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): May 10, 2007

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))

D 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 May 10, 2007, AtriCure, Inc. issued a press release and is holding a conference call regarding its financial results for the first quarter of 2007 ended March 31, 2007. 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 May 10, 2007.

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/ Julie A. Piton

Julie A. Piton Vice President and Chief Financial Officer

Dated: May 10, 2007

<u>No.</u> 99.1

Description Press Release of AtriCure, Inc. dated as of May 10, 2007.

AtriCure

Contacts:

AtriCure, Inc. Julie Piton Vice President and Chief Financial Officer (513) 755-4561 jpiton@atricure.com

The Ruth Group Nick Laudico (investors) (646) 536-7030 nlaudico@theruthgroup.com

Jason Rando (media) (646) 536-7025 jrando@theruthgroup.com

AtriCure Reports First Quarter 2007 Financial Results

<u>Highlights</u>

- Record consolidated revenues of \$10.8 million
- Record domestic open revenues of \$6.6 million
- Full commercial release of our open Isolator Synergy[™] ablation system
- Achievement of key regulatory milestones

WEST CHESTER, Ohio – May 10, 2007 – AtriCure, Inc. (Nasdaq:ATRC), a medical device company focused on developing, manufacturing and selling innovative surgical devices, today announced record revenues for the first quarter ended March 31, 2007.

"We are pleased with our first quarter financial results and extremely encouraged regarding our achievement of a series of product and regulatory milestones, including the full commercial release of our open Isolator SynergyTM ablation system," said David Drachman, President and Chief Executive Officer. "Additional achievements included a FDA regulatory filing in support of a cardiac ablation indication for our Isolator[®] bipolar ablation clamps and our FDA filing to support our left atrial appendage occlusion clip. Importantly, we filed an extension for a new arm of our minimally invasive clinical trial, RESTORE-SR IIB, designed to investigate our endoscopic Isolator SynergyTM system and our multifunctional bipolar Pen for treating patients with persistent and permanent atrial fibrillation. We are confident that the achievement of these major milestones will facilitate the increased adoption of our open and MIS products."

First Quarter 2007 Financial Results

First quarter 2007 consolidated revenues were \$10.8 million, a 24.5% year-over-year increase compared to revenues of \$8.6 million for the first quarter of 2006 and a 1.4% sequential increase compared to revenues of \$10.6 million for the fourth quarter of 2006. First quarter 2007 revenues from domestic products used in open procedures were \$6.6 million, a 17.8% year-over-year increase compared to revenues of \$5.6 million for the

first quarter of 2006 and a 3.2% sequential increase. Revenues from domestic minimally invasive products were \$3.0 million, a 32.5% year-over-year increase compared to revenues of \$2.2 million for the first quarter of 2006 and a 9.8% sequential decrease. International revenues were \$1.2 million, a 47.4% year-over-year increase compared to revenues of \$0.8 million for the first quarter of 2006 and a 28.4% sequential increase.

First quarter 2007 gross profit was \$8.5 million, resulting in a gross margin of 79.4%, compared to a gross margin of 81.5% for the first quarter of 2006 and 77.8% for the fourth quarter of 2006. The change in gross margin as compared to the first quarter of 2006 was primarily due to the introduction of new products, which initially carry a higher product cost. The change in gross margin as compared to the fourth quarter of 2006 was primarily due to a fourth quarter inventory valuation charge of \$0.2 million.

Research and development expenses for the first quarter of 2007 were \$3.1 million, a 7.5% increase over the first quarter of 2006 and a decrease of 2.4% as compared to the fourth quarter of 2006. Selling, general and administrative expenses, or SG&A, were \$10.3 million, a 37.2% increase as compared to \$7.5 million in the first quarter of 2006 and an 8.3% increase over \$9.5 million in the fourth quarter of 2006. The increase in SG&A as compared to the first quarter of 2006 was primarily due to increased selling and marketing expenses, increased stock-based compensation expense and \$0.3 million in costs associated with the proposed settlement of a legal dispute with a former European distributor.

Operating loss for the first quarter of 2007 was \$4.9 million as compared to \$3.4 million for the first quarter of 2006 and \$4.5 million for the fourth quarter of 2006. Interest and other income for the first quarter of 2007 included \$0.3 million of grant income. Loss per share was \$0.35 for the first quarter of 2007 as compared to \$0.26 for the first quarter of 2006 and \$0.35 for the fourth quarter of 2006. First quarter 2007 results include stock-based compensation expense of \$0.6 million, or \$0.05 per share, including a valuation adjustment of \$0.2 million, or \$0.02 per share. First quarter 2006 results included \$0.2 million of stock-based compensation expense, or \$0.01 per share.

Cash, cash equivalents and investments at March 31, 2007 were \$16.0 million. Cash used in operations was \$3.0 million for the first quarter of 2007 as compared to \$3.8 million for the first quarter of 2006.

Financial Guidance

The Company is confirming its full year 2007 guidance of \$48 to \$50 million for revenues and an expected net loss per share between \$0.95 and \$1.05. For the second quarter of 2007, the Company expects revenues to be between \$11.6 and \$12.3 million.

Conference Call

AtriCure will host a Web cast and conference call at 11:00 am EDT on May 10, 2007 to discuss first quarter 2007 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 <u>www.atricure.com</u>. The dial-in numbers are (866) 831-5605 for domestic callers, and (617) 213-8851 for international callers. The reservation number for both is 40584114.

A recording of the conference call will remain available on AtriCure's Web site through June 9, 2007. A telephonic replay of the call will be available until June 9, 2007. The replay dial-in numbers are (888) 286-8010 for domestic callers and (617) 801-6888 for international callers. Please use reservation code 24348175.

About AtriCure, Inc.

AtriCure, Inc. is a medical device company focused on developing, manufacturing and selling innovative surgical devices designed to create precise lesions, or scars, in soft and cardiac tissues. Medical journals have described the adoption by leading cardiothoracic surgeons of the AtriCure Isolator[®] bipolar ablation clamps as a treatment alternative during open-heart surgical procedures to create lesions in cardiac, or heart, tissue to block the abnormal electrical impulses that cause atrial fibrillation, or AF, a rapid, irregular quivering of the upper chambers of the heart. Additionally, leading cardiothoracic surgeons have described the AtriCure Isolator[®] clamps as a promising treatment alternative for patients who may be candidates for sole-therapy minimally invasive procedures. AF affects more than 2.5 million Americans and predisposes them to a five-fold increased risk of stroke.

The FDA has cleared the AtriCure Isolator^{*} bipolar ablation system, including the new Isolator SynergyTM ablation clamps, 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 multifunctional bipolar Pen for the ablation of cardiac tissue and for temporary pacing, sensing, stimulating and recording during the evaluation of cardiac arrhythmias, but the multifunctional bipolar Pen has not been approved for the treatment of AF.

Forward-Looking Statements

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 (including the purported class action lawsuit) 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 E 2007	nded March 31, 2006
Revenues	\$10,750,770	\$ 8,636,808
Cost of revenues	2,210,495	1,599,741
Gross profit	8,540,275	7,037,067
Operating expenses:		
Research and development expenses	3,129,278	2,910,493
Selling, general and administrative expenses	10,283,187	7,496,098
Total operating expenses	13,412,465	10,406,591
Loss from operations	(4,872,190)	(3,369,524)
Other income (expense):		
Interest income, net	149,923	279,753
Grant income	338,143	
Foreign currency transaction gain	81,703	_
Net loss	\$ (4,302,421)	\$ (3,089,771)
Basic and diluted loss per share	\$ (0.35)	\$ (0.26)
Weighted average shares outstanding:		
Basic and diluted	12,298,424	12,096,200

ATRICURE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

	March 31, 2007	December 31, 2006
Assets		
Current assets:		
Cash and cash equivalents	\$ 13,186,141	\$ 14,890,383
Short-term investments	2,797,820	4,598,032
Accounts receivable, net	6,264,462	6,562,341
Inventories, net	4,115,658	3,389,401
Other current assets	1,371,575	1,247,738
Total current assets	27,735,656	30,687,895
Property and equipment, net	3,767,652	3,643,069
Intangible assets	719,278	772,778
Goodwill	3,840,837	3,840,837
Other assets	168,896	183,486
Total assets	\$ 36,232,319	\$ 39,128,065
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 7,810,909	\$ 7,265,424
Current maturities of long-term debt and capital leases	399,406	391,460
Total current liabilities	8,210,315	7,656,884
Long-term debt and capital leases	589,662	692,544
Other liabilities	323,438	84,375
Total liabilities	9,123,415	8,433,803
Stockholders' equity:		
Common stock	12,304	12,189
Additional paid-in capital	87,414,130	86,646,064
Other comprehensive income	39,555	90,673
Accumulated deficit	(60,357,085)	(56,054,664)
Total stockholders' equity	27,108,904	30,694,262
Total liabilities and stockholders' equity	\$ 36,232,319	\$ 39,128,065

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

		nded March 31,
	2007	2006
Cash flows from operating activities:	¢ (4 000 404)	¢ (0.000 554)
Net loss	\$ (4,302,421)	\$ (3,089,771)
Adjustments to reconcile net loss to net cash used in operating activities:	500 505	450.005
Depreciation and amortization	502,585	473,665
Loss (gain) on disposal of equipment	3,856	(20,000)
Provision for losses on accounts receivable	(66,624)	65,074
Share-based compensation expense	641,940	150,268
Changes in assets and liabilities:		
Accounts receivable	364,503	(670,523)
Inventories, net	(726,258)	(573,386)
Other current assets	(123,836)	119,181
Accounts payable and accrued liabilities	506,266	(250,824)
Other non-current assets and liabilities	241,420	30,870
Net cash used in operating activities	(2,958,569)	(3,765,446)
Cash flows from investing activities:		
Purchases of property & equipment, net	(526,071)	(193,389)
Purchases of available-for-sale securities	(6,762)	(353,929)
Maturities of available-for-sale securities	1,808,000	—
Net cash provided by (used in) investing activities	1,275,167	(547,318)
Cash flows from financing activities:		
Payments on long-term debt and capital leases	(94,935)	(91,059)
Proceeds from stock option exercises	126,241	29,150
Net cash provided by (used in) financing activities	31,306	(61,909)
Effect of exchange rate changes on cash	(52,146)	
Net decrease in cash and cash equivalents	(1,704,242)	(4,374,673)
Cash and cash equivalents—beginning of period	14,890,383	27,432,948
Cash and cash equivalents—end of period	\$13,186,141	\$23,058,275