Zacks Small-Cap Research

August 15, 2017

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CAS Medical Systems Inc. (CASM-NASDAQ)

CASM: Headwinds Slow Growth, But Sales Force Productivity Gains, Clinical Superiority Bode Well For Inflection

Based on EV/S and P/S comps other publicly traded companies in the tissue oximeter, patient monitoring and cardiac surgery industries including BABY, MASI, BRSYF and MDT, CASM should trade near $3.00/share.

Current Price (08/15/17)	$0.97
Valuation	**$3.00**

OUTLOOK

The growth-stunting related headwinds in the U.S market include disruptions related to restructuring of the sales force as well as, more recently, competitors' success in thwarting market share gains via certain "wholesale" related sales channels. CASM has worked to address both issues with adding highly-experienced reps which have improved the rate of productivity gains. Relative to the more recent issue, management indicated on the Q2 call that they are addressing this head-on by appealing directly to IDNs, armed with evidence of the superior clinical performance of FORE-SIGHT as compared to competitors' technologies. Clinical superiority of FORE-SIGHT as well as continued expansion of the overall tissue oximetry market represent the long-term revenue catalysts, in our opinion. With additional evidence of the utility in various procedures and associated improved patient outcomes when cerebral oximtery is employed, the size of the market will undoubtedly continue to expand and remains relatively under-penetrated. So while CASM's recent headwinds have been disruptive, we think their 75% - 85% win-rate when prospective customers perform a clinical evaluation of FORE-SIGHT speaks to the robustness of the clinical competitive advantage of their technology which we believe will translate into continued market share gains.

SUMMARY DATA

52-Week High	**$1.94**
52-Week Low	**$0.80**
One-Year Return (%)	**-41.18**
Beta	**-1.17**
Average Daily Volume (sh)	**67,619**
Shares Outstanding (mil)	**28**
Market Capitalization ($mil)	**$26**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**27**
Insider Ownership (%)	**34**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**-0.3**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2017 Estimate	**N/A**
P/E using 2018 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Avg.,**
Type of Stock	**N/A**
Industry	**Med Products**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	4.5 A	4.7 A			18.7 A
2017	4.5 A	4.6 A	4.5 E	4.5 E	18.1 E
2018					21.6 E
2019					24.1 E

Earnings per Share

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	-$0.05 A	-$0.09 A			-$0.27 A
2017	-$0.09 A	-$0.09 A	-$0.09 E	-$0.09 E	-$0.36 E
2018					-$0.23 E
2019					-$0.11 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/A**

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WHAT'S NEW…

Q2 Financial Results

CAS Medical reported financial results for the second quarter ending June 30th. Revenue disappointed for the second consecutive quarter with tissue oximetry revenue missing our number by 3%, or almost $150k. And this was after making sizeable downward revisions to our estimates following the reporting of Q4 2016 and Q1 2017 results, the latter which missed our respective revenue estimate by 8%. Tissue oximetry sales have been essentially flat for six quarters with revenue from that segment actually falling 2% from the comparable yoy period through Q2 of this year.

The growth-stunting related headwinds in the U.S market include disruptions related to restructuring of the sales force as well as, more recently, competitors' success in thwarting market share gains via certain "wholesale" related sales channels such as group purchasing organizations (GPOs) and integrated delivery networks (IDNs). CASM has worked to address both issues with adding highly-experienced reps which have improved the rate of productivity gains. Relative to the more recent issue, management indicated on the Q2 call that they are addressing this head-on by appealing directly to IDNs, armed with evidence of the superior clinical performance of FORE-SIGHT as compared to competitors' technologies.

The consequences of these issues are apparent; through the first six months of 2017 domestic sensor sales increased just 3%, despite 17% growth in the U.S. installed monitor base. This also indicates deteriorating utilization (per installed monitor). Given that sensors account for almost 95% of FORE-SIGHT related revenue and U.S. sales contribute 85%, the meager domestic consumables growth is the reason for the company's recent disappointing financial performance.

The good news is that FORE-SIGHT remains the leader in clinical performance and that continues to resonate with clinicians. We think this has likely stemmed what could have been potentially significant market share losses, particularly given the ongoing budget-related pressures at many hospitals. And despite the flattening top-line, operational metrics are much more encouraging.

The clinical superiority is further supported by the 75% - 85% new customer close rate when prospective clinicians perform a clinical evaluation of FORE-SIGHT. Management noted that through the twelve months ending 6/30/17, 40% of monitor placements reflect market share gains (i.e. account wins from competitors) with the other 60% related to expansion of the tissue oximetry market. Additionally, over that same time, new accounts contributed 9% - so if not for erosion related to loss of existing accounts, financial results would have been substantially stronger. The recent loss of a major account in late 2016, which management believes was because they weren't sufficiently attentive to their needs, was significant in terms of total customer attrition and appears to have acted as a wake-up call. As, such and coupled with productivity gains and a new focus directly at the IDN level, there are reasons to be hopeful that customer losses moderate and growth in net monitor placements begin to accelerate.

Blood-Pressure Assets Divestiture

In late July CASM announced the sale of their non-invasive blood pressure monitoring products to SunTech Medical Inc. for $4.5M in upfront cash and up to an additional $2M in cash, which is based in certain sales milestones. This earn-out provision is based on achieving net product sales during the 24 months ending 6/30/19 of at least $3.32M. CASM will continue to provide services related to the products through the transition period.

This "Traditional Monitoring" segment generated $4.2M in revenue for CASM in 2016 but this was expected to decline as the company continued to focus on the bread-and-butter FORE-SIGHT tissue oximetry business. Nonetheless, this was profitable product line, generating $400k per quarter in gross income and over $300k per quarter in operating income. Pro forma for the sale of these assets, operating loss for the full year 2016 and Q1 2017 would have increased by approximately $1.5M ($4.9M vs. $6.4M) and $325k ($1.6M vs. $1.9M), respectively.

So why the divestiture? Clearly management believes FORE-SIGHT offers more opportunity for growth and will use the proceeds to facilitate that. The $4.5M in upfront cash represents about three years' worth of operating income contribution from this non-core segment. The $2M in earn-outs, if earned, represents another ~16 months. It also means that any future need to raise additional capital might be delayed.

Financials (pro forma for blood pressure assets sale)
Total revenue slipped 2% yoy and increased less than 1% sequentially to $4.57M in Q2. Total FORE-SIGHT revenue fell 2% yoy and increased 1% sequentially. FORE-SIGHT sensors revenue, which accounted for 90% of total revenue, increased 2% on both a yoy and sequential basis to $4.1M (vs. our $4.2M estimate) with international sales, which increased 26% yoy, driving all of the growth. Meanwhile U.S. sensor sales, which accounted for about 85% of total sensor sales fell 2% yoy.

Utilization, or the number of sensors sold per (installed) monitor, has slid faster than what we had been anticipating - this (and, to a lesser extent, the related effect from lower monitor placements), has explained the majority of the FORE-SIGHT revenue miss compared to our estimates over the last two quarters. How utilization trends going forward will likely be a significant determinant in trends in total revenue and also likely have an influence on gross margin.

There were 49 FORE-SIGHT monitors shipped in Q2 (32 U.S., 17 Int'l) which looks to be the fewest since Q3 2013 (41) and represents yoy and sequential declines of 41% and 38%, respectively. Monitor revenue was $269k, which is similarly the lowest since Q3 2013 ($176k). Monitor placements and related revenue were well below our 74 and $326k respective estimates. But while the total monitor placements and revenue are relatively very weak, the majority of the sequential contraction is international-related with OUS monitor placements falling 45% (31 units vs. 17 units) from Q1 of this year compared to only a 16% decline in U.S. placements (38 vs 32) over the same period.

Management's revised (lower) guidance includes for the U.S. monitor installed base to increase by at least 10% for the full year compared to 2016 - which implies U.S. placements of at least 42 units in 2H. While not exactly robust expectations, we would hope to see domestic placements begin to pick up by later in the year as a result of the recently implemented strategic sales-related initiatives.

Gross margin was 52%, below our 55.9% estimate and down from 55.9% in Q2 2016 and 54.6% in Q1 of this year. Sensor sales growth, variability in utilization and manufacturing efficiencies may all influence gross margin going forward. We now model gross margin to incrementally contract in 2017 compared to 2016 but expect to see this widen in 2018 as domestic sensor sales benefit from a much more seasoned and productive sales force. Operating loss was $2.0M, compared to $1.7M in Q2 2016 and $1.9M in Q1 2017.

In terms of cash, pro forma for the $4.5M upfront cash from sale of the blood pressure monitoring assets, cash balance at Q2 quarter-end would be approximately $9.2M. Management believes this, along with current borrowing capacity of $4.8M under the revolver, is sufficient to fund operations until at least August 15, 2018.

Cash used in operating activities (pro forma for the asset sale) was $2.5M ($3.1M ex-changes in working capital) in the first six months of 2017, compared to $3.6M ($3.1M ex-changes in working capital) in the comparable prior-year period.

Sales Force Productivity Gains Taking Time But Showing Promise…
CASM hired six reps in 2016, another eight since the start of 2017 and are currently fully-staffed with 18. While the newly beefed-up and expanded sales force did not produce the level of U.S. sensor sales or monitor placements that had been expected, management has indicated that many of the more-seasoned (i.e. tenure of 12+ months) reps continue to perform quite strongly. In fact sensor sales growth increased 15% yoy through Q2 from the current nine tenured reps. The company also noted that they are seeing productivity gains from the more recently hired reps.

The overall rate of productivity gains has slowed, at least in part, due to reps spending additional time servicing existing accounts - which we think is in direct response to the lesson learned from loss of the aforementioned large account in late 2016. The more recent headwinds, including competitors use of IDNs, has likely contributed to the slower than anticipated traction in expanding the U.S. installed base and may have similarly effected utilization.

But, solid experience of the sales force (management noted on the Q1 call in May that their sales force is “one of the best (they have) ever seen”), strong performance among the most seasoned members and indications of continued progress from the more recent hires, all suggest optimism that the U.S. FORE-SIGHT business is either at or near a new inflection point of growth.

Clinical superiority of FORE-SIGHT as well as continued expansion of the overall tissue oximetry market represent the long-term revenue catalysts, in our opinion. With additional evidence of the utility in various procedures and associated improved patient outcomes when cerebral oximtery is employed, the size of the market will undoubtedly continue to expand and remains relatively under-penetrated. So while CASM's recent headwinds have been disruptive, we think their 75% - 85% win-rate when prospective customers perform a clinical evaluation of FORE-SIGHT speaks to the robustness of the clinical competitive advantage of their technology which we believe will translate into continued market share gains.

Revised Guidance…

Over the near-term, these recent headwinds have resulted in management again lowering guidance for 2017. CASM's current 2017 FORE-SIGHT guidance includes:

- total FORE-SIGHT revenue growth flat to down slightly (lowered from mid-single digits growth)
- sensors revenue growth of mid-single digits (lowered from 10% growth)
- U.S. sensors revenue growth in low single digits (lowered from mid-teens growth)
- U.S. installed base growth in low double-digits (previous was U.S. placements growth in mid-teens)

Our Outlook

Sensors represent the disposable in the FORE-SIGHT business and therefore also represent most of the margin and the vast majority of the potential growth of the company. While CASM has been quite successful in the past in consistently growing both the installed monitor base as well as in growing sensor revenue, if the recent flattening of the latter does persist, that would be of substantial concern.

Sensor revenue has been essentially flat at between $4.0M - $4.1M for the last five quarters (i.e. Q2 – Q4 2016 and Q1 - Q2 2017). Over the same period the installed base increased by about 23% (1,788 to 2,206). While growth in the installed base may eventually result in lower utilization per machine (particularly at high levels of saturation), intuitively it should result in aggregate growth in sensor sales. The reasons for the recent disconnect (i.e. flat sensor sales despite substantial increase in the installed base) – while not completely clear – may largely relate to the aforementioned headwinds. Another possible contributor could simply be variable utilization rates based on the particular hospital or surgeons' preferences - management noted on a recent call that while some accounts use tissue oximitery regularly, others may not. Factors such as variable patient flow could conceivably exacerbate volatility in utilization, particularly as it relates to those accounts that are less regular users of tissue oximetry. Management mentioned on the Q2 call that they expect utilization to remain relatively flat from current levels through the end of 2017 (which we would be a positive development, in our opinion).

We have updated our model following Q2 results and management's revised guidance. For 2017 we now have (pro forma for the July 2017 asset sale) total revenue contracting 3% (revised down 2% growth) which includes a 3.5% decline in FORE-SIGHT revenue (revised down from 5% growth). We have sensor sales increasing 3% (revised from 10% growth), implying 1% growth in 2H, and monitor revenue falling 52% (revised from 31% decline), implying 62% contraction in 2H. But despite the significant downward revisions, we continue to think productivity gains will continue to compound which is reflected in incremental revenue improvement from Q3 to Q4 this year.

Our revenue revisions coupled with the sale of the profitable blood pressure monitoring assets means that we now model operating loss to widen in 2017 versus 2016. But, we expect this to show meaningful improvement in 2018 and again through 2019 as aforementioned catalysts benefit revenue growth and scale moderates growth in operating expenses.

VALUATION

We think the performance advantages of FORE-SIGHT compared to competing systems, most notably market-leading INVOS, coupled with increasing adoption of cerebral oximetry in surgical and other applications sets the stage for deeper and wider market penetration of FORE-SIGHT over the longer-term. Sales force productivity gains should further facilitate growth of the installed base over the longer-term and, most importantly, increase aggregate utilization and related sensor sales.

Valuation

We value CASM using comparable EV/S and P/S ratios of other publicly traded companies in the tissue oximeter, patient monitoring and cardiac surgery industries including direct competitors Masimo Corporation (MASI) and Medtronic (MDT). As the other tissue oximetry competitors are not publicly traded, we have rounded out our comparable cohort with companies which have similar exposure to CASM's end markets including Brainsway (BRSYF), a manufacturer non-invasive brain stimulation devices and Natus Medical (BABY), which makes monitoring and detection devices for neonatal neurological disorders.

Average of EV/S and P/S value CASM at approximately $3.00/share, indicating the market is substantially undervaluing the stock.

	Sales Estimate (M)							
	2017	2018	EV	EV/2017	EV/2018	MC	P/S '17	P/S '18
BABY	$504	$513	$1,222	2.4	2.4	$1,111	2.2	2.2
MASI	$769	$819	$3,997	5.2	4.9	$4,440	5.8	5.4
BRSYF	$10	$14	$59	5.9	4.2	$72	7.2	5.1
MDT	$29,530	$30,410	$135,490	4.6	4.5	$114,800	3.9	3.8
Avg.				**4.5**	**4.0**		**4.8**	**4.1**

CASM Valuation Based On:					
Comparable EV/Sales			Comparable Price/Sales		
	EV	Implied Share Value		MC	Implied Share Value
2017 S	$82	$2.28	2017 S	$86	$3.20
2018 S	$86	$2.43	2018 S	$89	$3.30
Average		**$2.36**	**Average**		**$3.25**

FINANCIAL MODEL

CAS Medical Systems Inc. (figures in 000s of $)

	2016 A	Q1 A	Q2 A	Q3 E	Q4 E	2017 E	2018 E	2019 E
FORE-SIGHT Sensors	$15,883.0	$4,035.0	$4,126.0	$4,074.3	$4,132.8	$16,368.1	$19,732.4	$22,036.8
yoy growth	*22.0%*	*8.1%*	*1.9%*	*0.2%*	*2.6%*	*3.1%*	*20.6%*	*11.7%*
% of total oximetry sales	88.2%	93.0%	93.9%	94.9%	94.9%	94.2%	94.4%	94.3%
FORE-SIGHT Monitors & Access.	$2,124.0	$302.0	$269.0	$220.5	$220.5	$1,012.0	$1,169.0	$1,333.8
yoy growth	*-10.6%*	*-44.4%*	*-37.6%*	*-69.4%*	*-48.7%*	*-52.4%*	*15.5%*	*14.1%*
% of total oximetry sales	11.8%	7.0%	6.1%	5.1%	5.1%	5.8%	5.6%	5.7%
Tissue Oximetry Total Sales	**$18,007.0**	**$4,337.0**	**$4,395.0**	**$4,294.8**	**$4,353.3**	**$17,380.1**	**$20,901.3**	**$23,370.6**
yoy growth	*16.9%*	*1.4%*	*-1.9%*	*-10.3%*	*-2.4%*	*-3.5%*	*20.3%*	*11.8%*
% of total revenue	**96.4%**	**95.5%**	**96.1%**	**96.1%**	**96.1%**	**95.9%**	**96.7%**	**97.2%**
Traditional Mntrng Total Sales	**$667.0**	**$206.0**	**$177.0**	**$175.3**	**$178.7**	**$737.0**	**$707.5**	**$679.2**
yoy growth	*-83.7%*	*8.4%*	*6.0%*	*-82.0%*	*-82.5%*	*10.5%*	*-4.0%*	*-4.0%*
% of total revenue	**3.6%**	**4.5%**	**3.9%**	**3.9%**	**3.9%**	**4.1%**	**3.3%**	**2.8%**
Total Revenues	$18,674.0	$4,543.4	$4,572.0	$4,470.1	$4,532.0	$18,117.5	$21,608.9	$24,049.8
YOY Growth	*-4.2%*	*1.7%*	*-1.7%*	*-22.4%*	*-17.3%*	*-3.0%*	*19.3%*	*11.3%*
Cost of Revenues	$8,176.00	$2,061.3	$2,193.8	$2,056.3	$1,994.1	$8,305.42	$9,291.8	$10,100.9
Gross Income	$10,498.0	$2,482.1	$2,378.2	$2,413.9	$2,537.9	$9,812.1	$12,317.0	$13,948.9
Gross Margin	*56.2%*	*54.6%*	*52.0%*	*54.0%*	*56.0%*	*54.2%*	*57.0%*	*58.0%*
R&D	$3,277.0	$786.6	$858.4	$835.0	$852.0	$3,331.9	$3,150.0	$3,170.0
% R&D	*17.5%*	*17.3%*	*18.8%*	*18.7%*	*18.8%*	*18.4%*	*14.6%*	*13.2%*
SG&A	$13,570.0	$3,574.3	$3,503.1	$3,442.0	$3,467.0	$13,986.4	$14,369.9	$14,718.5
% SG&A	*72.7%*	*78.7%*	*76.6%*	*77.0%*	*76.5%*	*77.2%*	*66.5%*	*61.2%*
Operating Income	($6,349.0)	($1,878.7)	($1,983.3)	($1,863.1)	($1,781.1)	($7,506.2)	($5,202.8)	($3,939.6)
Operating Margin	*-34.0%*	*-41.4%*	*-43.4%*	*-41.7%*	*-39.3%*	*-41.4%*	*-24.1%*	*-16.4%*
Interest Income, net	($1,048.2)	($259.7)	($265.0)	($256.9)	($244.4)	($1,026.0)	($843.9)	($566.2)
Other income	$42.5	$0.1	$0.1	$12.0	$10.0	$22.3	$30.0	$30.0
Pre-Tax Income	($7,354.7)	($2,138.3)	($2,248.2)	($2,108.1)	($2,015.5)	($8,510.0)	($6,016.8)	($4,475.8)
Taxes	($1,468.0)	($103.2)	($49.9)	$21.1	$20.2	($111.8)	$0.0	$0.0
Tax Rate	*20.0%*	*4.8%*	*2.2%*	*-1.0%*	*-1.0%*	*1.3%*	*0.0%*	*0.0%*
Preferred Dividends	$1,482.6	$387.0	$393.8	$401.0	$408.0	$1,589.8	$1,700.0	$0.0
Net Income (cont ops)	($7,369.3)	($2,422.1)	($2,592.1)	($2,530.1)	($2,443.7)	($9,988.0)	($7,716.8)	($4,475.8)
YOY Growth	*-14.9%*	*100.1%*	*12.9%*	*53.2%*	*35.8%*	*35.5%*	*-22.7%*	*-42.0%*
Net Margin	-	-	-	-	-	-	-	*-18.6%*
EPS (cont ops)	($0.27)	($0.09)	($0.09)	($0.09)	($0.09)	($0.36)	($0.23)	($0.11)
YOY Growth	*-18.5%*	*98.4%*	*10.8%*	*45.3%*	*28.8%*	*31.1%*	*-37.0%*	*-49.4%*
Diluted Shares O/S	26,827	27,026	27,330	28,300	28,300	27,739	34,000	39,000

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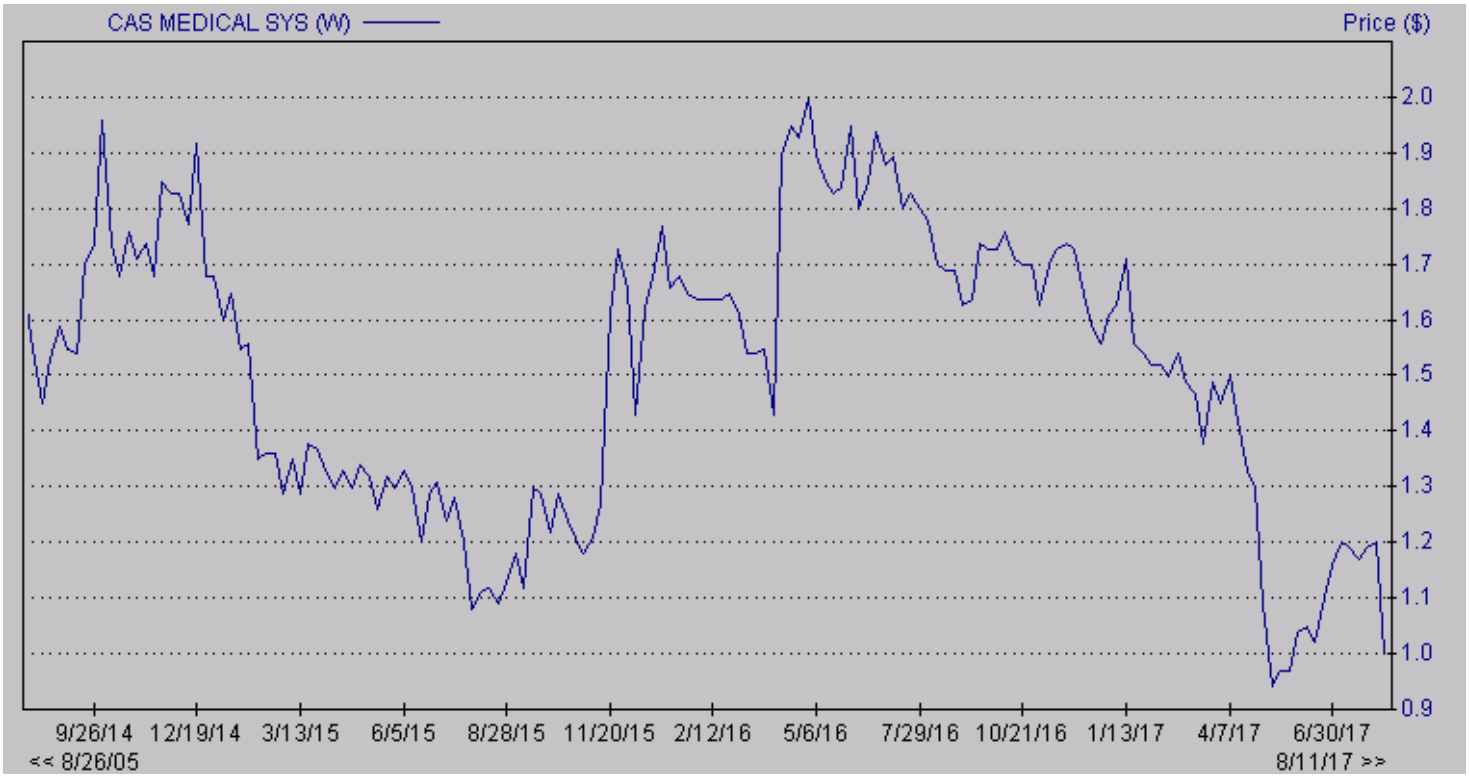

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