SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) of the SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): November 8, 2006

AtriCure, Inc.

(Exact name of registrant as specified in charter)

Delaware (State or other jurisdiction of incorporation) 000-51470 (Commission File Number) 34-1940305 (IRS Employer Identification No.)

6033 Schumacher Park Drive West Chester, OH (Address of principal executive offices)

45069 (Zip Code)

Registrant's telephone number, including area code: (513) 755-4100

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On November 8, 2006, AtriCure, Inc. issued a press release and is holding a conference call regarding its financial results for the third quarter of fiscal year 2006 ended September 30, 2006. A copy of the press release is furnished as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

The information in this Form 8-K is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section. The information in this Form 8-K shall not be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in any such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

No. Description

99.1 Press Release of AtriCure, Inc. dated as of November 8, 2006.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ATRICURE, INC.

By: /s/ David J. Drachman

David J. Drachman President and Chief Executive Officer

Dated: November 8, 2006

No.Description99.1Press Release of AtriCure, Inc. dated as of November 8, 2006.



Contacts:

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Press Release

AtriCure Reports Third Quarter 2006 Financial Results

Third Quarter Highlights

- Revenue of \$9.4 million, 31% year-over-year increase, exceeds high end of guidance
- Domestic MIS sales reach a record level of \$2.8 million, with year-over-year growth of 95%
- International sales increased 76% year-over-year
- Lowered full year 2006 loss per share guidance
- Received European approval to market the Isolator[™] bipolar ablation system for the treatment of cardiac arrhythmias, including atrial fibrillation (AF)

WEST CHESTER, Ohio – November 8, 2006 – AtriCure, Inc. (Nasdaq:ATRC), a medical device company focused on developing, manufacturing and selling innovative surgical devices, announced today financial results for the third quarter ended September 30, 2006.

Third quarter 2006 consolidated revenue was \$9.4 million, a 31% increase compared to revenue of \$7.2 million for the third quarter 2005 and, due to seasonality, relatively stable compared to revenue of \$9.6 million for the second quarter 2006. Third quarter 2006 revenue from domestic products used in open procedures was \$5.5 million, revenue from domestic products used in the minimally invasive sole-therapy setting was \$2.8 million, a 95% increase year-over-year, and international revenue was \$1.1 million, a 76% increase year-over-year.

Gross profit for the third quarter 2006 was \$7.5 million, with a gross margin of 79.8%, compared to \$5.2 million, with a gross margin of 71.9%, in the same period last year and \$7.9 million, with a gross margin of 81.5%, for the second quarter 2006. Higher gross margin for 2006 was attributable to the realization of the full impact of the Company acquiring the manufacturer of its disposable products, Enable Medical Corporation.

Research and development expenses were \$3.2 million for the third quarter 2006, compared to \$2.6 million for the third quarter 2005 and \$2.9 million for the second quarter 2006. The year-over-year increase in research and development expenses was attributable primarily to increases in headcount-related charges and the expansion of clinical research activities.

Selling, general and administrative expenses were \$7.7 million for the third quarter 2006, compared to \$6.3 million for the third quarter 2005 and \$8.5 million for the second quarter 2006. Selling, general and administrative expenses increased year-over-year primarily due to increases in headcount and higher general corporate expenditures, including Sarbanes-Oxley related expenses. The sequential decrease in selling, general and administrative expenses was primarily attributable to lower accounting related expenses, a seasonal decrease in sales and marketing expenses and an internal focus to decrease expenses.

Net loss for the third quarter 2006 totaled \$3.2 million, or \$0.26 per share, including the after-tax effect of approximately \$0.2 million, or \$0.02 per share, of stock-based compensation related to SFAS 123(R) and other non-cash-based compensation.

Cash, cash equivalents and investments at September 30, 2006 were \$22.3 million.

In commenting on the quarter, David Drachman, President and Chief Executive Officer said, "Considering the challenges of seasonality, we are particularly encouraged by our third quarter results. During 2006 we have focused on establishing the infrastructure to position the Company for sustained growth. The Company launched two new products during the third quarter, and we plan to build on this momentum in 2007 with the launch of four new significant, innovative disposable products. In addition, we anticipate that a series of peer-reviewed publications and presentations at the premier scientific meetings will further expand the markets for our minimally invasive products."

In September, the Company received CE Mark approval to market the IsolatorTM bipolar ablation system in the European Union (EU) for the treatment of cardiac arrhythmias, including atrial fibrillation (AF). The AtriCure clamps are the only bipolar radiofrequency (RF) clamps that are approved for this indication in the EU. The Company believes this initiative will further fuel the growth of its business in Europe.

Financial Guidance and Officer Update

For the full year 2006, the Company is raising the low-end of its revenue guidance and lowering its loss per share guidance. It now expects total revenue for 2006 to be between \$37.6 million and \$38.0 million and loss per share to be between \$1.20 and \$1.25. The Company's full year loss per share guidance includes the estimated impact of \$0.08 to \$0.10 per share of after-tax, stock-based compensation related to SFAS 123(R) and other non-cash-based compensation.

For the fourth quarter 2006, the Company expects total revenue to be between \$10.0 million and \$10.4 million.

Separately, the Company announced today that Michael D. Hooven, Co-Founder and Chief Technology Officer, will transition from his operating role to a consultant. In his consultant role, Mr. Hooven will focus on early-stage innovative product concepts for use by electrophysiologists. Mr. Hooven will continue to serve as a Director of AtriCure and provide support to the Company's product development efforts and the management of its intellectual property portfolio. AtriCure anticipates that under his consulting agreement, Mr. Hooven will be able to evaluate these early-stage concepts, while also being able to pursue his long-established entrepreneurial endeavors outside of AtriCure's business.

David J. Drachman, AtriCure President and CEO, said, "Mike is a world-class inventor and entrepreneur who has made a significant contribution to AtriCure and to the development of products to treat atrial fibrillation. We are pleased he will continue to assist AtriCure in its efforts to bring innovative solutions to important clinical challenges."

Mr. Hooven said, "I am very proud of the AtriCure team and its successes, and I am looking forward to returning to my roots as an independent inventor and entrepreneur, while working with AtriCure on these exciting early stage concepts."

Conference Call

AtriCure will host a Web cast and conference call at 5:00 p.m. ET on Wednesday, November 8, 2006, to discuss third quarter 2006 results. A live Web cast of the conference call will be available online from the investor relations page of AtriCure's corporate Web site at www.atricure.com. The dial-in numbers are 888-396-2356 for domestic callers and 617-847-8709 for international callers. The reservation number for both is 60310960. A recording of the conference call will remain available on AtriCure's Web site through December 9, 2006. A telephonic replay of the call will be available until December 9, 2006. The replay dial-in numbers are 888-286-8010 for domestic callers and 617-801-6888 for international callers. Please use reservation code 46575583.

About AtriCure, Inc.

AtriCure, Inc. is a medical device company focused on developing, manufacturing and selling innovative surgical devices to create precise lesions, or scars, in soft and cardiac tissues. Medical journals have described the adoption by leading cardiothoracic surgeons of the AtriCure bipolar ablation system as a standard treatment alternative during open-heart surgical procedures to safely, rapidly and reliably create lesions in cardiac, or heart, tissue to block the abnormal electrical impulses that cause atrial fibrillation, a rapid, irregular quivering of the upper chambers of the heart. Atrial fibrillation affects more than 2.4 million people in the U.S. and predisposes them to a five fold increased risk of stroke.

The FDA has cleared the AtriCure bipolar ablation system for the ablation, or destruction, of soft tissues in general and non-cardiac related surgical procedures but to date has not cleared or approved the system for cardiac use or for the treatment of AF. The FDA has cleared the AtriCure IsolatorTM TranspolarTM Pen for the ablation of cardiac tissue and the evaluation of cardiac arrhythmias, but the IsolatorTM TranspolarTM Pen has not been approved for the treatment of AF.

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements that address activities, events or developments that AtriCure expects, believes or anticipates will or may occur in the future, such as earnings estimates, other predictions of financial performance, launches by AtriCure of new products and market acceptance of AtriCure's products. Forward-looking statements are based on AtriCure's experience and perception of current conditions, trends, expected future developments and other factors it believes are appropriate under the circumstances and are subject to numerous risks and uncertainties, many of which are beyond AtriCure's control. These risks and uncertainties include the rate and degree of market acceptance of AtriCure's products, AtriCure's ability to develop and market new and enhanced products, the timing of and ability to obtain and maintain regulatory clearances and approvals for its products, the timing of and ability to obtain reimbursement of procedures utilizing AtriCure's products, competition from existing and new products and procedures or AtriCure's ability to effectively react to other risks and uncertainties described from time to time in AtriCure's SEC filings, such as fluctuation of quarterly financial results, reliance on third party manufacturers and suppliers, litigation or other proceedings, government regulation and stock price volatility. AtriCure does not guarantee any forward-looking statement, and actual results may differ materially from those projected. AtriCure undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

ATRICURE, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended September 30,		Nine Mont Septem	
	2006	2005	2006	2005
Revenues	\$ 9,358,045	\$ 7,169,748	\$ 27,643,891	\$22,397,927
Cost of revenues (a)	1,885,946	2,015,458	5,271,104	5,913,099
Gross profit	7,472,099	5,154,290	22,372,787	16,484,828
Operating expenses:				
Research and development expenses (a)	3,172,286	2,612,977	9,010,950	6,320,371
Selling, general and administrative expenses	7,691,260	6,317,891	23,676,328	16,713,075
Total operating expenses	10,863,546	8,930,868	32,687,278	23,033,446
Loss from operations	(3,391,447)	(3,776,578)	(10,314,491)	(6,548,618)
Preferred stock interest expense	—	(379,669)	—	(2,332,254)
Interest income (expense), net	235,849	106,943	788,149	122,552
Other income		84,868	72,632	84,868
Net loss available to common shareholders	\$ (3,155,598)	\$(3,964,436)	\$ (9,453,710)	\$ (8,673,452)
Basic and diluted loss per share	\$ (0.26)	\$ (0.49)	\$ (0.78)	\$ (2.18)
Weighted average shares outstanding:				
Basic and diluted	12,148,565	8,151,220	12,121,044	3,981,354

(a) Includes the following expenses resulting from transactions with Enable Medical Corporation prior to the acquisition as of August 10, 2005:

Cost of revenues	\$ 	\$ 943,313	\$ 	\$ 4,259,269
Research and development expenses	\$ —	\$ 139,365	\$ —	\$ 1,201,583

ATRICURE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

	September 30, 2006	December 31, 2005
Assets		
Current assets:		
Cash and cash equivalents	\$ 15,816,121	\$ 27,432,948
Short-term investments	3,689,367	6,369,234
Accounts receivable, net	6,085,754	4,865,065
Inventories, net	3,249,554	2,135,143
Other current assets	1,460,288	845,330
Total current assets	30,301,084	41,647,720
Property and equipment, net	3,534,343	3,359,549
Long-term investments	2,799,427	—
Intangible assets	826,278	986,778
Goodwill	3,840,837	3,840,837
Other assets	199,445	205,531
Total assets	\$ 41,501,414	\$ 50,040,415
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 5,799,864	\$ 5,374,998
Current maturities of capital lease obligation and long-term debt	384,992	369,835
Total current liabilities	6,184,856	5,744,833
Capital lease obligation	20,081	38,855
Long-term debt	773,298	1,045,150
Other liabilities	70,313	28,125
Shareholders' equity:		
Common stock	12,180	12,086
Additional paid-in capital	86,193,992	86,107,520
Unearned compensation	—	(599,591)
Other comprehensive income	37,794	826
Accumulated deficit	(51,791,100)	(42,337,389)
Total shareholders' equity	34,452,866	43,183,452
Total liabilities and shareholders' equity	\$ 41,501,414	\$ 50,040,415

ATRICURE, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

		Nine Months Ended September 30,		
	2006	2005		
Cash flows from operating activities:		+ (0.0=0.(=0)		
Net loss	\$ (9,453,710)	\$ (8,673,452)		
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	1,364,958	1,060,750		
Gain on disposal of equipment	(20,000)			
Stock compensation	649,422	497,898		
Preferred stock interest	—	2,332,254		
Changes in assets and liabilities:				
Accounts receivable	(1,200,690)	1,188,002		
Inventory	(1,114,411)	(483,136)		
Other current assets	(614,958)	(949,167)		
Accounts payable and accrued liabilities	364,332	1,002,176		
Other non-current assets and liabilities	96,279	412,420		
Net cash used in operating activities	(9,928,778)	(3,612,255)		
Cash flows from investing activities:				
Purchases of property & equipment	(1,378,541)	(1,486,948)		
Purchases of available-for-sale securities	(5,482,883)	—		
Maturities of available-for-sale securities	5,365,000	—		
Cash paid for acquisition, net	—	(6,420,681)		
Net cash used in investing activities	(1,496,424)	(7,907,629)		
Cash flow from financing activities:				
Proceeds from long-term debt borrowings	_	1,500,000		
Payments on long-term debt	(251,019)	(11,981)		
Payments on capital lease obligations	(24,449)	(5,386)		
Proceeds from stock offering	_	43,176,994		
Proceeds from stock option exercises and warrants	83,843	21,006		
Net cash provided by (used in) financing activities	(191,625)	44,680,633		
Net increase (decrease) in cash and cash equivalents	(11,616,827)	33,160,749		
Cash and cash equivalents - beginning of period	27,432,948	5,175,177		
Cash and cash equivalents - end of period	\$ 15,816,121	\$38,335,926		
Cash and cash equivalence - end of period	φ 13,010,121	\$50,555,520		