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): January 12, 2015

ATRICURE, INC.

(Exact name of registrant as specified in charter)

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

6217 Centre Park Drive	
West Chester, OH	**45069**
(Address of principal executive offices)	**(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 2.02. Results of Operations and Financial Condition.

On January 12, 2015, AtriCure, Inc. ("AtriCure" or the "Company") issued a press release regarding its preliminary financial results for the fourth quarter and full year ended December 31, 2014. A copy of the press release is furnished as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

Item 7.01. Regulation FD Disclosure.

During the week of January 12, 2015, the Company is holding meetings with investors discussing, among other topics, an overview of the Company's business and growth strategy. A copy of the investor presentation, which is available at www.atricure.com, is furnished as Exhibit 99.2 to this Form 8-K and is incorporated herein by reference.

The Company's presentation discloses certain financial results both in accordance with generally accepted accounting principles (GAAP) and on a non-GAAP basis with adjustments for certain items. The Company's management believes that presentation of these non-GAAP financial measures and their related reconciliations are useful to investors because the non-GAAP financial measures provide investors with a basis for comparing the results to financial results from prior periods.

Information in the presentation contains forward-looking statements regarding future events and performance of the Company. All such forward-looking statements are based largely on the Company's experience and perception of current conditions, trends, expected future developments and other factors, and on management's expectations and are subject to risks and uncertainties that could cause actual results to differ materially, including, but not limited to, those factors described in the presentation and in the Company's filings with the Securities and Exchange Commission.

The information in each of Item 2.02 and Item 7.01 of this Form 8-K and in the press release attached as Exhibit 99.1 and the presentation attached as Exhibit 99.2 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 each of Item 2.02 and Item 7.01 of this Form 8-K and each of Exhibit 99.1 and Exhibit 99.2 shall not be incorporated by reference in any filing or other document under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in any such filing or document.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

No.	Description
99.1	Press Release dated January 12, 2015
99.2	Investor Presentation

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: January 12, 2015

By: /s/ M. Andrew Wade
M. Andrew Wade
Vice President and Chief Financial Officer

Exhibit 99.1

Contact:

AtriCure, Inc.
Andy Wade
Vice President and Chief Financial Officer
(513) 755-4564
awade@atricure.com

Investor Relations Contact
Lynn Pieper
Westwicke Partners
(415) 202-5678
lynn.pieper@westwicke.com

AtriCure Announces Preliminary Results for Fourth Quarter and Full Year 2014
Issues 2015 Guidance

WEST CHESTER, Ohio – January 12, 2015 – AtriCure, Inc. (Nasdaq: ATRC), a leading innovator in surgical treatments for atrial fibrillation ("Afib") and Left Atrial Appendage Management ("LAAM"), today announced preliminary financial results for fourth quarter and full year 2014 and issued 2015 financial guidance.

Preliminary and unaudited revenue for fourth quarter 2014 is expected to be approximately $29.5 million, reflecting growth of approximately 34.6% over the fourth quarter of 2013. Based on this preliminary estimate, revenue from U.S. customers is expected to be $22.1 million, reflecting growth of 35.1%, and revenue from international customers is expected to be $7.3 million, reflecting growth of 33.2%, or 41.4% on a constant currency basis.

Preliminary revenue for full year 2014 is expected to be $107.5 million, reflecting year over year growth of 31.3% over full year 2013.

"We are pleased to report preliminary fourth quarter and full year 2014 results which reflect continued growth and momentum across our product lines. We continue to see a tremendous amount of untapped potential in our markets, and thus our plans remain focused on growth and successfully expanding the Afib market through improved patient outcomes, training and education. We are providing our outlook for 2015 and look forward to providing additional detail on our growth strategy when we release our final 2014 results in late February," said Mike Carrel, President and Chief Executive Officer of AtriCure.

2015 Financial Guidance

Management projects that 2015 revenue will be in the range of $122.5 million to $124.5 million, which represents an increase of 14% to 16% over 2014. At current foreign exchange rates, this range reflects an estimated $1.6 million adverse currency impact due to the weakening Euro against the U.S. Dollar.

Adjusted EBITDA, a non-GAAP measure, is projected to be a loss in the range of $7 to $9 million for 2015 as we continue to make strategic investments to drive our long-term growth plan. We will provide a reconciliation of this non-GAAP measure to the related GAAP measure in our release of final 2014 results.

About AtriCure, Inc.

AtriCure, Inc. is a medical device company providing innovative atrial fibrillation (Afib) solutions designed to produce superior outcomes that reduce the economic and social burden of atrial fibrillation. AtriCure's Synergy™ Ablation System is the first and only surgical device approved for the treatment of Persistent and Longstanding Persistent forms of Afib in patients undergoing certain open concomitant procedures. AtriCure's AtriClip Left Atrial Appendage Management (LAAM) exclusion device is the most widely sold device worldwide that's indicated for the occlusion of the left atrial appendage. The company believes cardiothoracic surgeons are adopting its ablation and LAAM devices for the treatment of Afib and reduction of Afib related complications such as stroke. Afib affects more than 33.5 million people worldwide.

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 (including projections and guidance), 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, AtriCure's ability to retain and attract key employees, 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, AtriCure's ability to continue to be in compliance with applicable U.S. federal and state and foreign government laws and regulations, AtriCure's ability to consummate acquisitions or, if consummated, to successfully integrate acquired businesses into AtriCure's operations, AtriCure's ability to recognize the benefits of acquisitions, including potential synergies and cost savings, failure of an acquisition or acquired company to achieve its plans and objectives generally, risk that proposed or consummated acquisitions may disrupt operations or pose difficulties in employee retention or otherwise affect financial or operating results, competition from existing and new products and procedures, including the development of drug or catheter-based technologies, 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, fluctuations in exchange rates for future sales denominated in foreign currency, which represent a majority of AtriCure's sales outside of the United States, 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. A further list and description of risks, uncertainties and other matters can be found in our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q.

Exhibit 99.2

AtriCure

Investor Presentation

January 2015

Your Partner
in Afib Solutions

Forward Looking Statements/Non-GAAP Measures

This presentation 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 (including projections and guidance), 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, AtriCure’s ability to retain and attract key employees, 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, AtriCure’s ability to continue to be in compliance with applicable U.S. federal and state and foreign government laws and regulations, AtriCure’s ability to consummate acquisitions or, if consummated, to successfully integrate acquired businesses into AtriCure’s operations, AtriCure’s ability to recognize the benefits of acquisitions, including potential synergies and cost savings, failure of an acquisition or acquired company to achieve its plans and objectives generally, risk that proposed or consummated acquisitions may disrupt operations or pose difficulties in employee retention or otherwise affect financial or operating results, competition from existing and new products and procedures, including the development of drug or catheter-based technologies, 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, fluctuations in exchange rates for future sales denominated in foreign currency, which represent a majority of AtriCure’s sales outside of the United States, 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. A further list and description of risks, uncertainties and other matters can be found in our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q..

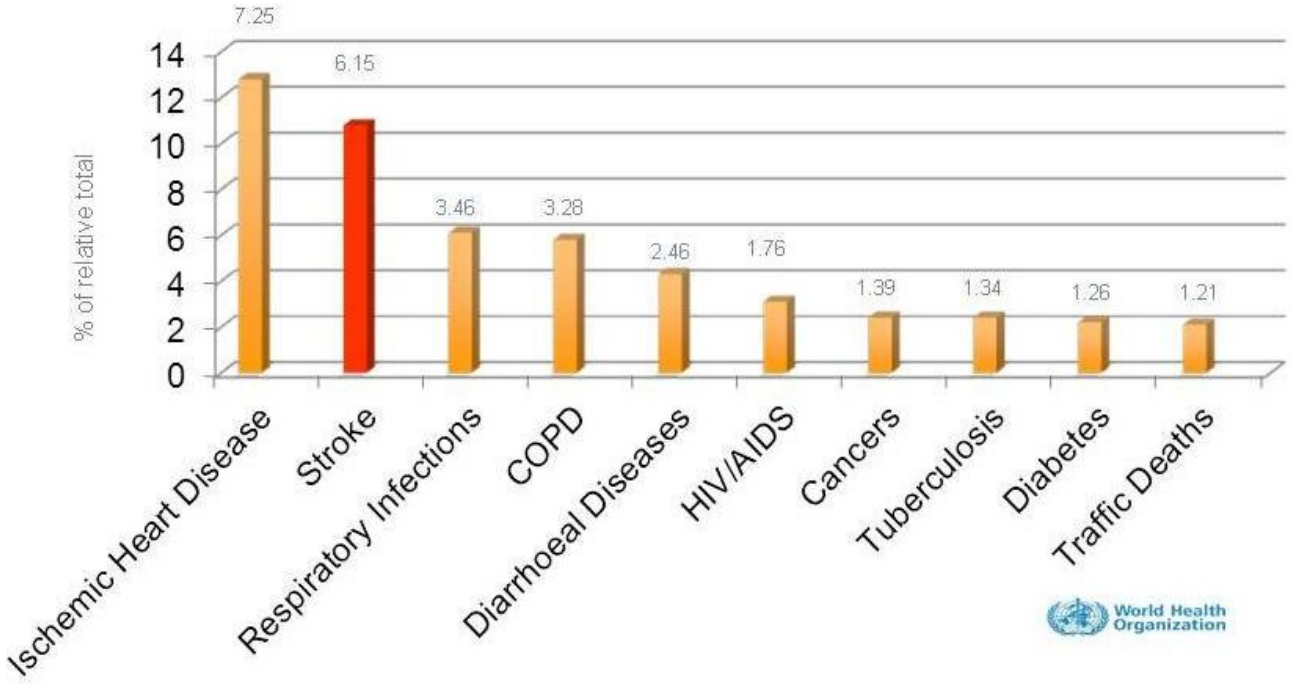
This presentation includes the use of non-GAAP measures. Reference AtriCure’s Form 8-K filings which include the furnishing of our earnings releases for a reconciliation to the related GAAP measures.

Vision

AtriCure seeks to develop solutions for and become a leader in the treatment of Atrial Fibrillation (Afib) and left atrial appendage (LAA) management for stroke reduction

AtriCure

Top 10 disease related deaths worldwide



Afib is the second leading cause of stroke!

AtriCure

Key Takeaway Messages

- Atrial Fibrillation is a health problem of epidemic proportions
- Only 27% of all surgical patients with AF are treated leaving a big opportunity for treatment [1]
- Many current therapies such as anti-arrhythmic medications are ineffective
- The Cox-Maze IV procedure is very effective at treating Afib
- Patients with Afib on average 4-6 times more likely to have a stroke [2]
- Large, under-penetrated market (10M+ people globally – conservative estimate)
- $26 Billion annual health economic burden from Afib in the U.S. alone

AND ATRICURE IS POISED FOR SUCCESS …

[1] *Circulation: Cardiovascular Quality and Outcomes* Estimation of Total Incremental Health Care Costs in Patients With Atrial Fibrillation in the United States. Michael H. Kim et al.
[2] http://www.ninds.nih.gov/disorders/atrial_fibrillation_and_strok e/atrial_fibrillation_and_stroke.htm

AtriCure

AtriCure Is Poised For Growth

- **The leading global player in the surgical Afib market**
  - Only FDA-approved device for surgical treatment of Afib
  - Broad and deep product portfolio with deepest IP in the field
  - World-class training

- **Strong and Consistent Revenue Growth and Gross Margins**
  - 17% growth in 2014 → 31% growth in 2014; organic growth of close to 20%
  - Expect 14-16% growth in 2015
    - *weakening Euro impacting business – guidance would have been higher with a flat exchange rate from 2014*
  - Gross Margins 70% in 2014 and on path to 75% over five years

- **Growth**
  - Short Term = Open Ablation + Clip + International → Education, Awareness, Training
  - Long Term = MIS + MIS Clip + New Products → Trials
  - Upside = MIS and International

AtriCure

How Are We Doing?

A look at the last ten quarters:

Q3 2012	6% growth
Q4 2012	9% growth
Q1 2013	11% growth
Q2 2013	12% growth
Q3 2013	25% growth
Q4 2013	19% growth
Q1 2014	28% growth
Q2 2014	30% growth
Q3 2014	32% growth
Q4 2014	35% growth

Includes revenue from 12/31/13 Estech acquisition– organic revenue above 17%

2014 → 31% growth

AtriCure

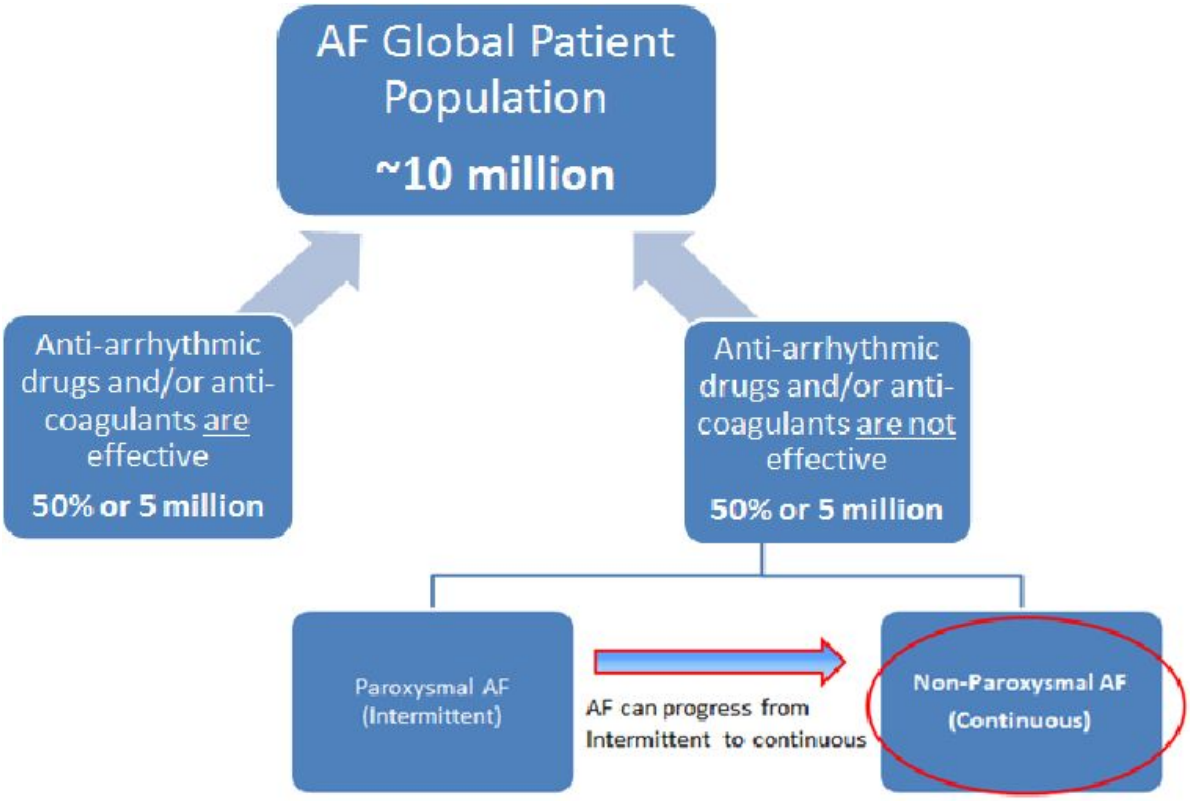
By The End Of The Decade We Will…

Be the recognized leader in Afib and appendage management

Have improved the lives of more than 250,000 Afib patients and treated over 150,000 with Clips

AtriCure

AF Clinical Hierarchy



AtriCure

Emerging Clinical Paradigm

	PAROXYSMAL (INTERMITTENT)	NON-PAROXYSMAL (CONTINUOUS)
OPEN (CONCOMITANT)	PULMONARY VEIN ISOLATION (CLAMP or FUSION)	COMPLETE MAZE
STAND-ALONE	PULMONARY VEIN ISOLATION (CATHETER)	HYBRID (SURGERY + EP PROCEDURE)

AtriCure

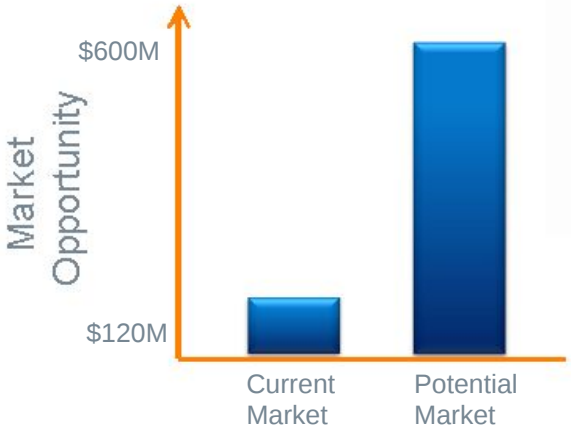
Ablation Global Market Opportunity – Open

Open Ablation

Estimated open heart surgeries per year	750,000
Estimated % that have Afib	33%
Estimated Afib patients undergoing surgery	250,000
Estimated Market Opportunity – Annual	**$600,000,000**

- Labeling advantage in U.S.*
- Best products
- High gross margins
- Education is key
- Competition is large device

AtriCure has the only on-label products for the surgical treatment of Afib*



Source: AtriCure estimates

** PMA approved products include our OLL2 and OSL2 clamps., along with the ASU RF generator and ASB switchbox; see AtriCure website for full indication language*

AtriCure

Ablation Global Market Opportunity – Stand-alone

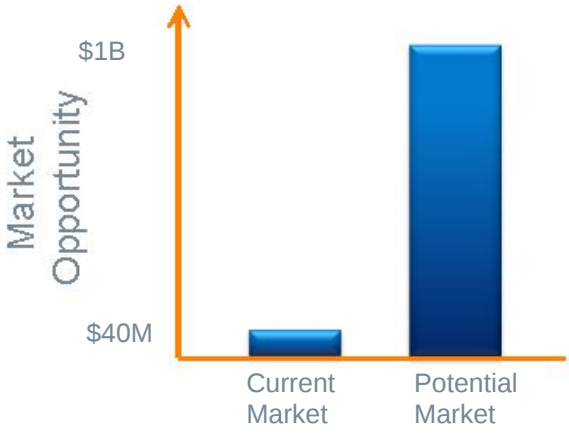
MIS / Stand Alone Ablation

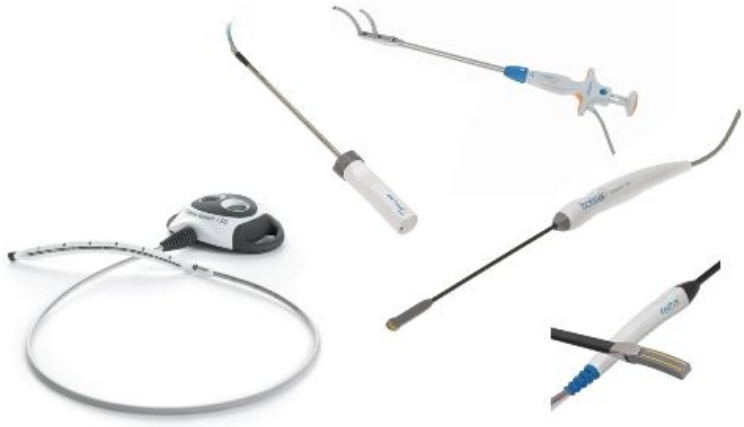
Estimated Afib patients – E.U. and U.S. Only	8,000,000
Estimated % drug refractory and symptomatic	50%
Subtotal	4,000,000
Estimated Persistent and Longstanding Persistent subset	50%
Subtotal - Patients	2,000,000
Estimated Market Opportunity – Total	**$20,000,000,000**
Estimated % treated annually	5%
Estimated Market Opportunity – Annual	**$1,000,000,000**

- High reimbursement
- High gross margins
- Growing internationally
- Development needed
- Competition is start-ups

Developing Market

Trial Key to FDA Approval for Afib treatment





Source: AtriCure estimates

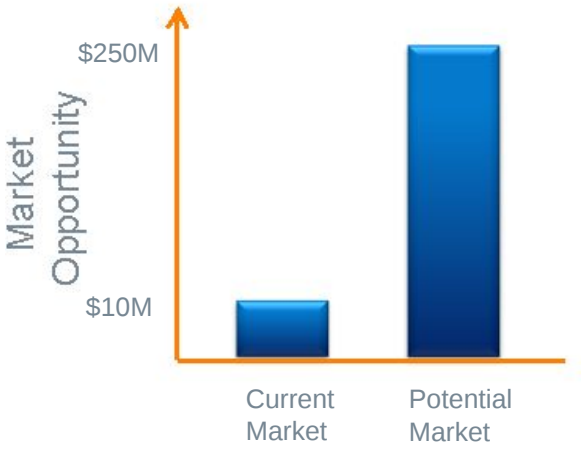
AtriCure

LAA Global Market Opportunity – Open

Open Clip

Estimated Open heart surgeries per year	750,000
Estimated % that have Afib	33%
Estimated Afib patients undergoing surgery	250,000
Estimated Market Opportunity – Annual	**$250,000,000**

- Best in class LAA management
- Superior safety - No adverse events
- Mechanical & Electrical Solution
- Competition includes Tiger Paw, staple, suture, ligature (endo loop)
- 2014 Revenue - $8.7M
- 2014 Revenue - $12.4M (+44%)



4+ years of clinical experience

Over 43,000 clips implanted – well ahead of competitive products

UPSIDE:
Prophylactic treatment could more than double this market

Source: AtriCure estimates

AtriCure

LAA Global Market Opportunity – MIS (AtriClip® Pro)

MIS Clip With Ablation

Estimated Afib patients – E.U. and U.S. Only	8,000,000
Estimated % drug refractory and symptomatic	50%
Subtotal	4,000,000
Estimated Persistent and Longstanding Persistent subset	50%
Subtotal - Patients	2,000,000
Estimated Market Opportunity – Total	**$5,000,000,000**
Estimated % treated annually	5%
Estimated Market Opportunity – Annual	**$250,000,000**

MIS Clip

Estimate of treatment resistant Afib patients	1,000,000
Estimated global revenue per device (all modes)	$5,000
Estimated Market Opportunity – Total	**$5,000,000,000**
Estimated % treated annually	10%
Estimated Market Opportunity – Annual	**$500,000,000**

Source: AtriCure estimates

One Product, Two Markets

Concomitant with MIS Ablation

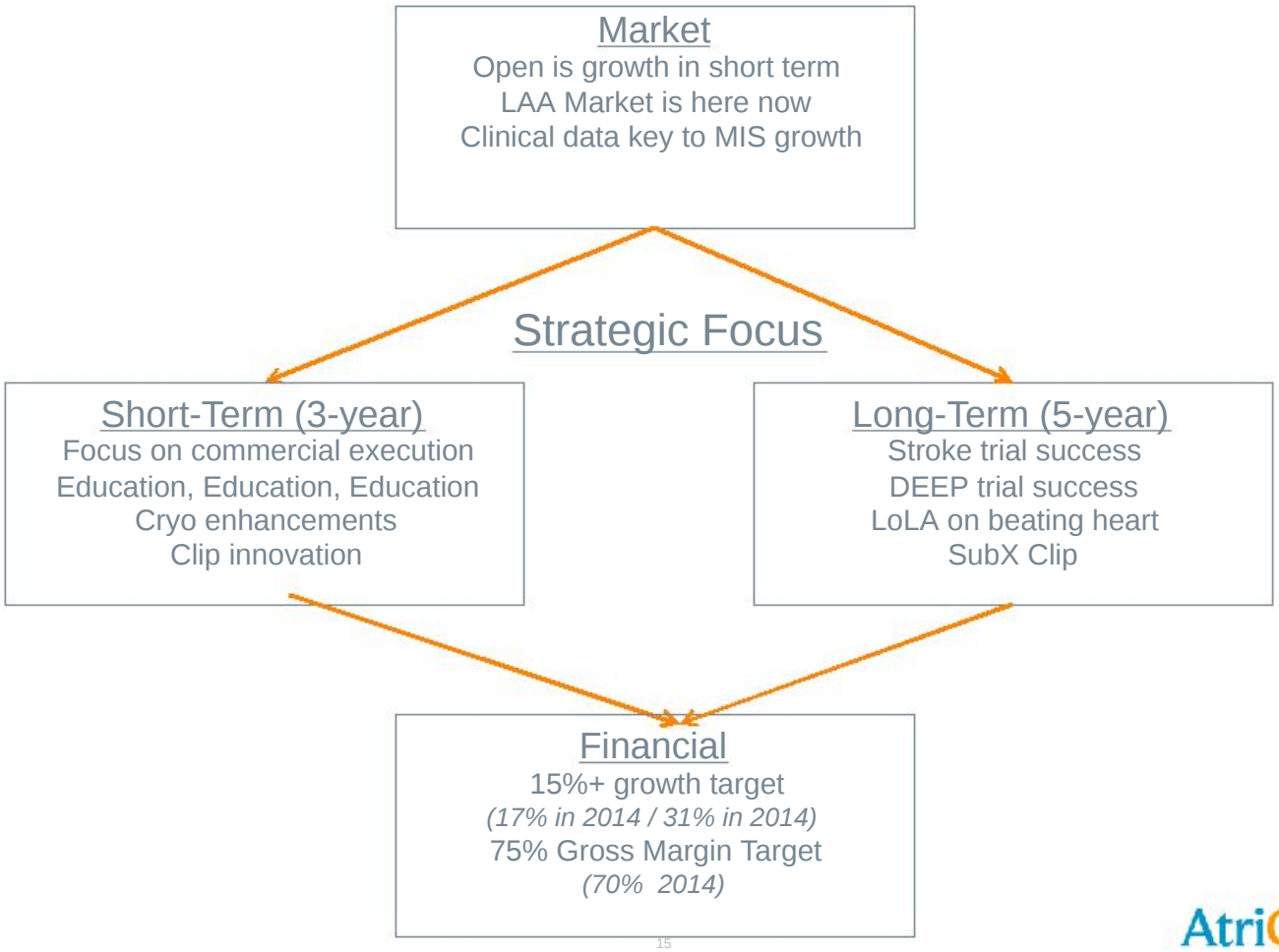
- Today's market …will draft MIS growth
- Virtually ALL revenue from MIS Clip is for concomitant treatment along with MIS ablation – 90% attach rate

Attractive sole therapy market

- NEW market for us…
- Today only a couple cases have been done with OUR products "sole therapy"… a lot done percutaneous
- Competition includes implants and EP closure (without FDA approval)
- *Stroke trial key to success*

AtriCure

Summary High-Level Plan



Business Overview - Diversified and Growing Portfolio

Focus Areas	Preliminary 2014 Growth	Global Market Size	Keys to Success	Current Trials
Open Ablation (Concomitant)	$44.7M U.S. *+18%*	$600M Annually	• Education and awareness • Conversions and add-on sales	PMA Post Approval Study (350 Patients; Five Years)
Open Clip	$16.7M U.S. *+54%*	$250M Annually	• Education and awareness • Tie to ablation growth	Sponsored Investigator Study Design Underway
MIS Ablation	$16.0M U.S. *+18%*	$20B total $1B+ Annually	• Trial • Collaborative care • Integration of Estech	IDE Staged DEEP (Hybrid) **Pivotal Approved** 220 Patients; 25 sites 1, 2 and 3 year follow-up
MIS Clip	Included In Open Clip line above	$5B total $500M+ Annually	• Awareness • Trial	Stroke Safety Feasibility Study Approved 30 patients, 7 sites
International	$27.3M *+39%*	Included above	• Market expansion • Reimbursement • Coverage	Involvement Above and Several E.U. Studies in Process
Overall	$107.5M *+31%*	$1B+ Annually $20B+ Total		

2015 Revenue Guidance:
$122.5 - $124.5 million → 14-16% growth
(Reflects estimated $1.6 million adverse currency impact due to weakening Euro)

Growth Strategy: Overview

Expand Open Heart Sales

- Leverage Afib indication
- Increased training and education
- Capitalize on sales force
- Afib Program Development

Penetrate LAA Opportunity

- Penetrate concomitant ablations
- Validate stroke prevention with trial

Build MIS Platform

- Support existing MIS surgeons
- Support Staged DEEP AF trial
- Integrate Estech Acquisition

International Expansion

- Capitalize on investments in sales team
- Geographic expansion and new products
- Increase support for distributors

AtriCure is the only company with FDA approval to surgically treat the Afib disease state and is a leader in the emerging market of LAA exclusion

AtriCure

Robust Commercial Infrastructure

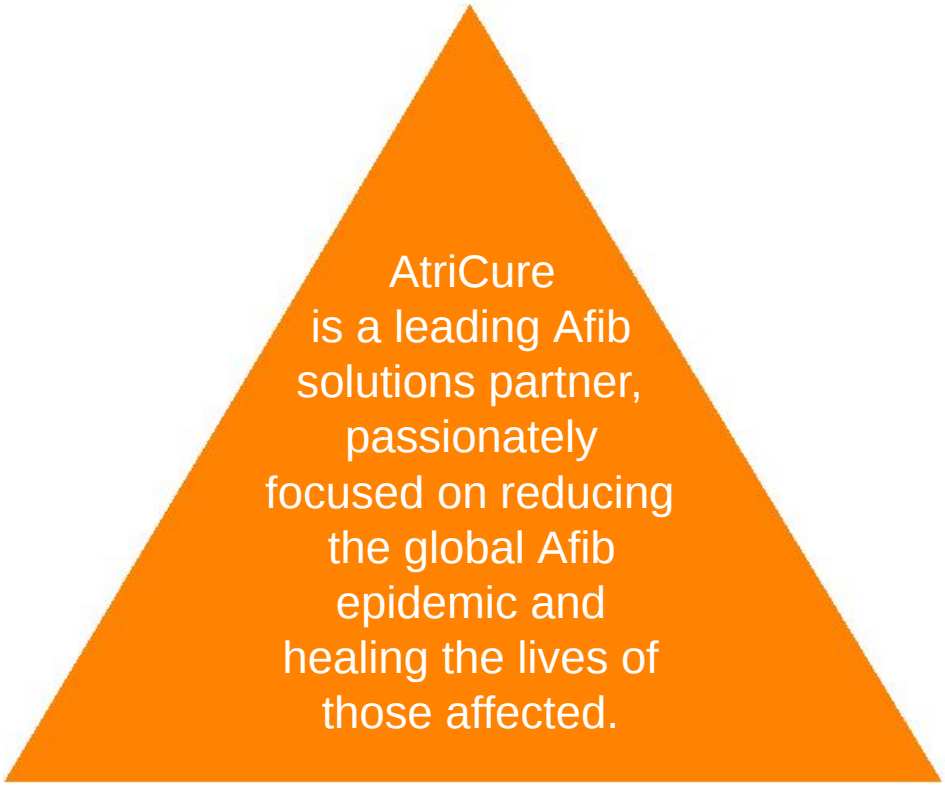
- Highly experienced sales and marketing team
- 45 U.S. sales territories; additional clinical team of 25
  - Up from 35 and 12 two years ago respectively
  - Adding 5+ territories in 2015
- E.U. subsidiary and 30 countries (generate ~25% of revenue)
  - Direct presence in Germany, France, BENELUX → over 10 people
  - Estech brings strong presence in E.U.
  - Well-established international network of independent distributors
    - Japan, China, Eastern Europe, UK, Italy, Russia

AtriCure has established a strong commercial infrastructure which will drive superior growth going forward

AtriCure

Other Key Investments For Long-term Growth

Clinical Science



Education

Innovation

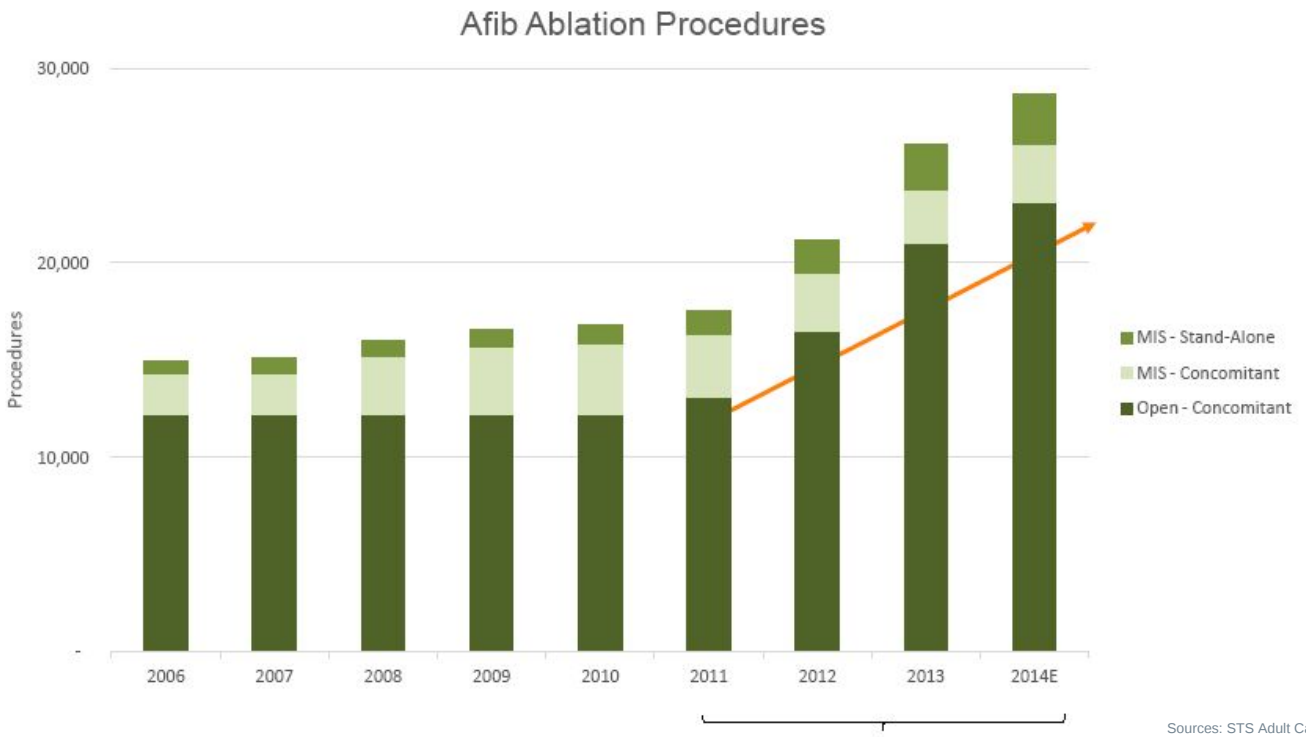
Education and Training Focus

- Robust training program
- Course designed by Dr. James Cox
- Leading KOL Education Steering Committee

- 700+ unique accounts and more than 1500 surgeons trained on the MAZE IV™ procedure
- Over 400 courses completed
- International Expansion Underway

AtriCure

Impact of Label and Educational Programs



Growth of Open Ablation due to ATRC Educational Programs

Sources: STS Adult Cardiac Surgery Database - 2006-2014; Ad 2014 - Ann Thor Surg Vol 96 - 763-769; company estimates

- FDA Approval of Synergy™ System in December 2011 for the treatment of persistent Afib
- Have trained ~62% of cardiac surgeons in the U.S.; 38% more to go!

Evidence-Based Benefits of AtriCure Technology

Commitment to Clinical Science

- $15M+ annual R&D expense – includes clinical trial expense
- Over 100 peer-reviewed publications to date
- Post Approval Study – 350 patients; 50 sites; 5 years with 3 year follow-up
- EXCLUDE Trial demonstrating safety and efficacy of AtriClip System
- Staged DEEP Protocol – FDA-approved hybrid trial
- Stroke trial design underway
- International trials – reimbursement focus
- Combined with Estech, 185 issued and nearly 50 patents pending
- Compelling animal and early clinical data with Estech Fusion System

AtriCure

Financial Snapshot

Revenue and Gross Margin

- 2014 Total Revenue Growth: 31%
  - 2014 US Growth: 29%
  - 2014 OUS Growth: 39%
- Four Year CAGR of 16%
- Gross Margins 70-73%, with expansion opportunity

Balance Sheet and Share Statistics

- Approximately $68.5 million in cash and investments at 12/31/2014
- No debt outstanding
- Approximately 27.5 million shares outstanding

AtriCure

Positioned for Success

- Strong and growing revenue base
  - 2014 Revenue: $81.9 million (17% growth)
  - 2014 Revenue (expected): $107.5 million (31% growth; ~ 20% organic growth)
  - 2015 Revenue (guidance): $122.5 - $124.5 million (14% to 16% growth, even with a weak Euro)
- Accelerating revenue growth
  - Open → only device FDA-approved for surgical treatment of Afib
  - Minimally Invasive Solutions (MIS) → trial, Estech acquisition, education and clinical data key
  - Left Atrial Appendage (LAA) → open and future trial
  - International Expansion → improve share and enter new markets
- Opportunity for expanding gross margins → path to 75%+

AtriCure

AtriCure

Appendix

Your Partner
in Afib Solutions

Atrial Fibrillation Overview

Condition Overview

- Abnormal electrical impulses cause the upper chambers of the heart to quiver at rapid rates of 400 to 600 BPM
- Frequently associated with cardiovascular disease, in particular hypertension, congestive heart failure, coronary artery disease, etc.

Effects

- Causes blood in the atria to become static, increasing the risk of blood clot formation, stroke, and other serious complications
- Symptoms include heart palpitations, dizziness, fatigue and shortness of breath, and these symptoms can be debilitating / life threatening

Types

- Paroxysmal: rapid heart rate begins and stops suddenly lasting 24 hours – 1 week
- Persistent: abnormal heart rate continuing for more than a week
- Permanent: normal heart rhythm can't be restored; often the result of paroxysmal and persistent Afib becoming more frequent

Continuum of Care

- Initial treatments include electrical cardioversion (shock to return heart to normal rhythm) and anticoagulant medicines such as warfarin
- If persistent, anticoagulants are augmented by rate-control medicines such as beta blockers
- When drugs fail, MIS catheter ablation and open-procedure surgical ablation are used to disrupt the electric impulses that cause Afib

AtriCure

Afib Population: Large, Growing & Undertreated

Afib affects over 5 million in the U.S.[1]

- U.S. prevalence projected to grow to 12-15 million by 2050
- International prevalence is comparable to the U.S.
- Most common sustained cardiac arrhythmia[2]
- Lifetime risk of Afib: ~1 in 4 for adults ≥40 years of age[3]

Afib increases 5-fold the risk of stroke [4,5]

- Afib is leading cause of stroke – over 15% in U.S. linked to Afib[5]
- Afib results in early mortality and cause of stroke in elderly[4]
- Afib-related strokes are more severe[5]

Issues with non-surgical treatment of Afib

- Warfarin drug therapy has complications
- Anti-arrhythmic drugs often not well-tolerated and ineffective
- <3% of Afib patients are treated with catheter or surgical ablation

Significant costs to healthcare system

- Direct medical costs are ~73% higher in Afib patients[6]
- Net incremental cost of $8,705 per patient per annum[6]
- U.S. annual incremental cost of Afib is ~$26.0 billion[6]

(1)Miyasaka Y, et al. Circulation. 2006;114(2):119-125

(2)Lloyd-Jones D, et al. [published online ahead of print December 17, 2009]. Circulation. doi:10.1161/CIRCULATIONAHA.109.192667.

(3)Lloyd-Jones DM, et al. Circulation. 2004;110(9):1042-1046.

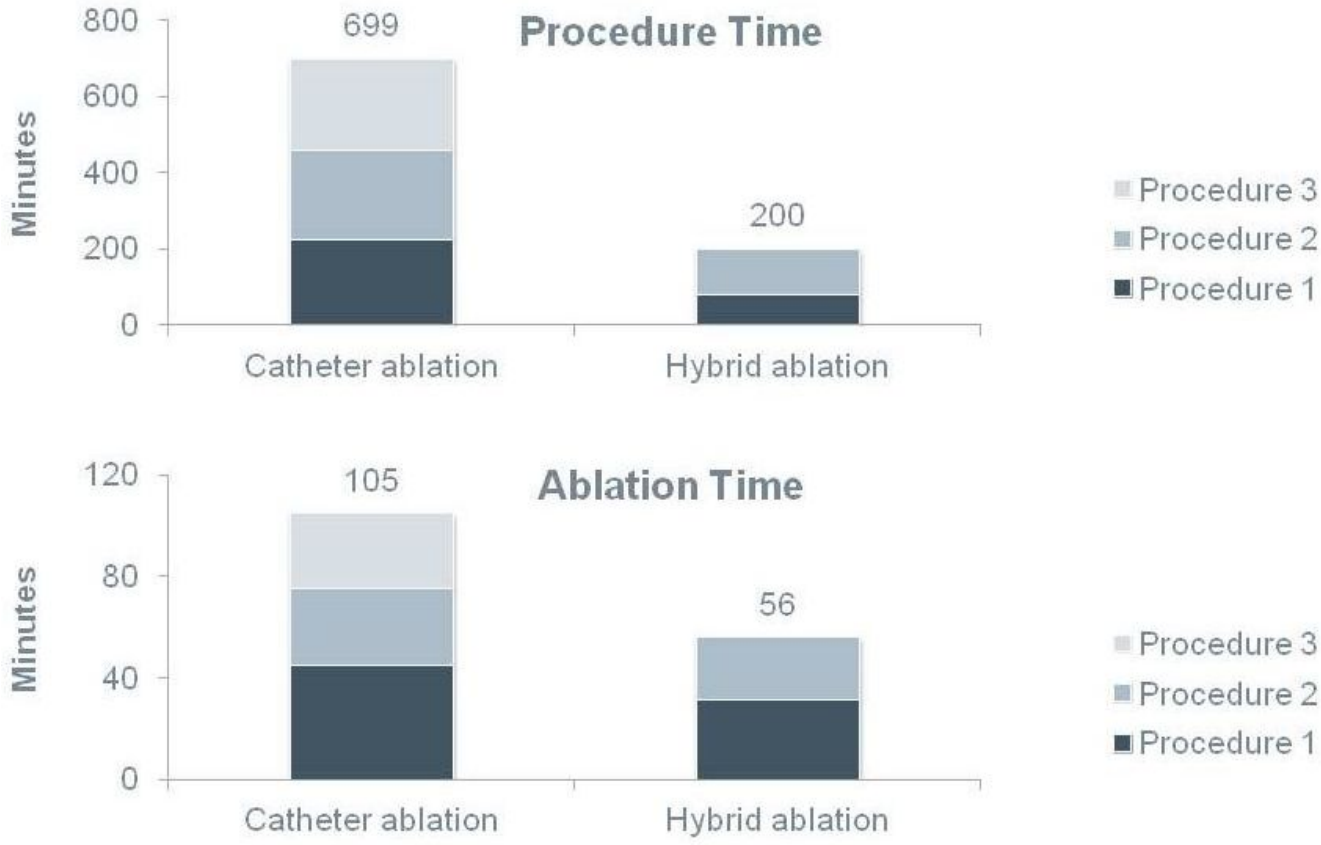
(4) Fuster V, et al. J Am Coll Cardiol. 2001;38(4):1231-12665

(5) Benjamin EJ, et al. Circulation. 1998;98(10):946-952.

(6) Kim M, et al. Circ Cardiovasc Qual Outcomes. 2011; 4:313-320

AtriCure

Ablation Procedure Comparison

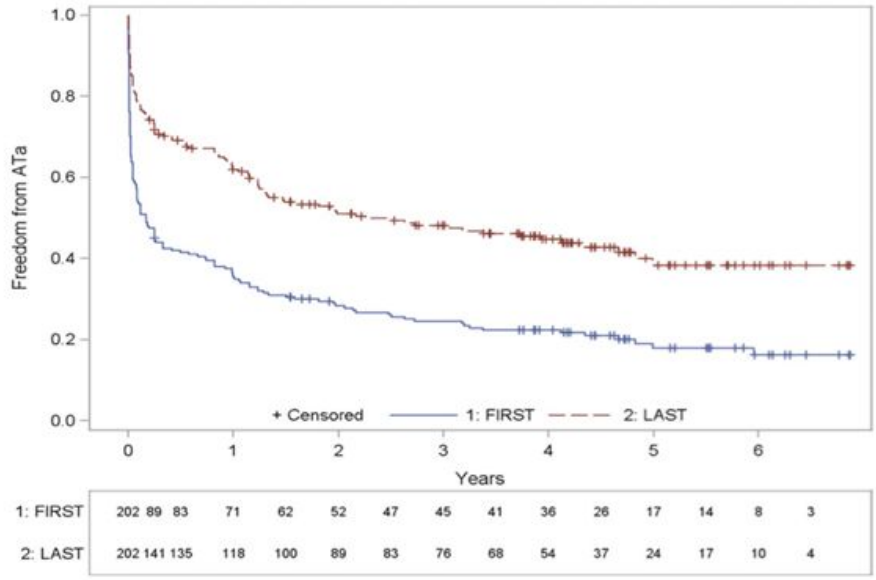


J Thorac Cardiovasc Surg 2012;-:1-6; J Am Coll Cardiol 2012;60:1921–9

AtriCure

Catheter Ablation of Long-Standing Persistent Atrial Fibrillation

5-Year Outcomes of the Hamburg Sequential Ablation Strategy



45% 2.44 procedures

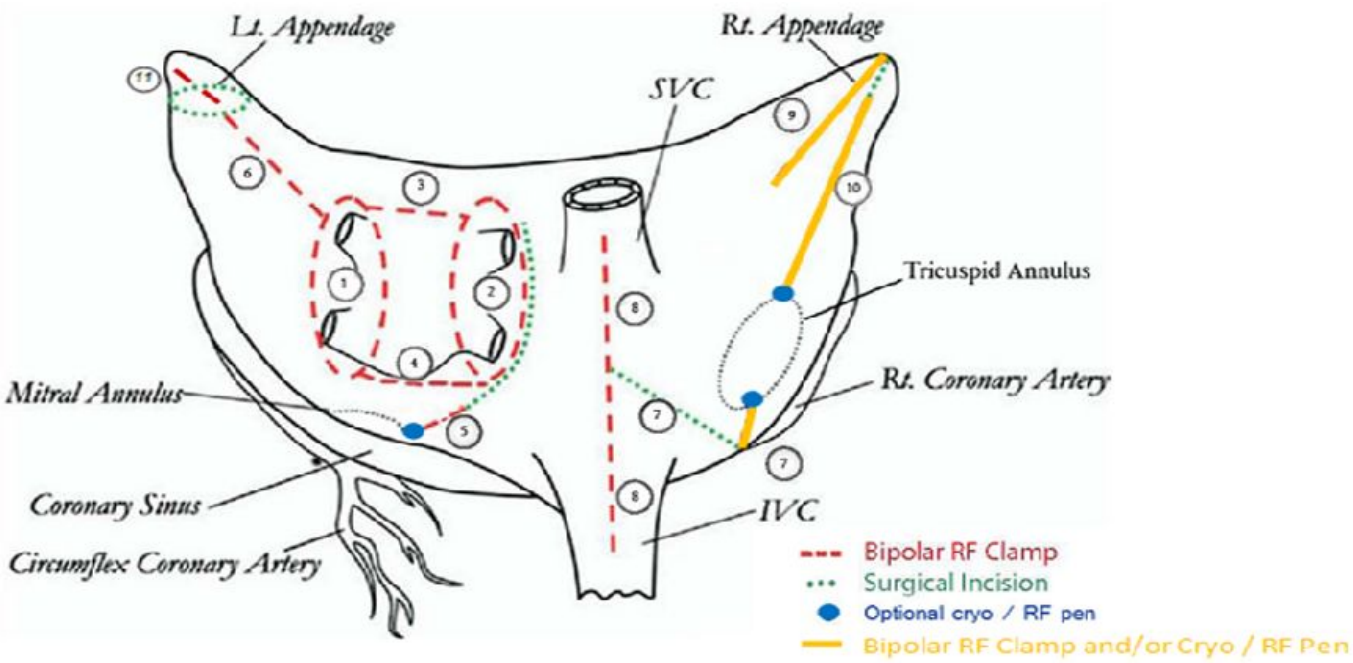
20% 1 procedure

Figure 3 **Single and Multiple Procedure Outcomes**

Kaplan-Meier event-free survival curve after the first procedure **(blue line)** and after the last procedure **(red line)**. Plus sign **(+)** indicates censored. **Numbers at bottom** indicate patients at risk. ATa = atrial tachyarrhythmia.

AtriCure

Maze IV



AtriCure

DEEP Pivotal Study (CP2014-1)

Study Objective: Establish the safety and effectiveness of a dual epicardial and endocardial ablation procedure for patients presenting with Persistent or Longstanding Persistent Atrial Fibrillation utilizing the AtriCure Bipolar System and AtriClip® PRO LAA Exclusion System in an endoscopic or open ablation procedure, followed by an endocardial mapping and ablation procedure utilizing commercially available RF based, irrigated, power controlled, ablation catheters for endocardial lesions. The endocardial procedure will be staged to occur after 90 days post epicardial surgical procedure.

Number of Subjects/Sites: 220 Subjects, 23 US/2 OUS study locations

Lead Principal Investigators:

Kenneth Ellenbogen, MD, VCU

Vigneshwar Kasirajan, MD, VCU

Ali Khoynezhad, MD, Cedars Sinai

Paul J. Wang, MD, Stanford

Subject Population:

Key Inclusion Criteria:

- Patient is ≥18 years of age and ≤ 75 years of age at time of consent.
- Patient has symptomatic (e.g. palpitations, shortness of breath, fatigue) Persistent Atrial Fibrillation or Longstanding Persistent Atrial Fibrillation refractory to a minimum of one Class I or Class III AADs.
- Patient may have had up to two (2) previously failed catheter ablations to treat atrial fibrillation using catheter ablation are eligible, if they present with symptomatic Persistent or Longstanding Persistent AF.

Key Exclusion Criteria:

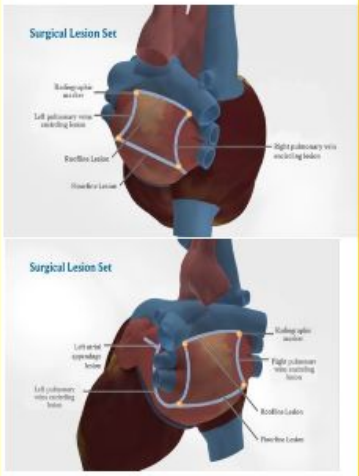
- Patient has a documented history of AF >10 years.
- Patient has had an EP catheter ablation procedure to treat atrial fibrillation within 6 months prior to signing consent.

Primary Endpoints:

Effectiveness: Freedom from any documented AF, atrial flutter, or atrial tachycardia lasting >30 seconds in duration through the 12 month follow-up visit in the absence of Class I or III AADs (with the exception of previously failed AADs at doses not exceeding those previously failed).

Safety: Composite endpoint consisting of predefined Adverse Events that are adjudicated by the CEC to be serious adverse events (SAEs) and related to the AtriCure Bipolar System, the AtriClip Pro LAA Exclusion System, within 30 days of the epicardial surgical ablation procedure, or within 7 days of the index endocardial procedure, or within 7 days after a repeat endocardial procedure within the blanking period.

Surgical Lesion Set



Endocardial Lesion Set

Cavo-tricuspid isthmus line