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Cardiac Science (CSCX)

CSCX: Good Start to 2006 — BUY

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Current Price $9.60 Target Price $15.00

Investment Highlights:

1) **Strong 1Q06**: For 1Q06, the company announced revenue and EPS of $39.1M and $0.02, respectively, ahead of our estimates (excluding merger related expenses and stock-based compensation expense). The company reported GAAP net income of $264k or $0.01 per share and generated $3.6M in operating cash flow.
2) **Management Executing to Plan**: Management has shown they can execute to plan, as they have done twice previously (first with Quinton in 2002 and next with the acquisition of Burdick in 2003), turning around an unprofitable business.
3) **Segment breakdown**: Revenue growth was 8.9% q/q and 9.4% y/y (assuming Quinton and CSI had been combined during 1Q05).
   - Diagnostic cardiology revenue grew 10.4% y/y,
   - AED segment revenue growth was 8.8% y/y,
   - Service revenue growth was 7.5% y/y,
   - International segment was strong, accounting for 23% of revenue
4) **Regaining Momentum in the AED Market**: In 2005, AED revenue had not shown any growth for the old Cardiac Science (CSI). For 1Q06, we estimate the company saw nearly 20% q/q (not y/y) growth in this segment (product and service). This growth is partly due to the approval of the biphasic product in Japan, but represents strong growth in all markets.
5) **Nihon Kohden (Japan) was a Strong Contributor**: The company began shipping product to Japan in late 3Q05. The company entered 2006 in full stride, and expects the Japanese market to be a significant contributor in FY06.

Stock Data		
52-Week Range	$8.00 – $12.00	
Shares Outstanding (Mill)	22.6	
Market Capitalization ($Mill)	$213.5	
Average Daily Volume	67,791	
Book Value/Share	$9.53	
Price/Book	1.03	
Cash / Securities ($Mill)	$6.2M	
Cash/Share	$0.28	
Insider Ownership	N/A	
Institutional Ownership	N/A	
Debt ($Mill)	-	
Dividend/Yield	-	
Short Interest ($Mill) / %	$1.1 / 0.6%	
Estimates (Dec)	**2H05**	**2006E**
Sales ($Mill)	$63.4	$175
EPS	$0.07	$0.39
Net Inc. (Loss) ($Mill)	$1.0	$8.8

Management	
Pres & CEO	John Hinson
SVP & CFO	Mike Matysik
VP, Research	David Hadley, PhD

Price target and ratings changes over the past 3 years:
Initiated October 5, 2005 – BUY – Price Target $15.00

See last page for important disclosures and analyst certification.

6) **New Product Development**: The company announced a number of new products in 1Q06 including FDA approval of the GE crash cart and the recently announced Atria 6100 resting ECG.
7) **Gross Margin Negatively Impacted by Large Order**: Pro forma gross margins decreased to 47.7%, from 48.4% in the 4Q05 due to a competitive bid on a large international order. Management continues to expect gross margins for FY06 to be between 48-50%, depending on product mix and volume.
8) **GE Crashcart Approval**: The company received approval of the crash cart defibrillator in early January. Full product launch by GE is expected in 3Q06, slightly later than originally expected. Revenue expectations for the year are in the mid-single digit million range.
9) **Philips Litigation**: The company has received the judge's ruling from the Markman hearing held in Februar, resulting in increased litigation costs in 2Q06. The trial is expected to commence in early 2007.
10) **Liquidity Good**: The company generated $3.6M from cash flow from operations. As a reminder, Quinton was a moderately profitable company while CSI was not-profitable. The company ended the quarter with $6.2M in cash, no debt and a $20M line of credit.
11) **Reiterated FY06 Guidance**: Management cited that momentum was good towards the end of the quarter in all market segments, and reiterated guidance for FY06 of revenue of $160-175M. Revenue should ramp throughout the year as several new products are rolled out (eg GE crashcart).
12) **Good Start to 2006, Reiterate BUY Rating**: All in, this was a strong start to 2006. Management has shown they can execute on plan. We continue to find the stock attractive at current levels, and reiterate our BUY recommendation and $15 price target.

INVESTMENT CONCLUSION & VALUATION

We are reiterating our BUY recommendation and $15 per share price target on Cardiac Science Corporation.

Cardiac Science Corporation (NASDAQ: CSCX) develops, manufactures and markets diagnostic and therapeutic cardiology products. This is the first full quarter for the new company.

The company started 1Q06 off strong, with revenue and EPS of $39.1M and $0.02, ahead of our estimate. **Management has executed to plan, delivering GAAP profitability in 1Q06 after delivering pro forma profitability in 3Q05 and 4Q05. With revenue growth, improving gross margins and expense control, this trend should continue.**

Based on FY06 revenue of $175Mln and EPS of $0.39, CSCX trades at a discount to its medical device peer group. At current levels, the stock trades at a 1.2x Price/Sales vs. 2.4x for the peer group (Russell 2000 Growth Medical & Dental Instruments Index). We contend that there is more upside potential than downside risk, given the company's growth prospects, position in the market and potential as an acquisition target. We continue to find the stock attractive at current levels, and reiterate our BUY recommendation and $15 price target.

1Q06 Results

The company reported 1Q06 revenue and pro forma EPS of $39.1M and $0.02, respectively, ahead of our estimate of revenue of $37.5M but below our EPS estimate of $0.03. Pro forma EPS excludes merger related and other one-time charges. On a pro forma basis (as if the two predecessor companies had been together for 1Q06), revenue grew 8.9% q/q and 9.4% y/y. As with 4Q05, backlog continues to build.

The EPS shortfall was largely due to a lower than expected gross margin. Pro forma gross margins decreased 70bp q/q to 47.7% from 48.4%, due to product mix and a large international order. We expect margins to rebound in 2Q06 and continued improvement in margins throughout FY06 as a result of continued cost reductions and increased contribution of defibrillator products, which generally carry margins in the mid-50s.

Operating expenses remain under control as the company realizes the benefit of merger integration. Operating expenses were $18.2M, including $3M in R&D, $9.4M in sales and marketing and $5.8M in G&A expenses.

Excluding merger related items and stock based compensation expense, EBITDA for the quarter was 7.5% of revenue. Management in targeting 11-14% EBITDA for FY06.

We expect some increase in operating expenses in 2Q06 due to increased litigation expenses.

Although the company reports on a fully taxed basis, actual cash income taxes will be significantly less due to the benefit of significant tax loss carryforwards. As of December 31, 2005, the company had net operating loss carry forwards of $103.3Mln (Federal) and $61.7Mln (State).

The company ended 1Q06 with $6.2M in cash and **no debt**. For 1Q06, cash flow from operations was $3.6M. In addition, the company has a $20M line of credit in place.

Management Executing to Plan

As this management team has done twice before with Quinton in 2002 and with the acquisition of Burdick in 2003, they have turned an unprofitable entity profitable. As they laid out in the pre-merger plan, the merger integration was completed ahead of schedule in 4Q05, the new company reported a pro forma profit in 3Q05 and 4Q05 and a GAAP profit in 1Q06.

Through the merger, the company has taken out approximately $14M in annual operating costs, eliminated nearly $8M in annual interest expense, and is expected to achieve 11 to 14% adjusted EBITDA margins in FY06.

Diagnostic Cardiology

The diagnostic cardiology and services segment performed well during the quarter, posting low single digit q/q revenue growth. With new product introductions, momentum should continue throughout FY06.

AED Market & Pricing

Building off of a strong performance in 4Q05, AED segment revenue in 1Q06 was very strong, growing nearly 20% q/q. Nihon Kohden clearly had a part to play in the strong performance. With the merger no longer a distraction, we anticipate the company will continue to build momentum in the AED marketplace.

AED market opportunity continues to be large and under-penetrated. Although all market segments performed well in the quarter, international sales were particularly strong. This should continue as evidenced by the number of orders in backlog.

The AED market is highly competitive. Although we have seen some price declines, pricing in general has remained stable, as is shown in the table below.

AED Competitive Landscape

Product	Manufacturer	Cost Oct'05	Nov'05	Feb'06	May'06
Powerheart AED G3 Pro	Cardiac Science	$2,895	$2,895	$2,895	$2,895
Powerheart AED G3		$1,995	$1,995	$1,995	$1,995
Lifeline AED	Defibtech	$1,245	$1,245	$1,245	$1,245
HeartStart OnSite	Philips	$1,460	**$1,295**	**$1,195**	**$995**
HeartStart FRx		$1,895	**$1,695**	$1,695	**$1,595**
HeartStart FR2+ AED		$1,950	**$1,850**	$1,850	**$1,795**
LifePak CR Plus	Medtronic	$2,199	$2,199	**$1,895**	**$1,795**
LifePak 500		$2,595	$2,595	**$1,995**	**$1,895**
AED 20	Welch Allyn	$2,906	$2,906	$3,158	$3,158
AED 10		$1,695	$1,695	$1,695	$1,695
Samaritan	Heartsine	$1,595	$1,595	$1,596	$1,596
Samaritan PAD		$1,195	$1,195	n/a	n/a
AED Plus	Zoll Medical	$1,545	$1,545	$1,595	$1,595
AED Pro		n/a	n/a	$3,595	**$2,995**

New Products

The company announced a number of new products in 1Q06 including FDA approval of the GE crash cart and the recently announced Atria 6100 resting ECG. In addition, the company is now shipping PowerHeart AEDs that meet the newly updated AHA guidelines for cardiopulmonary resuscitation.

The company's patent portfolio remains strong, with over 100 patents covering technology, devices and disposable products.

Nihon Kohden, International Sales and GE

The company began shipping product to Nihon Kohden in 4Q05, and momentum with this partner continues to build. As evidenced by 1Q06, we expect the rollout of the biphasic product in Japan to proceed fairly well, and expect revenue contribution for FY06 to exceed levels achieved in FY04 for Cardiac Science Inc. (sales to Japan accounted for >$10M for CSI in FY04).

In addition to the strength in sales to Japan, sales of AEDs to markets outside of the US was strong in the quarter. International sales in total accounted for 23% of revenue, with the company making sales in over 70 countries. Sales of AEDs were particularly strong in the UK, where management believes they are the market leader. Management mentioned several large international orders in backlog that should be shipped in FY06.

The company received regulatory approval for the crash cart defibrillator, the Powerheart ECD, in January 2006. Full product launch by GE has been delayed slightly to 3Q06 from late 2Q06. While this process has clearly taken longer than expected, revenue expectations for the year are in the mid-single digit million range. The product will be sold as the Cardiac Science Powerheart ECD in North America and in the rest of the world under the GE brand name as the Responder 2000. In addition, GE will have exclusive rights to market the company's AEDs to the US hospital market. GE will market a GE branded AED outside the US. GE has specific minimums associated with the sale of the crash cart defibrillators and the AEDs. With respect the AEDs, the minimums are in place to maintain exclusivity in the domestic hospital market.

Philips Litigation

The patent litigation with Philips continues. The company recently received the judge's ruling from the Markman hearing held in February. Management stated that there was nothing in the judge's order that changes the company's fundamental argument(s). The trial is expected to commence in early 2007. Management's guidance for FY06 includes **significant** costs associated with this litigation.

2Q06 and FY06 Guidance and Estimate

Management reiterated prior FY06 guidance and provided guidance for 2Q06. For 2Q06, the company expects revenue and GAAP EPS of $38-41M and $0.00-0.03, respectively. 2Q06 will include significant costs associated with the ongoing litigation with Philips. For FY06, the company reiterated prior guidance and expects revenue of $160-175M and GAAP EPS of $0.21-0.27. These results include anticipated stock-based compensation expense of $2.6-2.8M for the year.

We have adjusted our estimates for 2Q06 and FY06 slightly. We expect revenue of $41.4 and EPS of $0.05 for 2Q06 and revenue of $175M and EPS of $0.39 for FY06. These estimates exclude merger related charges (1Q06 only) and stock-based compensation expense.

Industry Valuation

We believe the stock is undervalued at the current price. At $9, the stock trades at 1.2x Price/Sales and 23x FY06 P/E. The Russell 2000 Growth Medical & Dental Instruments Index trades at 2.4x Price/Sales.

Our $15.00 per share target price is based on applying a 2x Price/Sales (FY06 sales).

Key Modeling Assumptions

Increase penetration of AED market – The AED and traditional defibrillator market is still relatively underpenetrated. Our forecast assumes continued adoption of AEDs in the U.S. and overseas.

International Markets – Both Quinton Cardiology and Cardiac Science Inc. derived the majority of their revenue from the U.S. We expect increased focus on international markets and the subsequent increase in sales.

Operational Savings – We expect the company to realize operational efficiencies from the merger.

New Product Introduction – Over the past several years, the company has introduced a number of new products (through internal development and acquisition). We expect continued investment in R&D to broaden the product offering.

RISKS

We believe a BUY position with Cardiac Science involves the following risks:

- ***Integration Difficulties*** – Cardiac Science plans to consolidate facilities and streamline operations. Any set-back would negatively impact the company.
- ***Regulatory*** – Cardiac Science relies on its products receiving approval from the Food and Drug Administration and other international regulatory agencies. The company currently has several products under development that must go through the approval process prior to commercial availability. Any delay will negatively impact the company.
- ***Competition*** – The diagnostic and therapeutic cardiology space is competitive, from both private and public companies. In addition, many of the company's competitors are much larger and have more resources than Cardiac Science.
- ***Potential Dilution*** – The company may need to raise additional funds for acquisitions or other business initiatives.
- ***Litigation*** – The company is currently involved in a patent litigation suit with Philips.
- ***Sector Rotation* –** Cardiac Science is a medical device company and is often held in a portfolio with other device companies. A material event affecting one company many times affects the entire group.

Cardiac Science Corporation (CSCX)

	Sep-05	Dec-05	Mar-06	Forecast Jun-06	Sep-06	Dec-06		
Pro Forma	3Q05	4Q05	1Q06	2Q06e	3Q06e	4Q06e	2H05	2006e
Income Statement *(pro forma)*								
Revenue								
Products	24,033	31,827	34,569				55,860	
Services	3,413	4,079	4,546				7,492	
Total	27,446	35,906	39,115	41,426	45,267	49,696	63,352	175,504
Cost of Revenue								
Products	13,029	18,286	17,680				31,315	
Services	2,139	2,683	3,042				4,822	
Total	15,168	20,969	20,722	21,334	22,905	24,848	36,137	89,809
Operating Expenses								
R&D	*2,262*	*3,374*	*2,970*	3,006	3,009	3,039	5,636	12,023
S&M	*6,601*	*9,107*	*9,383*	9,664	10,051	10,654	15,708	39,753
G&A	*4,697*	*6,118*	*5,811*	6,683	5,613	5,754	10,815	23,861
Total	13,560	18,599	18,164	19,353	18,673	19,447	32,159	75,637
Operating Income	(1,282)	(3,662)	229	1,894	4,767	6,527	(4,944)	13,417
Other Income								
Total	*157*	*(691)*	*181*	*40*	*40*	*40*	(534)	301
Income before Taxes	(1,125)	(4,353)	410	1,934	4,807	6,567	(5,478)	13,718
Income Taxes	558	1,819	(159)	(725)	(1,803)	(2,463)	2,377	(5,150)
Net Income	(567)	(2,534)	251	1,209	3,004	4,105	(3,101)	8,569
Pro Forma Adjustments								
Gross Profit	729	2,436	267				3,165	
Operating Expenses	1,633	920	152				2,553	
Other		916					916	0
Total	2,362	4,272	419	0	0	0	6,634	419
Income before Taxes	1,237	(81)	829	1,934	4,807	6,567	1,156	14,137
Income Tax	(340)	196	(307)	(725)	(1,803)	(2,463)	(144)	(5,297)
Net Income excl Merger Expenses	895	122	522	1,209	3,004	4,105	1,017	8,840
EBIT	(1,282)	(3,662)	229	1,894	4,767	6,527	(4,944)	13,417
EBIT *(%)*	-3.9%	-10.2%	0.6%	4.6%	10.5%	13.1%	-7.2%	7.6%
Weighted average shares - Basic	14,523	22,400	22,431				22,400	
Weighted average shares - Diluted	15,025	22,800	22,608	22,721	22,834	22,948	22,800	22,778
EPS	($0.04)	($0.11)	$0.01	$0.02	$0.10	$0.15	($0.15)	$0.28
EPS (excl Merger Expenses and Stock-based Comp Exp)	$0.06	$0.01	$0.02	$0.05	$0.13	$0.18	$0.06	$0.39
% of Revenue								
Gross Margins	39.5%	48.4%	47.7%	48.5%	49.4%	50.0%	43.0%	48.8%
R&D	6.9%	9.4%	7.6%	7.3%	6.6%	6.1%	8.2%	6.9%
S&M	20.0%	25.4%	24.0%	23.3%	22.2%	21.4%	22.8%	22.7%
G&A	14.3%	17.0%	14.9%	16.1%	12.4%	11.6%	15.7%	13.6%
Op Ex	41.2%	51.8%	46.4%	46.7%	41.3%	39.1%	46.7%	43.1%
Op Inc	(3.9%)	(10.2%)	0.6%	4.6%	10.5%	13.1%	(7.2%)	7.6%
Tax Rate	49.6%	37.0%	37.0%	*37.5%*	*37.5%*	*37.5%*	43.4%	37.5%
Net Income	(1.7%)	(7.1%)	0.6%	2.9%	6.6%	8.3%	(4.5%)	4.9%
q/q % Change								
Revenue		9.0%	8.9%	5.9%	9.3%	9.8%		
R&D		49.2%	(12.0%)	*1.2%*	*0.1%*	*1.0%*		
S&M		38.0%	3.0%	*3.0%*	*4.0%*	*6.0%*		
G&A		30.3%	(5.0%)	*15.0%*	*(16.0%)*	*2.5%*		
Op Ex		37.2%	(2.3%)	6.5%	(3.5%)	4.1%		
Op Inc		185.6%	(106.3%)	727.1%	151.7%	36.9%		
Net Income		346.9%	(109.9%)	381.6%	148.5%	36.6%		
y/y % Change								
Revenue					37.4%	38.4%		
R&D					33.0%	(9.9%)		
S&M					52.3%	17.0%		
G&A					19.5%	(6.0%)		
Op Ex					37.7%	4.6%		
Op Inc					(471.8%)	(278.2%)		
Net Income					(629.9%)	(262.0%)		

Balance Sheet			
Current Assets			
Cash and cash equivalents	8,119	3,546	6,169
Accounts receivable, net	20,331	25,738	25,899
Inventories	23,941	22,052	20,004
Deferred income taxes	11,483	12,115	12,115
Prepaid expenses and other	2,583	2,511	1,988
Total current assets	66,457	65,962	66,175
PPE, net	7,640	7,631	7,262
Deferred income taxes	22,986	27,849	27,790
Intangible assets, net	36,975	35,338	34,470
Goodwill	114,707	111,215	110,888
Other	1,239	562	554
Total assets	250,004	248,557	247,139
Current Liabilities			
Accounts payable	12,840	11,642	11,760
Accrued liabilities	11,424	11,918	9,890
Warrant liabilities	2,334	2,348	2,359
Deferred revenue	6,103	7,924	7,937
Total current liabilities	32,701	33,832	31,946
Other liabilities	2,061	1,806	1,306
Total liabilities	34,762	35,638	33,252
Minority interest	135	128	116
Shareholders' Equity	215,107	212,791	213,771
Total Liabilities and Shareholders' Equity	250,004	248,557	247,139

Note:
3Q05 inclues one month of Cardiac Science Inc. and a full quarter of Quinton Cardiology.
As of December 31, 2005, the company had net operating loss carry forwards of $103.3Mln (Fed) and $61.7Mln (State).

DISCLOSURES

Initiated October 5, 2005 – BUY – Price Target $15.00

Analyst Certification: The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) All Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

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Ratings definitions: 1) Speculative Buy: the stock is expected to appreciate and produce a total return of at least 30% over the next 12-18 months but **the volatility and investment risk is substantially higher** than our "Strong Buy" recommendation; **2) Strong Buy:** the stock is expected to appreciate and produce a total return of at least 30% over the next 12-18 months; **3) Buy:** the stock is expected to appreciate and produce a total return of at least 20% over the next 12-18 months; **4) Neutral:** the stock is fairly valued for the next 12-18 months; **5) Sell:** the stock is expected to decline at least 20% over the next 12-18 months and should be sold; **6) Sell Short:** the stock is expected to decline at least 30% over next 12-18 months and should be sold short, however **the volatility and investment risk is substantially higher** than our "Sell" recommendation; **7) Under Review:** the previous rating and/or price target is suspended due to a significant event which now requires additional analysis and the previous rating and/or price target cannot be relied upon; and **8) Restricted:** coverage cannot be initiated or has been temporarily suspended to comply with applicable regulations and/or firm policies in certain circumstances such as investment banking or an advisory capacity involving the company.

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Speculative Buy	4	22%	1	25%
Strong Buy	2	11%	1	50%
Buy	8	44%	1	13%
Neutral	2	11%	1	50%
Sell	1	6%	0	0%
Sell Short	0	0%	0	0%
Under Review	1	6%	1	100%
Restricted	0	0%	0	0%
Total	18	100%	5	28%

Information about valuation methods and risks can be found in the "STOCK VALUATION" and "RISKS" sections of this report.