

CAS Medical Systems Inc. (CASM-NASDAQ)**CASM: Disappointing Q1 But Expect Sales Force Productivity, Revenue Acceleration in 2H**

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 \$4.00/share.

Current Price (05/05/17) **\$1.09**
Valuation **\$4.00**

OUTLOOK

While CASM's newly beefed-up and expanded sales force did not produce the level of sensor sales in Q1 that had been expected, management continues to believe that productivity gains will result in improving performance throughout the year, particularly in the second half. As a reminder, at the start of Q4 2016 CASM had 11 sales reps - five of which had been with the company for less than one year. During Q4 another five reps and one clinical specialist were added. Management noted on the Q1 call that, following the hiring of one more rep last week, that they are now fully staffed at 17. So while the lack of tenure and overall disruption the sales force restructuring negatively impacted both Q4 '16 and Q1 '17 revenue, management expects substantial and rapid productivity gains given the solid experience of the new hires. CASM indicated they were highly selective in filling open sales positions and noted on the Q1 call that their current team is "one of the best (they have) ever seen." Importantly, indications are that market and competitive fundamentals remain solid and intact. Because of that, coupled with the fact that the U.S. cerebral oximetry market remains substantially under-penetrated and more and more positive clinical outcomes studies are driving greater adoption of tissue oximetry in general, we think CASM's long-term growth prospects remain bright.

SUMMARY DATA

52-Week High **\$2.15**
52-Week Low **\$1.02**
One-Year Return (%) **-39.00**
Beta **-0.72**
Average Daily Volume (sh) **33,638**

Shares Outstanding (mil) **28**
Market Capitalization (\$mil) **\$34**
Short Interest Ratio (days) **N/A**
Institutional Ownership (%) **31**
Insider Ownership (%) **34**

Annual Cash Dividend **\$0.00**
Dividend Yield (%) **0.00**

5-Yr. Historical Growth Rates
Sales (%) **0.5**
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 | Q2 | Q3 | Q4 | Year |
|------|-------|-------|-------|-------|--------|
| | (Mar) | (Jun) | (Sep) | (Dec) | (Dec) |
| 2016 | 5.5 A | 5.5 A | 5.8 A | 5.5 A | 22.2 A |
| 2017 | 5.2 A | 5.5 E | 5.8 E | 6.1 E | 22.6 E |
| 2018 | | | | | 27.5 E |
| 2019 | | | | | 30.9 E |

Earnings per Share

| | Q1 | Q2 | Q3 | Q4 | Year |
|------|-----------|-----------|-----------|-----------|-----------|
| | (Mar) | (Jun) | (Sep) | (Dec) | (Dec) |
| 2016 | -\$0.03 A | -\$0.08 A | -\$0.06 A | -\$0.07 A | -\$0.24 A |
| 2017 | -\$0.08 A | -\$0.07 E | -\$0.06 E | -\$0.06 E | -\$0.27 E |
| 2018 | | | | | -\$0.16 E |
| 2019 | | | | | -\$0.05 E |

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

WHAT'S NEW...

Q1 Financial Results

CAS Medical reported financial results for the first quarter 2017 ending March 31st. Revenue disappointed relative to both ours as well as management's expectations. While the company's flagship FORE-SIGHT tissue oximetry business, which now accounts for 83% of total sales, eked out 1% yoy revenue growth, it fell about 3% on a sequential basis and was about 7% below our estimate. That certainly did not reflect expected performance given that disruptions related to restructuring of the sales force, which hampered FORE-SIGHT sales growth in Q4 2016, were largely believed to be a thing of the past. Clearly a hangover remained, however, as management pointed to lower-than-expected productivity from the newly-hired sales reps as the main reason for the disappointing FORE-SIGHT revenue.

Total revenue slipped by 4% yoy and by 5% sequentially to \$5.22M, which was about 9% lower than our \$5.73M estimate. FORE-SIGHT sensors revenue, which accounts for approximately 77% of total revenue, increased 8% yoy but was flat from Q4 2016. While U.S. sensor sales had increased on a yoy basis at a double-digit rate for 27 consecutive quarters through Q4 of last year, that streak was broken with Q1 growth coming in at just 8%. Meanwhile, international sensor revenue grew 2% yoy.

There were 69 FORE-SIGHT monitors shipped in Q1 – 38 in the U.S. and 31 internationally. Monitor revenue was approximately \$300k. We were looking for 81 monitors and \$397k. The \$300k in monitor revenue is down about 44% yoy and down 30% sequentially and, along with the 69 shipments, is at the lowest level since Q3 2013. But given that monitors are the figurative 'razor' of the FORE-SIGHT business and therefore generate less at the margin (versus sensors) and can be expected to exhibit slowing growth, we have little concern related to the Q1 monitor 'performance' – we also note that monitor shipments can be somewhat volatile from q-to-q,

Meanwhile, revenue from the non-invasive blood pressure monitoring segment fell 25% yoy and was down about 13% from Q4 2016. As a reminder that business, which now accounts for only about 17% of total revenue, has largely been deprioritized given the focus on growing FORE-SIGHT.

Gross margin was 54.4% in Q1, slightly below our 55.2% estimate but up 160 basis points from Q1 2016. Gross margin is expected to have some more room to improve as FORE-SIGHT sensors, which accounted for approximately 71% of total revenue in 2016 and 77% in the most recent quarter, continue to grow to account for an even greater portion of overall revenue. In addition, management expects realization of some additional manufacturing efficiencies throughout 2017. We currently model gross margin to average 56.3% for the full year.

Operating loss was approximately \$1.6M in Q1 – about \$100k higher than the comparable prior year period and the highest since Q4 2015.

In terms of cash, CASM exited Q1 with approximately \$4.7M of cash and equivalents. In addition, \$1.8M remains available under the revolver. Management noted on the Q1 call (10-Q is not yet filed) that they used approximately \$0.8M in cash for operations plus capital expenditures – which compares to a comparable use of \$2.1M in the year-earlier period. Importantly, management believes that cash on hand plus revolver availability (and additional debt if-needed) is sufficient to fund operations until they reach a point of cash flow break-even – which CASM had previously noted they think is achievable by late 2018. Clearly, their message remains that they do not expect to raise additional capital via secondary equity offerings.

Expect Revenue Acceleration in 2H With Sales Force Productivity Gains...

While CASM's newly beefed-up and expanded sales force did not produce the level of sensor sales in Q1 that had been expected, management continues to believe that productivity gains will result in improving performance throughout the year, particularly in the second half.

As a reminder, at the start of Q4 2016 CASM had 11 sales reps - five of which had been with the company for less than one year. During Q4 another five reps and one clinical specialist were added. Management noted on the Q1 call that, following the hiring of one more rep last week, that they are now fully staffed at 17. So while the lack of tenure and overall disruption from the sales force restructuring negatively impacted both Q4 '16 and Q1 '17 revenue, management expects substantial and rapid productivity gains given the solid

experience of the new hires. CASM indicated they were highly selective in filling open sales positions and noted on the Q1 call that their current team is “one of the best (they have) ever seen.”

Revised Guidance...

But despite broader geographic reach from expansion of the sales force from 11 to 17 and expectations of rapid improvement in productivity among the new hires, CASM lowered 2017 FORE-SIGHT revenue guidance. This includes:

- total FORE-SIGHT revenue growth in mid-single digits (lowered from mid-teens)
- sensors revenue growth of 10% (lowered from 20%)
- U.S. sensors revenue growth in mid-teens (no previous guidance)
- U.S. monitor placements growth in mid-teens (previous was U.S. installed base growth of 20%)

Fundamentals Remain Solid, Will Drive Long-Term Growth...

Q1 revenue was a disappointment and while we model sequential growth in Q2, we think revenue could remain relatively tepid until the second half of the year. Importantly, indications are that market and competitive fundamentals remain solid and intact. These are what we expect to drive long-term growth.

As a reminder, FORE-SIGHT’s rapid growth has been largely been attributable its performance-leading technology, affording market share gains at the expense of competitors. CASM noted on the call that their “win-rate”, remains very high – approximately 75% of clinical evaluations of its technology by prospective customers turn into contracts. Additionally, about 50% of all new monitor shipments relate to market share gains against competing systems.

For these reasons, coupled with the fact that the U.S. cerebral oximetry market remains substantially under-penetrated and more and more positive clinical outcomes studies are driving greater adoption of tissue oximetry in general, we think CASM’s long-term growth prospects remain bright.

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 four quarters (i.e. Q2 – Q4 2016 and Q1 2017). Over the same period the installed base increased by about 21% (1,788 to 2,157). 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 sales force restructuring. Another possible contributor could simply be variable utilization rates based on the particular hospital or surgeons’ preferences - management noted on the Q1 call that while some accounts use tissue oximetry 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.

Given that fundamentals, as we outlined above, remain solid, we think it is more likely than not that the recent lack of sensors sales growth is more anomaly than it is descriptive of an actual demand headwind. The next few quarters, during which the sales force will become more tenured and any volatility may be smoothed, should provide more clarity on this.

We have updated our model following Q1 results and management’s revised guidance. For 2017 we now have total revenue growing 2% (revised down from 12%) which includes 5% growth of the FORE-SIGHT segment (revised down from 16% growth) and 11% contraction in traditional monitoring (revised from 6% contraction). Within FORE-SIGHT, we have sensor sales increasing 10% (revised from 19% growth). FORE-SIGHT sales, monitor placements and total revenue growth is weighted more to 2H, reflecting productivity gains of the sales force.

Our 2017 gross margin estimate of 56.3% remains largely unchanged (vs. 54.6% in 2016). While we have slightly trimmed our SG&A estimate for the full year, our more significant downward revision to revenue implies operating loss now remains roughly flat as compared to 2016 (revised from a 14% improvement).

But, similar to revenue growth, we still continue to expect accelerated improvement in operating loss in the second half of 2017. We also continue to model consistent improvement in operating loss through the out years in our model.

OUTLOOK / 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. Sales force expansion and improved productivity should further facilitate growth of the installed base 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.

Both EV/S and P/S value CASM at approximately \$4.00/share, indicating the market is substantially undervaluing the stock.

| | Sales Estimate (M) | | EV | EV/2017 | EV/2018 | MC | P/S '17 | P/S '18 |
|-------------|--------------------|----------|-----------|------------|------------|-----------|------------|------------|
| | 2017 | 2018 | | | | | | |
| BABY | \$504 | \$512 | \$1,281 | 2.5 | 2.5 | \$1,220 | 2.4 | 2.4 |
| MASI | \$753 | \$803 | \$4,223 | 5.6 | 5.3 | \$4,550 | 6.0 | 5.7 |
| BRSYF | \$10 | \$14 | \$57 | 5.7 | 4.1 | \$65 | 6.5 | 4.6 |
| MDT | \$29,660 | \$30,860 | \$135,660 | 4.6 | 4.4 | \$114,990 | 3.9 | 3.7 |
| Avg. | | | | 4.6 | 4.1 | | 4.7 | 4.1 |

| CASM Valuation Based On: | | | | | |
|--------------------------|---------------------|---------------------|------------------------|---------------------|---------------|
| | Comparable EV/Sales | | Comparable Price/Sales | | |
| | EV | Implied Share Value | MC | Implied Share Value | |
| 2017 S | \$104 | \$3.51 | 2017 S | \$107 | \$3.95 |
| 2018 S | \$112 | \$3.78 | 2018 S | \$113 | \$4.18 |
| Average | | \$3.65 | Average | | \$4.06 |

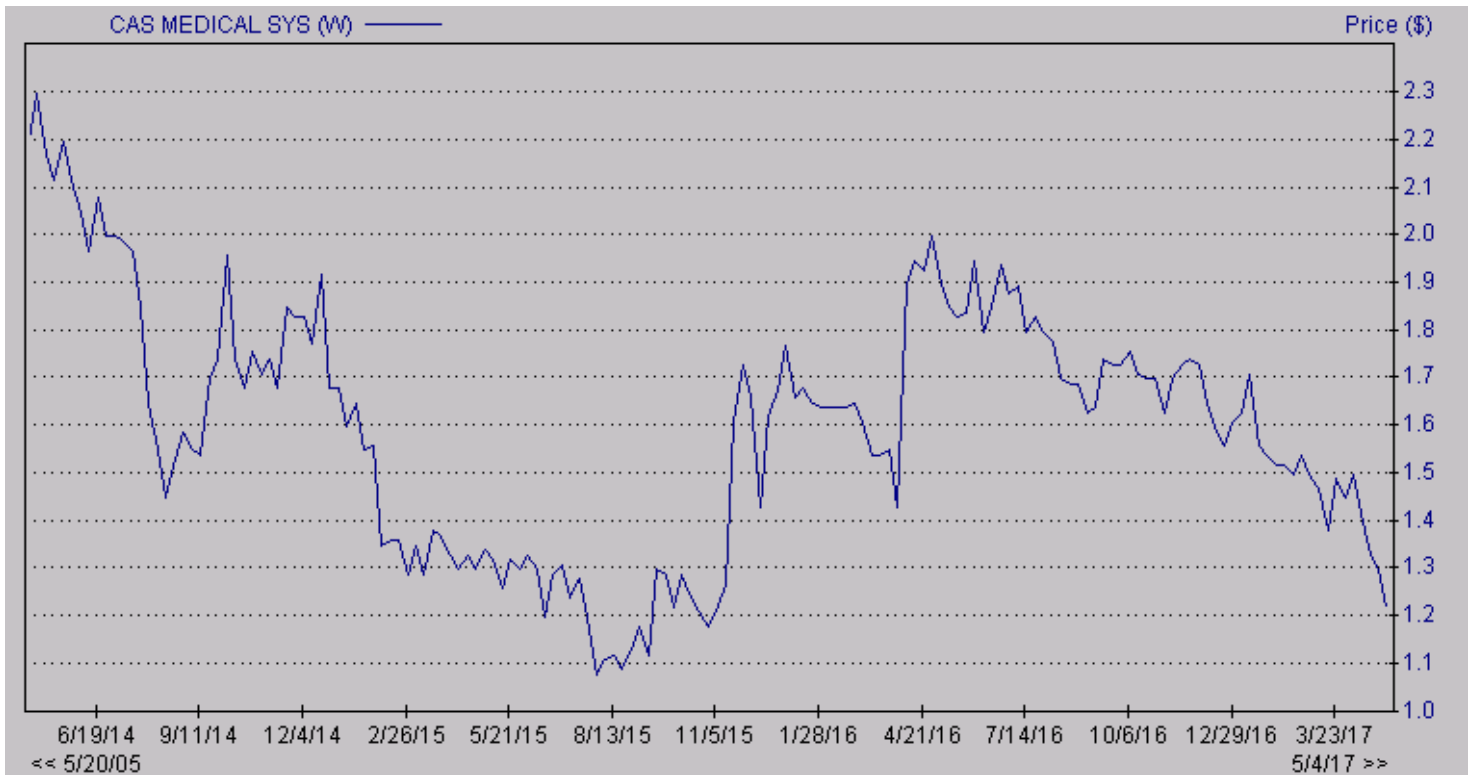
FINANCIAL MODEL

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

| | 2016 A | Q1 A | Q2 E | Q3 E | Q4 E | 2017 E | 2018 E | 2019 E |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| FORE-SIGHT Sensors | \$15,883.0 | \$4,035.0 | \$4,216.6 | \$4,456.3 | \$4,735.4 | \$17,443.3 | \$22,201.3 | \$25,488.7 |
| <i>yoy growth</i> | 22.0% | 8.1% | 4.1% | 9.5% | 17.5% | 9.8% | 27.3% | 14.8% |
| <i>% of total oximetry sales</i> | 88.2% | 93.0% | 92.8% | 91.7% | 91.7% | 92.3% | 92.9% | 93.1% |
| FORE-SIGHT Monitors & Access. | \$2,124.0 | \$302.0 | \$325.6 | \$405.0 | \$427.5 | \$1,460.1 | \$1,688.1 | \$1,896.4 |
| <i>yoy growth</i> | -10.6% | -44.4% | -24.5% | -43.8% | -0.6% | -31.3% | 15.6% | 12.3% |
| <i>% of total oximetry sales</i> | 11.8% | 7.0% | 7.2% | 8.3% | 8.3% | 7.7% | 7.1% | 6.9% |
| Tissue Oximetry Total Sales | \$18,007.0 | \$4,337.0 | \$4,542.2 | \$4,861.3 | \$5,162.9 | \$18,903.4 | \$23,889.3 | \$27,385.1 |
| <i>yoy growth</i> | 16.9% | 1.4% | 1.3% | 1.5% | 15.8% | 5.0% | 26.4% | 14.6% |
| <i>% of total revenue</i> | 81.0% | 83.0% | 82.9% | 83.3% | 84.3% | 83.4% | 86.9% | 88.8% |
| Traditional Mntng Total Sales | \$4,231.0 | \$887.9 | \$935.4 | \$974.0 | \$959.7 | \$3,757.1 | \$3,606.8 | \$3,462.5 |
| <i>yoy growth</i> | 3.5% | -24.7% | -11.5% | 0.0% | -6.0% | -11.2% | -4.0% | -4.0% |
| <i>% of total revenue</i> | 19.0% | 17.0% | 17.1% | 16.7% | 15.7% | 16.6% | 13.1% | 11.2% |
| Total Revenues | \$22,237.8 | \$5,224.9 | \$5,477.6 | \$5,835.3 | \$6,122.6 | \$22,660.4 | \$27,496.1 | \$30,847.6 |
| <i>YOY Growth</i> | 14.1% | -4.2% | -1.1% | 1.3% | 11.7% | 1.9% | 21.3% | 12.2% |
| Cost of Revenues | \$10,091.3 | \$2,380.8 | \$2,415.6 | \$2,526.7 | \$2,571.5 | \$9,894.66 | \$11,823.3 | \$12,956.0 |
| Gross Income | \$12,146.5 | \$2,844.0 | \$3,062.0 | \$3,308.6 | \$3,551.1 | \$12,765.8 | \$15,672.8 | \$17,891.6 |
| <i>Gross Margin</i> | 54.6% | 54.4% | 55.9% | 56.7% | 58.0% | 56.3% | 57.0% | 58.0% |
| R&D | \$3,436.6 | \$823.6 | \$817.0 | \$795.0 | \$812.0 | \$3,247.6 | \$3,150.0 | \$3,170.0 |
| <i>% R&D</i> | 15.5% | 15.8% | 14.9% | 13.6% | 13.3% | 14.3% | 11.5% | 10.3% |
| SG&A | \$13,575.2 | \$3,574.3 | \$3,516.6 | \$3,641.2 | \$3,771.5 | \$14,503.7 | \$15,315.3 | \$16,071.6 |
| <i>% SG&A</i> | 61.0% | 68.4% | 64.2% | 62.4% | 61.6% | 64.0% | 55.7% | 52.1% |
| Operating Income | (\$4,865.4) | (\$1,553.8) | (\$1,271.6) | (\$1,127.6) | (\$1,032.4) | (\$4,985.5) | (\$2,792.6) | (\$1,350.0) |
| <i>Operating Margin</i> | -21.9% | -29.7% | -23.2% | -19.3% | -16.9% | -22.0% | -10.2% | -4.4% |
| Interest Income, net | (\$1,048.2) | (\$259.7) | (\$264.8) | (\$256.9) | (\$244.4) | (\$1,025.9) | (\$843.9) | (\$566.2) |
| Other income | \$42.5 | \$0.1 | \$3.0 | \$12.0 | \$10.0 | \$25.1 | \$30.0 | \$30.0 |
| Pre-Tax Income | (\$5,871.1) | (\$1,813.4) | (\$1,533.5) | (\$1,372.5) | (\$1,266.9) | (\$5,986.2) | (\$3,606.5) | (\$1,886.2) |
| Taxes | (\$948.4) | \$10.5 | \$15.3 | \$13.7 | \$12.7 | \$52.3 | \$0.0 | \$0.0 |
| <i>Tax Rate</i> | 16.2% | -0.6% | -1.0% | -1.0% | -1.0% | -0.9% | 0.0% | 0.0% |
| Preferred Dividends | \$1,482.6 | \$387.0 | \$394.0 | \$401.0 | \$408.0 | \$1,590.0 | \$1,700.0 | \$0.0 |
| Net Income (cont ops) | (\$6,405.2) | (\$2,210.9) | (\$1,942.8) | (\$1,787.3) | (\$1,687.5) | (\$7,628.5) | (\$5,306.5) | (\$1,886.2) |
| <i>YOY Growth</i> | -26.1% | 143.8% | -5.1% | 8.2% | -6.2% | 19.1% | -30.4% | -64.5% |
| <i>Net Margin</i> | - | - | - | - | - | - | - | -6.1% |
| EPS (cont ops) | (\$0.24) | (\$0.08) | (\$0.07) | (\$0.06) | (\$0.06) | (\$0.27) | (\$0.16) | (\$0.05) |
| <i>YOY Growth</i> | -29.2% | 141.8% | -10.1% | 2.6% | -11.0% | 14.2% | -42.8% | -69.0% |
| Diluted Shares O/S | 26,827 | 27,026 | 28,300 | 28,300 | 28,300 | 27,982 | 34,000 | 39,000 |



HISTORICAL ZACKS RECOMMENDATIONS



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