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): December 16, 2011

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.)

6217 Centre 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)

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 December 16, 2011, AtriCure, Inc. issued a press release announcing that the U.S. Food and Drug Administration has approved AtriCure's Synergy Ablation System for the treatment of atrial fibrillation. A copy of the press release is filed as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

No. Description

99.1 Press Release dated December 16, 2011

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.

Dated: December 16, 2011

By: /s/ Julie A. Piton

Julie A. Piton Vice President, Finance and Administration and Chief Financial Officer



Contact:

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AtriCure's Synergy Ablation System Receives FDA Approval for the Treatment of Atrial Fibrillation

First and Only System in the United States Approved to Treat Patients with Persistent and Long-Standing Persistent Atrial Fibrillation

WEST CHESTER, Ohio – December 16, 2011 – AtriCure, Inc. (Nasdaq: ATRC), a medical device company and a leader in cardiac surgical ablation systems and systems for the exclusion of the left atrial appendage, today announced that the U.S. Food and Drug Administration (FDA) has approved AtriCure's Synergy Ablation System for the treatment of atrial fibrillation (AF). Specifically, the Synergy Ablation System has been approved for the treatment of patients with persistent and long-standing persistent AF during open-heart concomitant coronary artery bypass grafting and/or valve replacement or repair procedures. This is the first time a surgical ablation system has been approved for the treatment of AF and the first time any system, catheter or surgical, has been approved in the United States for the treatment of patients with persistent and long-standing persistent AF.

"This marks the achievement of a major milestone for AtriCure, the field of cardiac surgery, and the treatment of AF. The approval confirms the effectiveness of the Synergy Ablation System and recognizes the increasing need for the surgical treatment of AF," said David J. Drachman, President and Chief Executive Officer. "We look forward to educating physicians and patients on our surgical alternative for the treatment of AF, which we believe will raise awareness for a large number of AF patients that are currently being undertreated. Importantly, we would like to thank all of our partners who worked with us to achieve this approval, particularly the FDA, physicians and their patients who participated in the ABLATE trial. Additionally, I would like to recognize the efforts of the AtriCure team, who have worked tirelessly toward the successful achievement of this seminal milestone."

The Synergy Ablation System includes AtriCure's Isolator Synergy clamps, a radiofrequency generator and related switchbox. It was previously cleared in the United States for cardiac tissue ablation during concomitant open-heart surgical procedures.

The FDA's approval includes the implementation of a 350-patient post-approval study, of which 46 patients have been enrolled through the ABLATE AF study. Additionally, the FDA approval includes a physician training program.

About AtriCure, Inc.

AtriCure, Inc. is a medical device company and a leader in developing, manufacturing and selling innovative cardiac surgical ablation systems designed to create precise lesions, or scars, in cardiac, or heart, tissue for the treatment of Atrial Fibrillation, or AF, and systems for the exclusion of the left atrial appendage. The Company believes cardiothoracic surgeons are adopting its ablation products for the treatment of AF, during concomitant open-heart surgical procedures and sole-therapy minimally invasive procedures. AF affects more than 5.5 million people worldwide and predisposes them to a five-fold increased risk of stroke. AtriCure's Synergy Ablation system is cleared for the treatment of patients with persistent and long-standing persistent AF during open-heart concomitant coronary artery bypass grafting and/or valve replacement or repair procedures. AtriCure's other products are not approved in the United States for the treatment of other forms of AF or for other uses for the treatment of AF. Additionally, the FDA has not cleared or approved AtriCure's products for a reduction in the risk of stroke.

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 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.