2022, and we currently anticipate relatively low (8-10%) peak market penetration as cell therapy is not currently a standard of care in hospitals for treating AMI.
6. For the trauma (inflammatory) indication, we model the treatable population based on a reported 2.5 million trauma-related emergency room visits. Approximately 13% of those visits are due to debilitating ailments, leading to hospitalization. The estimation brings us to over 300,000 addressable patients growing at a rate of 3.1% annually.
7. For the GVHD (inflammatory) indication, we do not currently assume any revenues in our model, but we show the model as we believe, with additional resources, Athersys may "down the road" re-visit development plans. The population of total U.S. allogeneic stem cell transplants based on 4,265 related and 4,972 unrelated transplants (2017 data) is growing at a rate of 3.1% annually. We estimate 90% of that population to desire prophylactic treatment for GVHD.
8. We model a price for MultiStem at \$25,000 initially, growing at 1% per year. Academic literature estimates that therapies such as tPA in stroke should be priced at \$45,800 based on the quality-adjusted life years (QALY) provided to patients. In this instance, should a therapy allow for successful treatment beyond the three- to six-hour therapeutic time window, the literature estimates this therapy should command a higher price. We therefore believe our pricing estimates are conservative, considering our belief in the upside therapeutic potential of MultiStem. We have seen examples of other cell (for example, CAR-T) and gene therapies command prices anywhere between \$100k and \$2.5M; given the blockbuster size of the stroke market, we recognize the therapy must be affordable for the market size.
9. But are also relatively in line with other allogeneic cell therapies currently on the market, despite the other allogeneic cell therapies not being approved for the same targeted indications.
10. Our sum-of-the-parts model uses the same probabilities as the product models and the same discount rate as the FCFF. We apply a risk factor of 70% for the trauma and AMI clinical programs as they are in earlier stages (neither beyond Phase 2) and have only been tested in a limited number of patients. We anticipate reducing this risk factor should the trials meet our assumptions of producing data in the next year. For royalties and partnerships, we also use 50% because they are dependent on a third party, Healios, and therefore do not provide transparency in terms of timing of cash flows to Athersys. Lastly, the stroke and ARDS indications have a 50% risk factor as a result of the inherent variability associated with stroke and the fact that the current pivotal programs are based on a post-hoc analysis.

Exhibit 1. MultiStem Ischemic Stroke (U.S.).

Ischemic Stroke (U.S.)	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
No. of Annual Strokes	696,000	696,696	697,393	698,090	698,788	699,487	700,186	700,887	701,588	702,289	702,991	703,694	704,398	705,102
Market Size Growth	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Associated Mortality	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
Ischemic Strokes Survivors	582,552	583,135	583,718	584,301	584,886	585,471	586,056	586,642	587,229	587,816	588,404	588,992	589,581	590,171
Total cortical ischemic stroke patients (35%)	203,893	204,097	204,301	204,505	204,710	204,915	205,120	205,325	205,530	205,736	205,941	206,147	206,353	206,560
Market Share Penetration	0%	0%	0%	0%	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%
Number of Patients Procedures	-	-	-	-	-	29,274	58,606	87,996	117,446	146,954	176,521	206,147	235,832	265,577
Cost of Therapy	-	-	-	-	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Risk Factor	-	-	-	-	-	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total Revenue ('000)	-	-	-	-	-	\$ 365,919	\$ 732,570	\$ 1,099,954	\$ 1,468,072	\$ 1,836,925	\$ 2,206,514	\$ 2,576,841	\$ 2,947,906	\$ 3,319,711

Source: Dawson James estimates

Exhibit 2. MultiStem Ischemic Stroke (Japan).

Ischemic Stroke (Japan)	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
No. of Annual Strokes	295,800	296,096	296,392	296,688	296,985	297,282	297,579	297,877	298,175	298,473	298,771	299,070	299,369	299,669
Market Size Growth	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Associated Mortality	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
Ischemic Strokes Survivors	247,585	247,832	248,080	248,328	248,576	248,825	249,074	249,323	249,572	249,822	250,072	250,322	250,572	250,823
Total cortical ischemic stroke patients (35%)	86,655	86,741	86,828	86,915	87,002	87,089	87,176	87,263	87,350	87,438	87,525	87,613	87,700	87,788
Market Share Penetration	0%	0%	0%	0%	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%
Number of Patients Procedures	-	-	-	-	-	12,441	24,907	37,398	49,914	62,455	75,021	87,613	100,229	112,870
Cost of Therapy	-	-	-	-	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Risk Factor	-	-	-	-	-	50%	50%	50%	50%	50%	50%	50%	50%	50%
Japan Annual Sales	-	-	-	-	-	\$ 155,516	\$ 311,342	\$ 467,480	\$ 623,931	\$ 780,693	\$ 937,769	\$ 1,095,157	\$ 1,252,860	\$ 1,410,877
Royalty to Athersys	-	-	-	-	-	8%	10%	12%	14%	15%	15%	15%	15%	15%
Total Revenue ('000)	-	-	-	-	-	\$ 12,441	\$ 31,134	\$ 56,098	\$ 87,350	\$ 117,104	\$ 140,665	\$ 164,274	\$ 187,929	\$ 211,632

Source: Dawson James estimates

Exhibit 3. MultiStem Hemorrhagic Stroke (U.S.).

Hemorrhagic Stroke (U.S.)	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
No. of Annual Hem. Strokes (13% of total)	90,480	90,570	90,661	90,752	90,842	90,933	91,024	91,115	91,206	91,298	91,389	91,480	91,572	91,663
Market Size Growth	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Associated Mortality	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Hemorrhagic Strokes Survivors	63,336	63,399	63,463	63,526	63,590	63,653	63,717	63,781	63,844	63,908	63,972	64,036	64,100	64,164
Market Share Penetration	0%	0%	0%	0%	0%	0%	0%	15%	30%	50%	55%	60%	65%	70%
Number of Patients Procedures	-	-	-	-	-	-	-	9,567	19,153	31,954	35,185	38,422	41,665	44,915
Cost of Therapy	-	-	-	-	-	-	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Risk Factor	-	-	-	-	-	-	-	50%	50%	50%	50%	50%	50%	50%
Total Revenue ('000)	-	-	-	-	-	-	-	\$ 119,589	\$ 239,417	\$ 399,427	\$ 439,809	\$ 480,271	\$ 520,814	\$ 561,438

Source: Dawson James estimates

Exhibit 4. MultiStem Acute Respiratory Distress Syndrome (U.S.).

Acute Respiratory Distress Syndrome (U.S.)	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
No. of Annual Cases	228,900	235,996	243,312	250,854	258,631	266,648	274,915	283,437	292,223	301,282	310,622	320,251	330,179	340,415
Market Size Growth	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
Market Share Penetration	-	-	0.0%	0.0%	0.0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
Number of Patients Procedures	-	-	-	-	-	2,666	5,498	8,503	11,689	15,064	18,637	22,418	26,414	30,637
Cost of Therapy	-	-	-	-	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Risk adjustment	-	-	-	-	-	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total Revenue ('000)	-	-	-	-	-	\$ 33,331	\$ 68,729	\$ 106,289	\$ 146,112	\$ 188,302	\$ 232,967	\$ 280,220	\$ 330,179	\$ 382,967

Source: Dawson James estimates

Exhibit 5. MultiStem Acute Myocardial Infarction (U.S.).

Acute Myocardial Infarction (U.S.)	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
No. of Annual Heart Attacks	720,000	799,920	888,711	987,358	1,096,955	1,218,717	1,353,994	1,504,288	1,671,264	1,856,774	2,062,876	2,291,855	2,546,251	2,828,885
Market Size Growth	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%
Associated Mortality	-	-	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%
AMI Survivors	-	-	750,961	834,318	926,927	1,029,816	1,144,125	1,271,123	1,412,218	1,568,974	1,743,130	1,936,618	2,151,582	2,390,408
Market Share Penetration	-	-	0%	0%	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
Number of Patients Procedures	-	-	-	-	-	10,298	22,883	38,134	56,489	78,449	104,588	135,563	172,127	215,137
Cost of Therapy	-	-	-	-	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Risk adjustment	-	-	-	-	-	70%	70%	70%	70%	70%	70%	70%	70%	70%
Total Revenue ('000)	-	-	-	-	-	\$ 77,236	\$ 171,619	\$ 286,003	\$ 423,665	\$ 588,365	\$ 784,409	\$ 1,016,724	\$ 1,290,949	\$ 1,613,525

Source: Dawson James estimates

Exhibit 6. Trauma (U.S.).

Trauma (U.S.)	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Trauma Prevalence	2,500,000	2,577,500	2,657,403	2,739,782	2,824,715	2,912,281	3,002,562	3,095,642	3,191,606	3,290,546	3,392,553	3,497,722	3,606,152	3,717,942
Market Size Growth	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
% of Patients Hospitalized	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
Treatable Population	312,500	322,188	332,175	342,473	353,089	364,035	375,320	386,955	398,951	411,318	424,069	437,215	450,769	464,743
Market Share Penetration	-	-	0%	0%	0%	0%	1%	3%	5%	7%	9%	11%	13%	15%
Number of Patients Procedures	-	-	-	-	-	-	3,753	11,609	19,948	28,792	38,166	48,094	58,600	69,711
Cost of Therapy	-	-	-	-	-	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Risk adjustment	-	-	-	-	-	-	70%	70%	70%	70%	70%	70%	70%	70%
Total Revenue ('000)	-	-	-	-	-	-	\$ 28,149	\$ 87,065	\$ 149,607	\$ 215,942	\$ 286,247	\$ 360,703	\$ 439,500	\$ 522,836

Source: Dawson James estimates

Note: Numbers are estimates.

Valuation. Our therapeutic models for MultiStem assume a probability of success (PoS) for all the forecast therapeutic indications. We project our model through the year 2030. For modeling purposes, we use a 30% risk rate (r) in our Free Cash Flow to the Firm (FCFF), discounted EPS, and Sum-Of-The-Parts (SOP) models. Our price target is derived from these three models, equally weighted and averaged to the nearest whole number. The result is a one-year price target of \$7.00 per share.

Exhibit 7. FCFF Model

Average of Metrics	\$	7
FCFF Price Target	\$	9
Year		2021

DCF Valuation Using FCFF (mln):

units ('000)	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(45,488)	(75,146)	(50,449)	253,573	662,650	1,260,816	1,865,960	2,527,898	3,117,658	3,741,308	4,403,479	5,109,435
Tax Rate	0%	0%	0%	14%	16%	20%	24%	28%	29%	30%	31%	32%
EBIT(1-t)	(45,488)	(75,146)	(50,449)	218,073	556,626	1,008,653	1,418,130	1,820,087	2,213,537	2,618,916	3,038,400	3,474,416
CapEx	(579)	(735)	(809)	(889)	(978)	(1,076)	(1,184)	(1,302)	(1,432)	(1,576)	(1,733)	(1,906)
Depreciation	941	1,035	1,138	1,252	1,377	1,515	1,666	1,833	2,016	2,218	2,439	2,683
Change in NWC	(130)	(3,704)	-	-	-	-	-	-	-	-	-	-
FCFF	(44,997)	(71,142)	(50,119)	218,435	557,025	1,009,092	1,418,612	1,820,617	2,214,121	2,619,558	3,039,107	3,475,193
PV of FCFF	(76,044)	(92,485)	(50,119)	168,027	329,600	459,304	496,696	490,345	458,713	417,469	372,562	327,709
Discount Rate	30%											
Long Term Growth Rate	1%											
Terminal Cash Flow	12,103,258											
Terminal Value YE2030	1,141,332											
NPV	4,519,155											
NPV-Debt	-											
Shares out ('000)	476,695											
NPV Per Share	\$ 9											

Source: Dawson James estimates, company reports

Exhibit 8. Discounted EPS Model

Current Year	2021
Year of EPS	2030
Earnings Multiple	10
Discount Factor	30%
Selected Year EPS	\$ 7.29
NPV	\$ 6.88

Discount Rate and Earnings Multiple Varies, Year is Constant							
2030 EPS							
	6.9	20%	25%	30%	35%	40%	45%
Earnings Multiple	10	\$14.13	\$9.79	\$6.88	\$4.90	\$3.53	\$ 2.57
	15	\$21.20	\$14.68	\$10.32	\$7.35	\$5.29	\$ 3.86
	20	\$28.27	\$19.58	\$13.75	\$9.79	\$7.06	\$ 5.15
	25	\$35.34	\$24.47	\$17.19	\$12.24	\$8.82	\$ 6.43
	30	\$42.40	\$29.37	\$20.63	\$14.69	\$10.59	\$ 7.72
	35	\$49.47	\$34.26	\$24.07	\$17.14	\$12.35	\$ 9.01
	40	\$56.54	\$39.15	\$27.51	\$19.59	\$14.12	\$ 10.30
	45	\$63.61	\$44.05	\$30.95	\$22.04	\$15.88	\$ 11.58

Source: Dawson James estimates

Exhibit 9. Sum of the Parts Model

Athersys Sum of the Parts	LT Gr	Discount Rate	Yrs. to Mkt	% Success	Peak Sales	Term Val
MultiStem Ischemic Stroke (U.S.)	1%	30%	3	50%	\$4,742	\$16,353
NPV						\$3.12
MultiStem Hemorrhagic Stroke (U.S.)	1%	30%	3	50%	\$1,123	\$3,872
NPV						\$0.74
MultiStem GI GVHD	1%	30%	3	50%	\$0	\$0
NPV						\$0.00
MultiStem ARDS	1%	30%	6	50%	\$681	\$2,348
NPV						\$0.20
MultiStem AML	1%	30%	5	30%	\$4,781	\$16,486
NPV						\$1.12
MultiStem Trauma	1%	30%	6	30%	\$1,743	\$6,010
NPV						\$0.31
Net Margin						40%
MultiStem-Japan Royalties	1%	30%	3	50%	\$423	\$1,460
NPV						\$0.70
MM Shrs OS						477
						\$6.19

Source: Dawson James estimates

Risk Analysis

Clinical Risk: Athersys is an early-stage biotechnology company currently operating with high expenditures and no product revenues. A significant element of the company's valuation is associated with its lead clinical candidate MultiStem. As such, clinical progress with this stem cell product represents the key risk for the company and shareholders.

Commercial Risk: There can be no assurances that the pipeline products will be commercialized, and if they receive regulatory approval, there is a risk that Athersys will not be able to reach the projected market share potential.

Employee Risk: Athersys has an experienced management team, which plans to ideally bring MultiStem to market within the next three years. The success of the company may depend on the expertise, abilities, and continued services of its senior officers, sales staff, and key scientific personnel.

Financial Risk: Athersys has a high burn rate and is currently not a profitable company. The company might face multiple dilutions in the future to raise capital to fund its operations.

Intellectual Property Risk: The company may have to defend its patents and technical know-how, and there can be no assurances that the patents will not be infringed upon or will be held as valid if challenged, and the company may infringe on third parties' patents.

Partnership Risk: The potential benefits from the partnership with Healios are subject to certain milestones, which, if not achieved, may delay commercialization in Japan and fail to provide payments to Athersys.

Regulatory Risk: There are no assurances that Athersys's products will be approved in the U.S., Japan, Europe, or other markets.

Exhibit 10. Income Statement.

Athersys, Inc. Income Statement (\$ '000)	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ATHX: YE Dec. 31													
Product Revenue (000's)													
MultiStem Ischemic Stroke (U.S.)					365,919	732,570	1,099,954	1,468,072	1,836,925	2,206,514	2,576,841	2,947,906	3,319,711
% Chg													
MultiStem Ischemic Stroke (Japan) - Royalty					12,441	31,134	56,098	87,350	117,104	140,665	164,274	187,929	211,632
% Chg													
MultiStem Hemorrhagic Stroke (U.S.)					-	-	119,589	239,417	399,427	439,809	480,271	520,814	561,438
% Chg													
MultiStem ARDS					-	34,364	70,859	109,584	150,641	194,139	240,189	288,907	340,415
% Chg													
MultiStem AMI					-	85,809	190,668	317,749	470,692	653,674	871,478	1,129,581	1,434,245
% Chg													
MultiStem Trauma						28,149	87,065	149,607	215,942	286,247	360,703	439,500	522,836
% Chg													
Total Revenues (Product Sales, Grants & Milestones)	-	-	-	-	378,360	883,878	1,624,233	2,371,778	3,190,731	3,921,048	4,693,755	5,514,637	6,390,275
Contract revenues from Healios	22,276	5,517	1,432										
% Chg													
License Fees - Contract revenues	1,461	-	-	-	-	-	-	-	-	-	-	-	-
% Chg													
Grant Revenues	554	116	8	-	-	-	-	-	-	-	-	-	-
% Chg													
Pfizer Milestones													
% Chg													
Total Revenues (Product Sales, Grants & Milestones)	24,291	5,633	1,440	-	378,360	883,878	1,624,233	2,371,778	3,190,731	3,921,048	4,693,755	5,514,637	6,390,275
Expenses													
COGS (excludes royalties)	-	-	-	-	73,184	170,549	313,627	456,886	614,725	756,077	905,896	1,065,342	1,235,729
COGS % Product Sales		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
R&D	38,656	39,045	62,994	35,000	36,000	34,920	33,872	32,856	31,871	30,914	29,987	29,087	28,215
R&D % Revs													
G&A	10,442	11,378	15,888	16,047	16,207	16,369	16,533	16,698	16,865	17,034	17,204	17,376	17,550
G&A % Revs													
Other (depreciation)	855	698	890										
Total expenses	49,953	51,121	79,772	51,047	125,391	221,838	364,033	506,440	663,461	804,025	953,088	1,111,805	1,281,494
Oper. Inc. (Loss)	(25,662)	(45,488)	(78,332)	(51,047)	252,969	662,040	1,260,200	1,865,338	2,527,270	3,117,023	3,740,667	4,402,831	5,108,781
Gain from sale of insurance proceeds, net	617												
Oper. Inc. (Loss)	(25,045)												
Oper Margin	NM	NM	NM	NM	67%	75%	78%	79%	79%	79%	80%	80%	80%
Other Income Expense (net)	762	906	(433)										
Other Income (loss of unconsolidated affiliate)													
Equity Earnings (loss) of unconsolidated affiliate													
Expense from change in fair value of warrants, net													
Preferred Stock Dividends													
Change in Warrant valuation													
Deemed dividend resulting from induced conversion of convert p.stock													
Pre-tax income	(24,283)	(44,582)	(78,765)	(51,047)	252,969	662,040	1,260,200	1,865,338	2,527,270	3,117,023	3,740,667	4,402,831	5,108,781
Taxes	-	-	-	-	35,416	105,926	252,040	447,681	707,636	903,937	1,122,200	1,364,878	1,634,810
Tax Rate	0%	0%	0%	0%	14%	16%	20%	24%	28%	29%	30%	31%	32%
Net Income	(24,283)	(44,582)	(78,765)	(51,047)	217,554	556,113	1,008,160	1,417,657	1,819,634	2,213,086	2,618,467	3,037,953	3,473,971
Net Margin	NM	NM	NM	NM	57%	63%	62%	60%	57%	56%	55%	55%	54%
EPS	(0.18)	(0.29)	(0.42)	(0.22)	0.86	2.03	3.40	4.42	5.24	5.88	6.43	6.89	7.28
Non GAAP EPS (dil)	(0.16)	(0.27)	(0.40)	(0.20)	0.87	2.04	3.41	4.43	5.25	5.90	6.44	6.90	7.29
Wgtd Avg Shrs (Bas) - '000s	136,641	151,696	187,472	229,353	236,309	243,475	250,859	258,467	266,305	274,381	282,702	291,276	300,109
Wgtd Avg Shrs (Dil) - '000s	136,641	151,696	187,472	233,687	252,950	273,801	296,372	320,802	347,246	375,871	406,855	440,393	476,695

Source: Dawson James estimates, company reports

Companies mentioned in this report:

Healios (TYO-4593: Not Rated)

Important Disclosures:

Price Chart:



Price target and rating changes over the past three years:

- Initiated – Buy – August 26, 2019 – Price Target \$11.00
- Update – Buy – November 7, 2019 – Price Target \$11.00
- Update – Buy – January 14, 2020 – Price Target \$11.00
- Update – Buy – February 11, 2020 – Price Target \$11.00
- Update – Price Target Change – March 17, 2020 – Price Target from \$11.00 to \$12.00
- Update – Buy – March 23, 2020 – Price Target \$12.00
- Update – Buy – April 9, 2020 – Price Target \$12.00
- Update – Buy – April 13, 2020 – Price Target \$12.00
- Update – Buy – April 15, 2020 – Price Target \$12.00
- Update – Buy – May 1, 2020 – Price Target \$12.00
- Update – Buy – May 5, 2020 – Price Target \$12.00
- Update – Buy – May 8, 2020 – Price Target \$12.00
- Update – Buy – June 22, 2020 – Price Target \$12.00
- Price Target Change - Buy – August 11, 2020 – Price Target \$7.00
- Update – Buy – September 23, 2020 – Price Target \$7.00
- Update – Buy – November 10, 2020 – Price Target \$7.00
- Update – Buy – November 18, 2020 – Price Target \$7.00
- Update – Buy – November 24, 2020 – Price Target \$7.00
- Update – Buy – December 21, 2020 – Price Target \$7.00
- Update – Buy – February 17, 2021 – Price Target \$7.00
- Update – Buy – March 26, 2021 – Price Target \$7.00

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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.

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Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	20	69%	6	30%
Market Perform (Neutral)	9	31%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	29	100%	6	21%

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