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): July 5, 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

 $\begin{tabular}{ll} Not \ Applicable \\ (Former name or former address, if changed since last report) \end{tabular}$

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)
	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 8.01. Other Events.

On July 5, 2007, our Isolator® bipolar ablation clamp system received 510(k) clearance from the Food and Drug Administration, or FDA, for the ablation of cardiac tissue.

A copy of the press release is being filed as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference in its entirety.

Financial Statements and Exhibits.

(d) Exhibits.

Description

No. 99.1 Press Release of AtriCure, Inc. dated as of July 9, 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: July 9, 2007

EXHIBIT LIST

Description Press Release of AtriCure, Inc. dated as of July 9, 2007. No. 99.1



Contact:

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

AtriCure's Isolator® Bipolar Ablation Clamp System Receives FDA 510(k) Clearance for Cardiac Use

WEST CHESTER, Ohio – July 9, 2007 – AtriCure, Inc. (Nasdaq: ATRC), a medical device company focused on developing, manufacturing and selling innovative cardiac surgical devices, announced today that its Isolator® bipolar ablation clamp system has received 510(k) clearance from the Food and Drug Administration (FDA) for the ablation of cardiac tissue. AtriCure believes that theirs is the only bipolar radiofrequency clamp system that has been cleared by the FDA for the ablation of cardiac tissue.

"The AtriCure team is pleased to have achieved this major milestone. This expanded indication reaffirms our leadership position in our rapidly growing markets," said David J. Drachman, President and Chief Executive Officer. "Furthermore, we continue to make significant progress toward obtaining an atrial fibrillation indication for our Isolator® ablation clamp and pen systems. We look forward to continuing to make important contributions toward improving and preserving human life."

About AtriCure, Inc.

AtriCure, Inc. is a medical device company focused on developing, manufacturing and selling innovative cardiac 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® bipolar ablation 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 Synergy TM ablation clamps, for the ablation, or destruction, of soft tissues in general and cardiac surgical procedures but has not yet cleared or approved the system 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 regulations 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.