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): August 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)

_	Whiteh communications pursuant to reac 425 under the occurred rec (17 of re 250.425)
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
	Pre-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 August 8, 2006, AtriCure, Inc. issued a press release and on August 9, 2006, it is holding a conference call regarding its financial results for the second quarter ended June 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. <u>Description</u>

99.1 Press Release of AtriCure, Inc. dated as of August 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/ Thomas J. Etergino

Thomas J. Etergino
Vice President and Chief Financial Officer

Dated: August 8, 2006

EXHIBIT LIST

No. <u>Description</u>

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



Contacts:

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Press Release

AtriCure Reports Second Quarter 2006 Financial Results

Recent Highlights:

- Generated second quarter 2006 revenues of \$9.6 million, up 11.7% sequentially
- Physicians performed MIS procedures in 65 domestic medical centers during the quarter
- Launched Multifunctional IsolatorTM TranspolarTM Pen System
- Launched new IsolatorTM TranspolarTM open clamp
- · Completed treatment phase of RESTORE-SR II feasibility study

WEST CHESTER, Ohio — August 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 second quarter ended June 30, 2006.

Second quarter 2006 consolidated revenue was \$9.6 million, compared to \$7.7 million for the second quarter 2005 and \$8.6 million for the first quarter 2006. Second quarter 2006 revenue from domestic products used in open procedures was \$5.6 million, revenue from domestic products used in the minimally invasive sole-therapy setting was \$2.7 million, and international revenue was \$1.3 million.

Gross profit for the second quarter 2006 was \$7.9 million with gross margins of 81.5%, compared to \$5.8 million with gross margins of 74.4% in the same period last year and \$7.0 million with gross margins of 81.5% for the first quarter 2006.

Research and development expenses were \$2.9 million for the second quarter 2006, compared with \$2.0 million for the second quarter 2005 and \$2.9 million for the first quarter 2006. The year over year increase in research and development expenses was attributable primarily to the expansion of product development initiatives and clinical trials.

Selling, general and administrative expenses were \$8.5 million for the second quarter 2006, compared with \$5.1 million for the second quarter 2005 and \$7.5 million for the first quarter 2006. Selling, general and administrative expenses increased year over year primarily due to increases in headcount and higher general corporate expenditures as a result of being a public company. The sequential increase to selling, general and administrative expenses was primarily attributable to increased selling-related expenses and higher general corporate expenditures, including Sarbanes-Oxley related expenses.

Net loss for the second quarter 2006 totaled \$3.2 million, or \$0.26 per share, including the after-tax effect of approximately \$0.3 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 June 30, 2006 were \$26.8 million.

In commenting on the quarter, David Drachman, President and Chief Executive Officer said, "In the second quarter of 2006, our organization achieved significant milestones across all operational functions. Our record-breaking quarter was the result of increased adoption of our products, evidenced by 65 domestic medical centers performing MIS procedures. Recently, our product development, regulatory, manufacturing and marketing teams successfully launched the Multifunctional IsolatorTM TranspolarTM Pen System and the new IsolatorTM TranspolarTM open clamp. We believe the launch of these new products will significantly strengthen our open and MIS market positions. Additionally, our regulatory and clinical team achieved a significant milestone by completing the treatment phase of our RESTORE-SR II feasibility study."

In July, AtriCure received 510(k) clearance from the Food and Drug Administration (FDA) for its Isolator™ Transpolar™ Pen System for temporary pacing, sensing, stimulating and recording during the evaluation of cardiac arrhythmias in addition to its FDA-cleared use for the ablation of cardiac tissue. The multifunctional system provides physicians with enhanced flexibility and efficiency and is the only surgical device that is cleared for this broad range of indications.

In July, the Company also released its IsolatorTM TranspolarTM open clamp that, through design enhancements, improves the surgeon's access to anatomical structures, simplifies the ablation procedure and provides superior tactile feedback to the user. Additionally, the new open clamp isolates more tissue, potentially an important clinical benefit.

The clamp currently has clearance from the FDA for the ablation of soft tissues in general, thoracic and other non-cardiac related surgical procedures.

Financial Guidance

For the full year 2006, the Company is reiterating its expectation of total revenue between \$36.0 million and \$38.0 million and loss per share to be between \$1.30 and \$1.50. 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 third quarter 2006, the Company expects total revenue to be between \$8.0 million and \$8.6 million.

Conference Call

AtriCure will host a Web cast and conference call at 8:30 am ET on August 9, 2006 to discuss second 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 (800) 561-2718 for domestic callers and (617) 614-3525 for international callers. The reservation number for both is 78639154. A recording of the conference call will remain available on AtriCure's Web site through September 9, 2006. A telephonic replay of the call will be available until September 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 60782728.

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.

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 I 2006	Three Months Ended June 30, 2006 2005		Six Months Ended June 30, 2006 2005	
Revenues	\$ 9,649,038	\$ 7,730,420	\$18,285,846	\$15,228,179	
Cost of revenues (a)	1,785,417	1,978,129	3,385,158	3,897,641	
Gross profit	7,863,621	5,752,291	14,900,688	11,330,538	
Operating expenses:					
Research and development expenses (a)	2,928,171	1,970,558	5,838,664	3,707,394	
Selling, general and administrative expenses	8,488,970	5,143,086	15,985,068	10,395,184	
Total operating expenses	11,417,141	7,113,644	21,823,732	14,102,578	
Loss from operations	(3,553,520)	(1,361,353)	(6,923,044)	(2,772,040)	
Preferred stock interest expense	-	(976,293)	_	(1,952,585)	
Interest income (expense), net	272,547	(5,192)	552,300	15,609	
Other income	72,632		72,632		
Net loss available to common shareholders	\$ (3,208,341)	\$(2,342,838)	\$ (6,298,112)	\$ (4,709,016)	
Basic and diluted loss per share	\$ (0.26)	\$ (1.24)	\$ (0.52)	\$ (2.50)	
Weighted average shares outstanding:					
Basic and diluted	12,118,032	1,888,079	12,107,116	1,884,837	
(a) Includes the following expenses resulting from transactions with Enable Medical Corpor	ation prior to the acquisition as of August 10, 2	005.			

3,315,956 1,062,218

Cost of revenues Research and development expenses

ATRICURE, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)

	June 30, 2006	December 31, 2005
Assets		
Current assets:		
Cash and cash equivalents	\$ 19,814,470	\$ 27,432,948
Short-term investments	5,174,928	6,369,234
Accounts receivable, net	5,599,078	4,865,065
Inventories, net	3,055,668	2,135,143
Other current assets	498,818	845,330
Total current assets	34,142,962	41,647,720
Property and equipment, net	3,272,035	3,359,549
Long-term investments	1,790,741	_
Intangible assets	879,778	986,778
Goodwill	3,840,837	3,840,837
Other assets	213,595	205,531
Total assets	\$ 44,139,948	\$ 50,040,415
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 5,475,706	\$ 5,374,998
Current maturities of capital lease obligation and long-term debt	379,299	369,835
Total current liabilities	5,855,005	5,744,833
Capital lease obligation	26,480	38,855
Long-term debt	865,727	1,045,150
Other liabilities	56,250	28,125
Shareholders' equity:		
Common stock	12,123	12,086
Additional paid-in capital	85,967,309	86,107,520
Unearned compensation	<u> </u>	(599,591)
Other comprehensive income	(7,444)	826
Accumulated deficit	(48,635,502)	(42,337,389)
Total shareholders' equity	37,336,486	43,183,452
Total liabilities and shareholders' equity	\$ 44,139,948	\$ 50,040,415

ATRICURE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

	Six Months En 2006	nded June 30, 2005
Cash flows from operating activities:		
Net loss	\$ (6,298,112)	\$(4,709,016)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	884,655	632,870
Gain on disposal of equipment	(20,000)	_
Stock compensation	468,927	344,785
Preferred stock interest	_	1,952,585
Changes in assets and liabilities:		
Accounts receivable	(714,012)	(684,574)
Inventory	(920,526)	(465,366)
Other current assets	346,511	(79,247)
Accounts payable and accrued liabilities (a)	(18,002)	160,434
Other non-current assets and liabilities (a)	54,950	128,523
Net cash used in operating activities	(6,215,609)	(2,719,006)
Cash flows from investing activities:		
Purchases of property & equipment	(643,486)	(884,023)
Purchases of available-for-sale securities	(5,479,649)	_
Maturities of available-for-sale securities	4,865,000	
Advance payments for acquisition of company	_	(500,000)
Net cash used in investing activities	(1,258,135)	(1,384,023)
Cash flow from financing activities:		
Payments on long-term debt	(165,672)	_
Payments on capital lease obligations	(16,660)	_
Proceeds from stock option exercises	37,598	18,532
Net cash provided by (used in) financing activities	(144,734)	18,532
Net decrease in cash and cash equivalents		(4,084,497)
Net decrease in cash and cash equivalents (7,618,478) Cash and cash equivalents—beginning of period 27,432,948		5,175,177
Cash and cash equivalents—end of period	\$19,814,470	\$ 1,090,680

⁽a) Cash flows from operating activities in 2005 exclude non-cash costs related to the initial public offering in other assets and accrued liabilities.