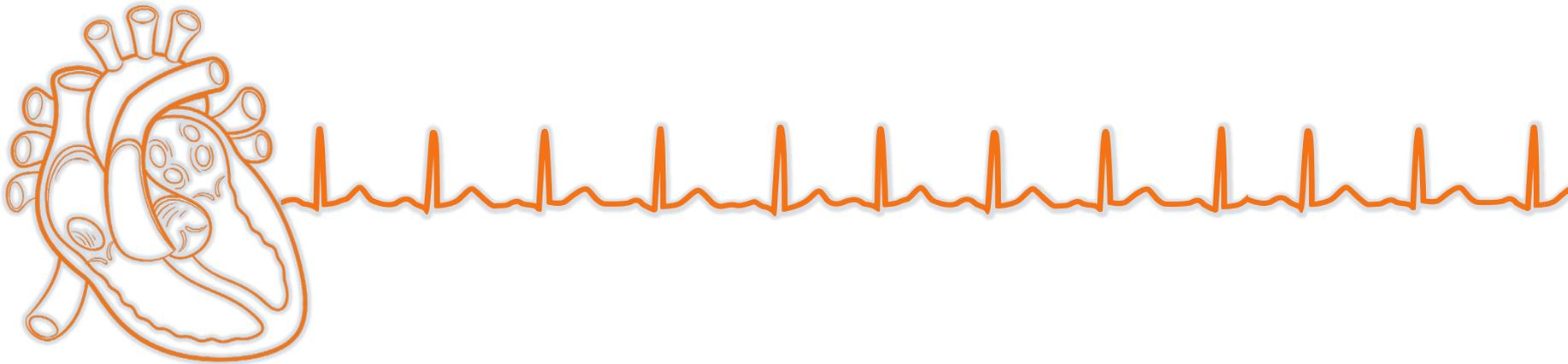


# AtriCure Investor Presentation

Creating a World Class Afib Platform



# Forward Looking Statements

This presentation and oral statements made in connection with this presentation contain “forward-looking statements,” which are statements related to future events that by their nature address matters that are uncertain. Forward-looking statements address, among other things, AtriCure’s expected market opportunity, future business, financial performance, financial condition, and results of operations, and often contain words such as “intends,” “estimates,” “anticipates,” “hopes,” “projects,” “plans,” “expects,” “seek,” “believes,” “see,” “should,” “will,” “would,” “opportunity,” “target,” and similar expressions and the negative versions thereof. Such statements are based only upon current expectations of AtriCure. All forward-looking information is inherently uncertain and actual results may differ materially from assumptions, estimates, projections or expectations reflected or contained in the forward-looking statements as a result of various risk factors.

Reliance should not be placed on forward-looking statements because they involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to differ materially from those expressed or implied. These risks, uncertainties and other factors include, but are not limited to, those identified at <http://www.atricure.com/forward-looking-statements> and/or described in AtriCure’s Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, particularly the “Risk Factors” sections thereof, as filed with the U.S. Securities and Exchange Commission and available at <http://www.sec.gov>.

With respect to all forward-looking statements, AtriCure claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Forward-looking statements speak only as of the date they are made. AtriCure undertakes no obligation, and does not expect, to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise unless required by law.

# Non-GAAP Financial Measures

To supplement AtriCure's condensed consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP, AtriCure provides certain non-GAAP financial measures as supplemental financial metrics in this presentation.

Adjusted EBITDA is calculated as net income (loss) before other income/expense (including interest), income tax expense, depreciation and amortization expense, share-based compensation expense, acquisition costs, legal settlement costs, impairment of intangible asset and change in fair value of contingent consideration liabilities. Management believes in order to properly understand short-term and long-term financial trends, investors may wish to consider the impact of these excluded items in addition to GAAP measures. The excluded items vary in frequency and/or impact on our continuing results of operations and management believes that the excluded items are typically not reflective of our ongoing core business operations and financial condition. Further, management uses adjusted EBITDA for both strategic and annual operating planning. Adjusted income (loss) per share is a non-GAAP measure which calculates the net income (loss) per share before non-cash adjustments in fair value of contingent consideration liabilities, impairment of intangible asset and legal settlement costs.

The non-GAAP financial measures used by AtriCure may not be the same or calculated in the same manner as those used and calculated by other companies. Non-GAAP financial measures have limitations as analytical tools and should not be considered in isolation or as a substitute for AtriCure's financial results prepared and reported in accordance with GAAP. We urge investors to review the reconciliation of these non-GAAP financial measures to the comparable GAAP financials measures, and not to rely on any single financial measure to evaluate our business.

We are passionately focused on reducing the global Afib epidemic and healing the lives of those affected



### **Large Markets**

Addressing an underserved and growing patient population



### **Strong Portfolio**

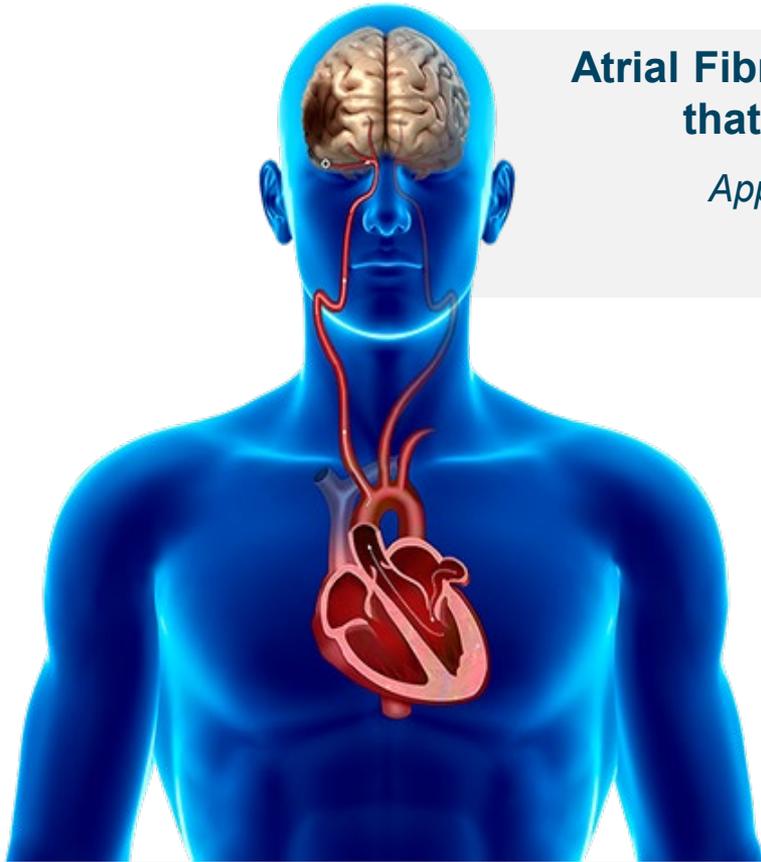
Existing products and solutions driving consistent growth



### **Bright Future**

Novel therapies supported by growing body of clinical evidence

# Afib: a Serious Problem



**Atrial Fibrillation (Afib) is an irregular heartbeat (or arrhythmia) that affects more than 33 million people worldwide.<sup>1</sup>**

*Approximately 1.2 million Afib diagnoses annually in the US.<sup>2</sup>*

*1 in 4 adults over 40 will develop Afib in their lifetime.<sup>3</sup>*

**5x**

Risk of ***Stroke***<sup>4</sup>

**>5x**

Higher risk of ***Heart Failure***<sup>5</sup>

**46%**

Greater risk of all cause ***Mortality***<sup>6</sup>

# Significant Global Market Opportunity

## US Market Focus

- Continued build of dedicated sales and training expertise
- Clinical data supporting multiple label expansions
- New product development
- Enhanced reimbursement

**US market opportunity  
\$3B+ annually**



**International market  
opportunity \$2B+ annually**

## International Market Focus

- Penetration of large markets first
- Expand product availability
- Improve market access via reimbursement
- Continued build of dedicated sales and training expertise

*Market opportunity based on internal estimates and research, as well as from publicly available information. See Supplemental Information for additional detail.*

# Two Distinct Patient Profiles

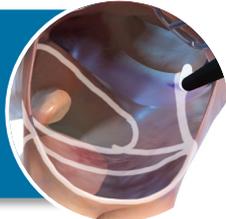


Referring Physician: GP, Cardiologist

**STRUCTURAL HEART ISSUE**  
Surgery required – Afib corrected at same time (Valve, CABG)

**GUIDELINES<sup>7</sup>**  
Surgical Ablation is **RECOMMENDED**  
LAA management is **REASONABLE**

**Concomitant Open Procedures**  
(Ablation/LAAM)

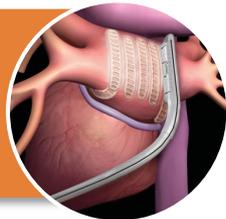


**NO STRUCTURAL ISSUE**  
Afib is primary concern

Medicine is effective | Intervention is better choice



**Standalone Hybrid Procedures**  
(Ablation/LAAM)  
*Catheter often first line of treatment*



# US Market Opportunity

**\$350M**

**Pain Management  
Procedures  
(Ablation)**



**Boosting  
Growth via  
adjacent new  
market**

Estimated **140,000**  
**thoracic patients**  
annually

**\$700-800M**

**Concomitant Open  
Procedures  
(Ablation/LAAM)**



**Steady Growth in  
penetration of  
Cardiac Surgery  
Market**

- Estimated **300,000 total patients** (Afib, non-Afib) annually with structural heart issue
- Only PMA product for the concomitant surgical treatment of Afib

**\$2B+ and growing  
Standalone Hybrid Procedures**

(Ablation/LAAM)

**Expansive Growth from development  
of Standalone Afib Market**

*Vastly underpenetrated market with 10-15% estimated  
annual market expansion*

- **Addressable market is more than 3 million patients;** less than 1% treated today
  - 25,000 long-standing persistent patients treated by catheter ablation only today
- Multiple approaches to treatment
  - Hybrid Convergent + AtriClip®, DEEP

Market opportunity based on internal estimates and research, as well as from publicly available information. See Supplemental Information for additional detail.

# AtriCure: A Decade of Progress

*Differentiated portfolio of solutions  
built from continuous innovation and strong clinical evidence,  
supported by robust training and education.*

**2011**

*Impacting more than 300,000 patients worldwide.*

**2021**

**Isolator Synergy  
Ablation System  
approved by FDA for  
treatment of persistent  
or long-standing  
persistent Afib  
concomitant to open  
heart procedures...**  
*the first medical device to  
receive FDA approval for  
the treatment of  
persistent Afib*

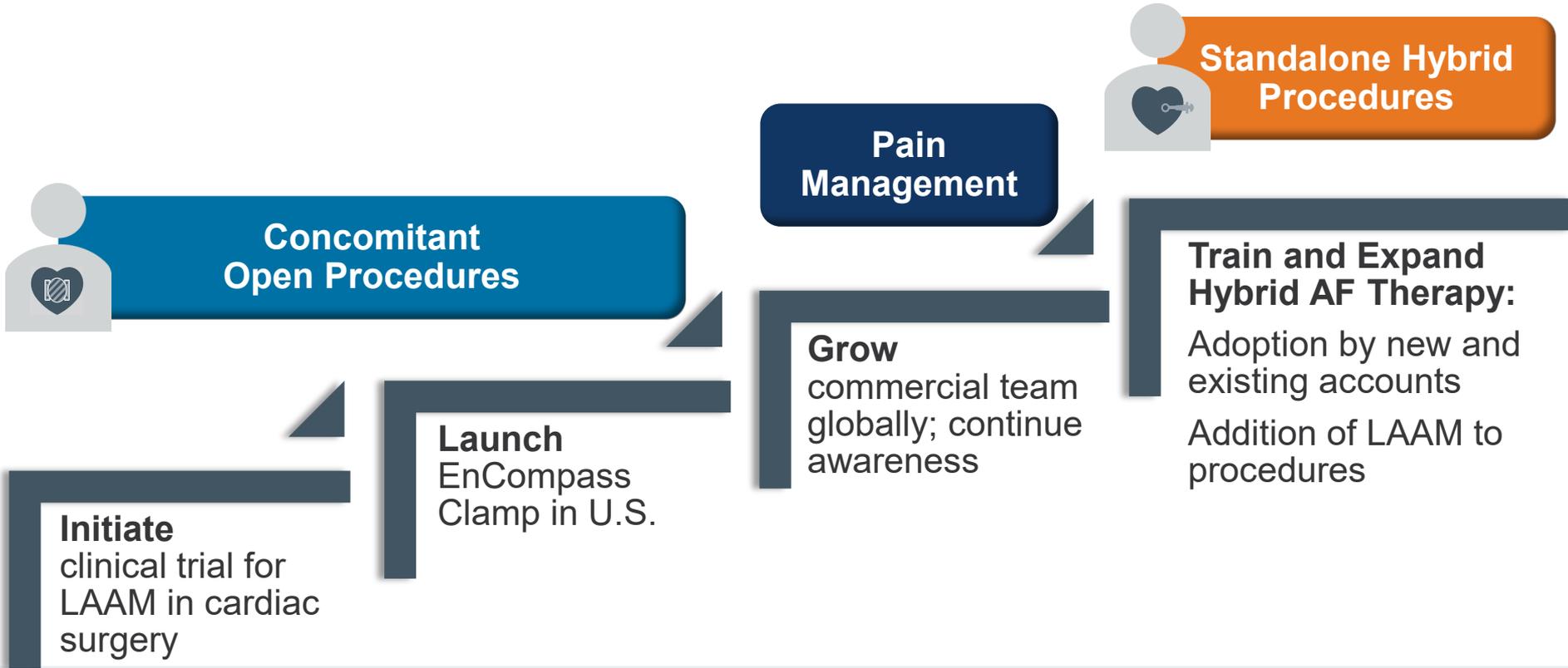
- Maze IV Training Program initiated; Advanced Ablation Courses later endorsed by the Society of Thoracic Surgeons (STS)
- Continued innovation in AtriClip platform with FLEX, PRO2 and V-Clip devices for open heart and minimally invasive procedures
- Changes in clinical practice guidelines recommend Afib ablation treatment and state management of LAA reasonable
- Expansion of AtriClip labeling with electrical isolation of LAA
- Completed three acquisitions, moving into EP space with minimally invasive therapies
- Entered pain management market with release of cryoSPHERE® probe and dedicated commercial team

**Epi-Sense®  
Guided Coagulation  
System approved by  
FDA for treatment of  
long-standing  
persistent Afib**

**Expanded labeling for  
Cryo Nerve  
Block Therapy in  
adolescents**

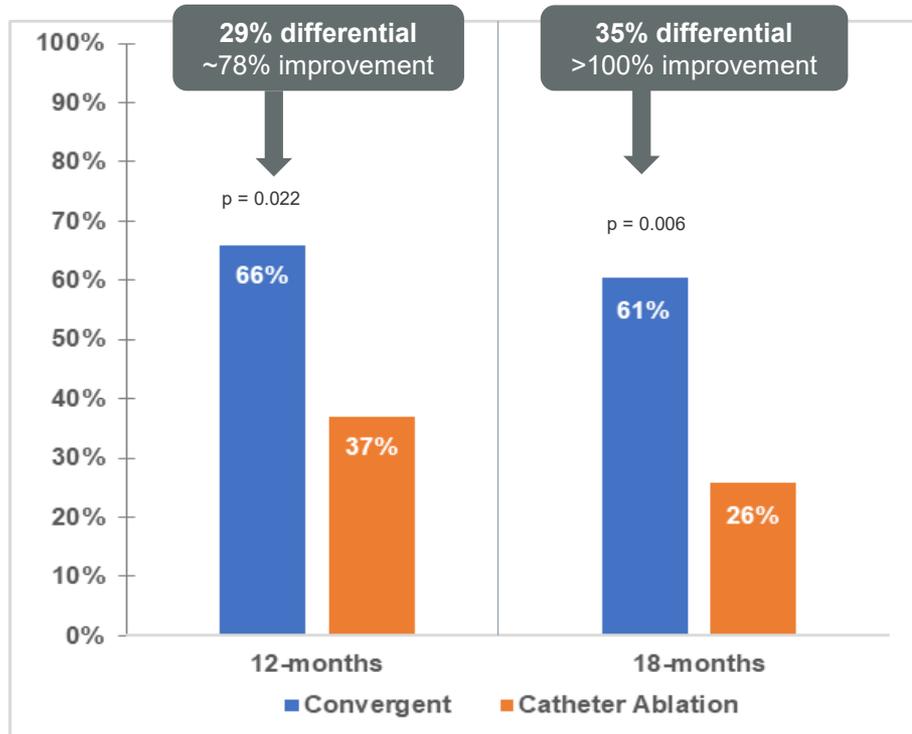
**510k clearance of  
EnCompass® clamp**

# 2022 Priorities: Driving Therapy Expansion



# CONVERGE: Long-standing Persistent Afib Patient Analysis

*Freedom from AF/AFL/AT from 3-month blanking period through 12-months and 18-months*

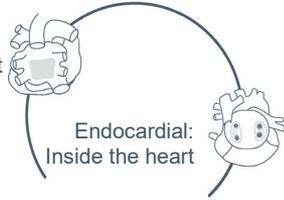


- **Superior outcomes with hybrid Convergent procedure** when compared to endocardial catheter ablation alone in patients with drug refractory long-standing persistent Afib
- Data for long-standing persistent patients in the trial demonstrated **compelling efficacy and durability**
- **Improved EP lab efficiency demonstrated** by reduction in endocardial ablation time as a result of adding epicardial ablation

# Benefits of the EPI-Sense System and Hybrid AF Therapy

Benefits based on 7-day continuous rhythm monitoring at 18-months post procedure

Epicardial:  
Outside the heart



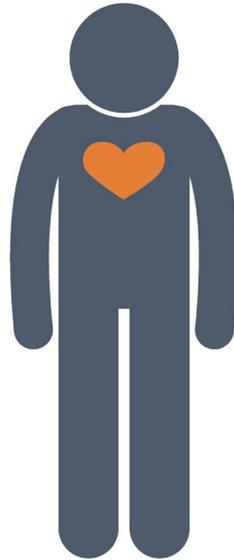
2

**TRIGGER AREAS TARGETED**  
where atrial fibrillation begins

Emphasizes value of team-based  
approach for advanced AF treatment

≥90%

**LESS TIME IN AF**  
For most patients at 1 year



Patients in the Hybrid AF Arm  
report feeling better, both  
physically + emotionally<sup>8</sup>

More than

**2x** AS EFFECTIVE AT  
STOPPING AA

(vs endocardial RF ablation alone)



Additive to endocardial  
catheter ablation

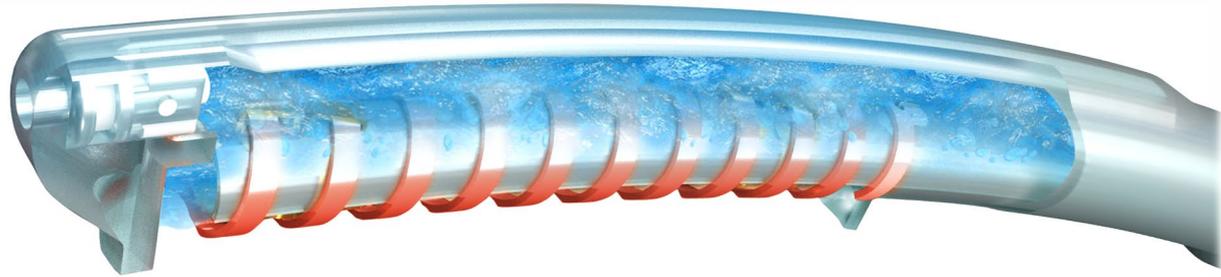
Patients are

**2x** MORE LIKELY TO  
NO LONGER NEED  
AF MEDICATION

(vs endocardial RF ablation alone)



# Commercial Strategy for the EPi-Sense System



## TARGET

Drive utilization with existing and new sites

## BUILD

Train and develop programs, build referral channel

## LEVERAGE

Add AtriClip to Hybrid AF Therapy

## EXPAND

Grow commercial + training teams, broaden internationally

## AMPLIFY

Spread awareness of Hybrid AF Therapy to patients

# Innovative and Expanding Product Portfolio



ISOLATOR®  
SYNERGY™  
CLAMP



cryoICE®  
CRYOABLATION  
PROBE



EPI-SENSE®  
DEVICE



cryoSPHERE®  
CRYOABLATION  
PROBE



ISOLATOR SYNERGY  
ENCOMPASS®  
CLAMP

## Ablation

Continuous innovation toward less invasive, simpler to use, and more efficient products

## LAA Management



ATRICLIP®  
FLEX DEVICE



ATRICLIP PRO®  
DEVICE



ATRICLIP PRO-V®  
DEVICE



ATRICLIP FLEX-V®  
DEVICE

# SPOTLIGHT: Cryo Nerve Block for Pain Management

## Therapy Overview

- Temporarily stops transmission of pain signals coming from the chest wall during surgery
- Nerve “scaffolds” remain intact allowing axons to regenerate and restore nerve function over time
- Applicability in a wide variety of thoracic surgical approaches (thoracotomy, video-assisted, robotic) and procedures (resection, transplant, thoracoabdominal, surgical rib fixation, pectus repair)
- Can be an important tool in combatting the opioid epidemic – 1 in 7 thoracic surgery patients become reliant upon opioids after their procedure<sup>9</sup>



*A new way to freeze out post-operative pain: cryotherapy for temporary pain relief in thoracic surgical procedures*

## HIGHLIGHTS

- cryoICE® probe made available for Cryo Nerve Block applications in 2015
- Dedicated commercial team established in 2019 and expanding
- Q1 2019 launch of cryoSPHERE® probe
- Label expansion includes adolescent patients as young as 12 years of age
- **~8% of worldwide revenue in 2021**, up from ~5% in 2020
- International launch in Europe in 2022
- Continuing to gather data to support evidence development for therapy

# SPOTLIGHT: Isolator Synergy EnCompass® Clamp



## Product Overview

- **FDA 510(k) clearance to ablate cardiac tissue during surgery**
- Designed with same benefits of the AtriCure Isolator Synergy Clamps:
  - + Parallel closure
  - + Uniform pressure
  - + Synergy algorithm provides custom power
- Compatible with existing AtriCure RF generator

*A simpler and faster approach  
to ablating the heart in  
open procedures*

## HIGHLIGHTS

- FDA 510(k) clearance in July 2021
- Limited initial release began 3Q 2021
- Broad commercial launch in U.S. April 2022
- Continue to drive penetration of cardiac surgery market



**HEAL-IST**  
Clinical Trial

## HIGHLIGHTS

- **Inappropriate Sinus Tachycardia (IST) is a chronic condition characterized by elevated resting heart rate and exaggerated response to exercise or stress**
  - ✓ Currently, no approved therapies; HEAL-IST is the first clinical trial for this large unmet need
  - ✓ Building off current Synergy product technology
  - ✓ Hybrid therapy leverages expertise and partnership between EP and Cardiac Surgery
- **FDA approval of HEAL-IST clinical trial protocol in February 2022**

# HEAL-IST Overview

**IDE Trial** to support safety and efficacy of hybrid sinus node sparing ablation procedure for the treatment of IST

*Using AtriCure ISOLATOR Synergy Ablation System*

## STUDY DESIGN

### Summary

Multi-center, prospective, single arm, Bayesian Adaptive Design

### Number of Subjects and Sites

Up to 142 patients at up to 40 sites (US, UK, and EU)

### Study Duration

Safety: 30-day follow-up  
Efficacy: 12-month follow-up  
All subjects followed for a total of 24 months post procedure

## PRIMARY ENDPOINTS

### Effectiveness

Freedom from IST at 12-months. Freedom from IST is defined as mean heart rate of  $\leq 90$ bpm or at least a 15% reduction in mean heart rate as compared to baseline, in the absence of new or higher dosage of previously failed medications.

### Safety

Incidence of device or procedure-related major adverse events (MAEs) for subjects undergoing the hybrid sinus node sparing ablation procedure from the index procedure through 30-days post procedure.



**Left**  
**Atrial**  
**Appendage Exclusion for**  
**Prophylactic**  
**Stroke Reduction**

## HIGHLIGHTS

- **Seminal clinical trial – one of the largest IDE trials in cardiac surgery**
- **Study will have a global reach with sites in the United States, Canada, Europe and Asia**
- **Multiple secondary and other key endpoints will be evaluated**
- **FDA approval of LeAAPS clinical trial protocol in April 2022**

# LeAAPS Overview

**IDE Trial** to evaluate the effectiveness of prophylactic LAA exclusion for the prevention of ischemic stroke or systemic arterial embolism in cardiac surgery patients without pre-operative AF diagnosis

*Using AtriClip LAA Exclusion System*

## STUDY DESIGN

### Summary

Multi-center, prospective, randomized control (1:1) trial

### Number of Subjects and Sites

Up to 6,500 subjects at up to 250 sites worldwide

### Study Duration

Safety: 30-day follow-up  
Efficacy: Event-driven trial, with a minimum follow-up of 5 years post procedure

## PRIMARY ENDPOINTS

### Effectiveness

First occurrence of ischemic stroke or systemic arterial embolism.

### Safety

Incidence of safety events through 30-days to demonstrate no increase in risk with LAA exclusion during cardiac surgery.

# Key Investments Driving Growth

## AtriCure Pillars

*Foundation of our past and strengthening our future*

### Innovation

Increasing pipeline to drive LAAM penetration and build MIS market

### Clinical Science

Hybrid AF Therapy proven by CONVERGE trial: a complimentary and differentiated approach for advanced Afib... now focused on expansion of clinical data across franchises

### Education

Significant investment in physician education, providing multiple training options

## Aligning Expertise with Opportunity

*Dedicated commercial and education teams*

### U.S. Cardiac

134 Sales and Clinical Specialists

### U.S. Hybrid Therapies

47 Sales and Clinical Specialists

### U.S. Cryo Nerve Block

34 Sales and Clinical Specialists

### U.S. Sales Leadership

25 Area Directors across our specialized teams

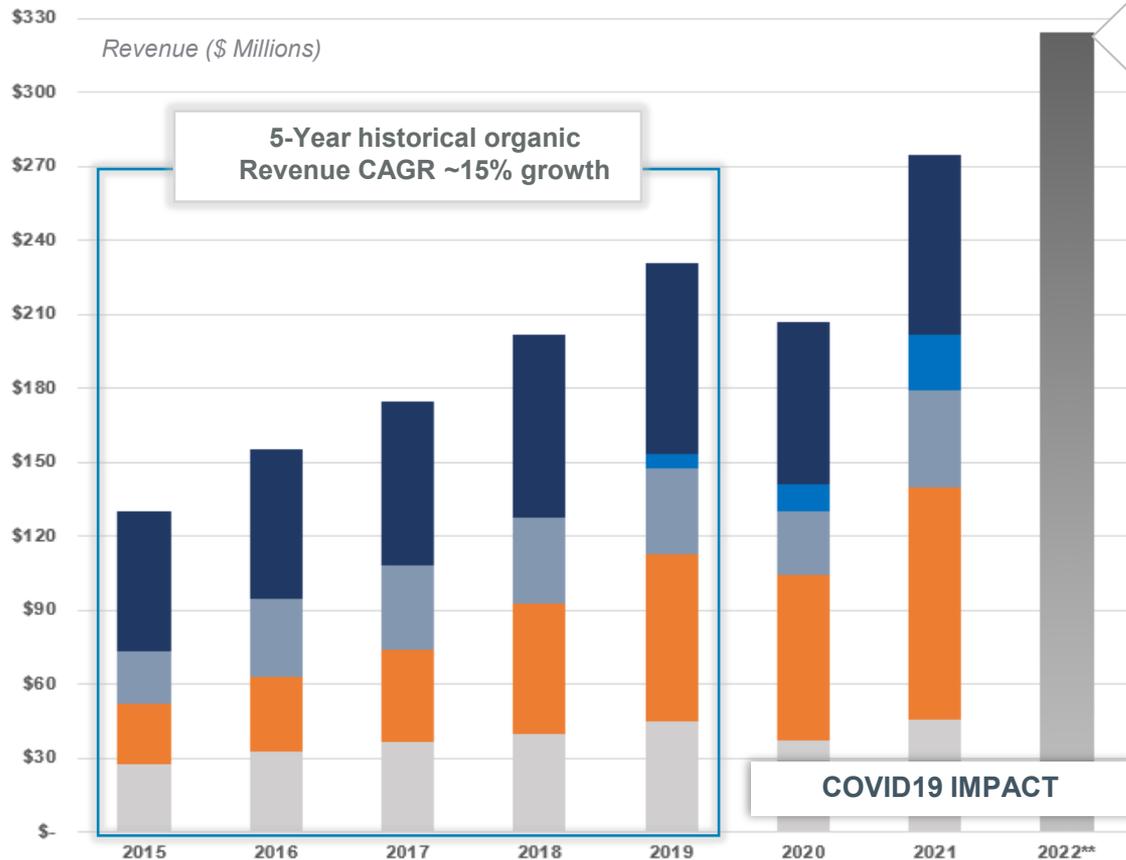
### U.S. Education

Over 40 Physician + Field Supporting Roles

### International

Over 50 Sales and Education Professionals

# History of Strong Growth



**2022 Revenue Guidance**  
Updated May 2022

**Accelerating Growth (16-20% YoY)**  
\$318-330M worldwide revenue

## History of Consistent Revenue Growth pre-COVID19

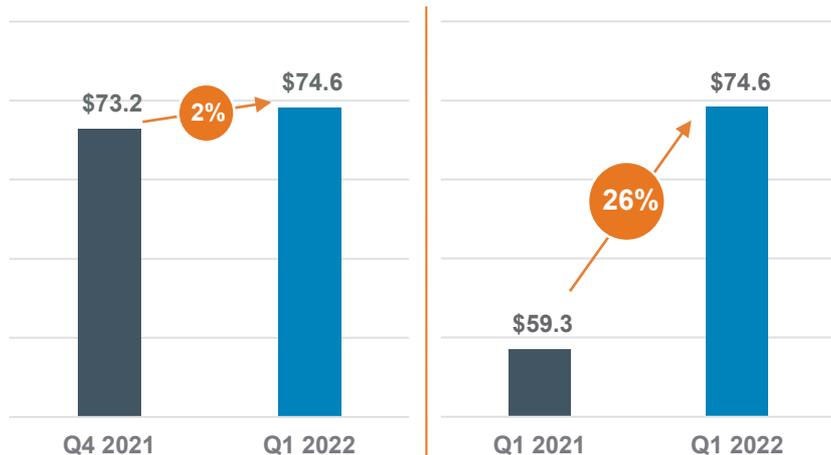
**5-Year historical organic revenue CAGRs:**

- U.S. AtriClip ~32%
- U.S. Open Ablation ~11% excluding Pain Management (cryoSPHERE)
- U.S. MIS Ablation ~8%
- International ~10%

\*\*Based on midpoint of 2022 Revenue guidance range

# First Quarter 2022 Financial Highlights

## WORLDWIDE REVENUE\* (\$M)



- COVID-19 receding in major markets at end of first quarter
- Strong activity and growing demand across key product lines
- U.S. revenue of \$62.3M (84% of revenue)
- International revenue of \$12.3M (16% of revenue)

## KEY METRICS\*

	Q1 2021	Q1 2022
<b>GROSS MARGIN</b>	75.1%	74.5%
<b>OPERATING EXPENSES</b>	(\$60.4M)	(\$69.7M)
<b>ADJUSTED EBITDA-S**</b>	(\$4.7M)	(\$4.2M)
<b>ADJ. LOSS PER SHARE**</b>	(\$0.32)	(\$0.33)
<b>CASH &amp; INVESTMENTS</b>	\$236M	\$182M

\* 2022 financial results are preliminary and unaudited

\*\* Reconciliation of Adjusted EBITDA and Adjusted Loss per share to GAAP metrics may be found in Q2 2022 earnings release.

# Change in Revenue Presentation

## Summary of Changes

### Presentation of revenue aligns with current product line offerings.

Changes implemented in Q1 2022 include:

- **Pain Management** revenue (sales of cryoSPHERE probe), historically included in Open ablation revenue, is now separately presented.
- **Valve** revenue, historically shown as a separate product type, is now included in Open ablation revenue.

	Three Months Ended (in \$000s)			
	March 31, 2021	June 30, 2021	September 30, 2021	December 31, 2021
<b>United States Revenue:</b>				
Open ablation	\$17,439	\$19,503	\$17,893	\$17,561
Minimally invasive ablation	8,385	9,702	9,990	11,303
Pain management	<u>3,898</u>	<u>5,709</u>	<u>6,253</u>	<u>6,927</u>
Total ablation	29,722	34,914	34,136	35,791
Appendage management	<u>20,587</u>	<u>25,156</u>	<u>23,401</u>	<u>25,424</u>
<b>Total United States</b>	<b><u>\$50,309</u></b>	<b><u>\$60,070</u></b>	<b><u>\$57,537</u></b>	<b><u>\$61,215</u></b>
<b>International Revenue:</b>				
Open ablation	\$4,434	\$5,526	\$6,690	\$6,544
Minimally invasive ablation	1,274	1,575	1,849	1,711
Pain management	<u>—</u>	<u>11</u>	<u>11</u>	<u>39</u>
Total ablation	5,708	7,112	8,550	8,294
Appendage management	<u>3,258</u>	<u>4,194</u>	<u>4,373</u>	<u>3,709</u>
<b>Total International</b>	<b><u>\$8,966</u></b>	<b><u>\$11,306</u></b>	<b><u>\$12,923</u></b>	<b><u>\$12,003</u></b>
<b>Total Revenue</b>	<b><u>\$59,275</u></b>	<b><u>\$71,376</u></b>	<b><u>\$70,460</u></b>	<b><u>\$73,218</u></b>

# An Exciting Future Ahead

## **COMPREHENSIVE PLATFORM OF THERAPIES**

*for differentiated population of Afib patients*

Surgical Ablation || AtriClip

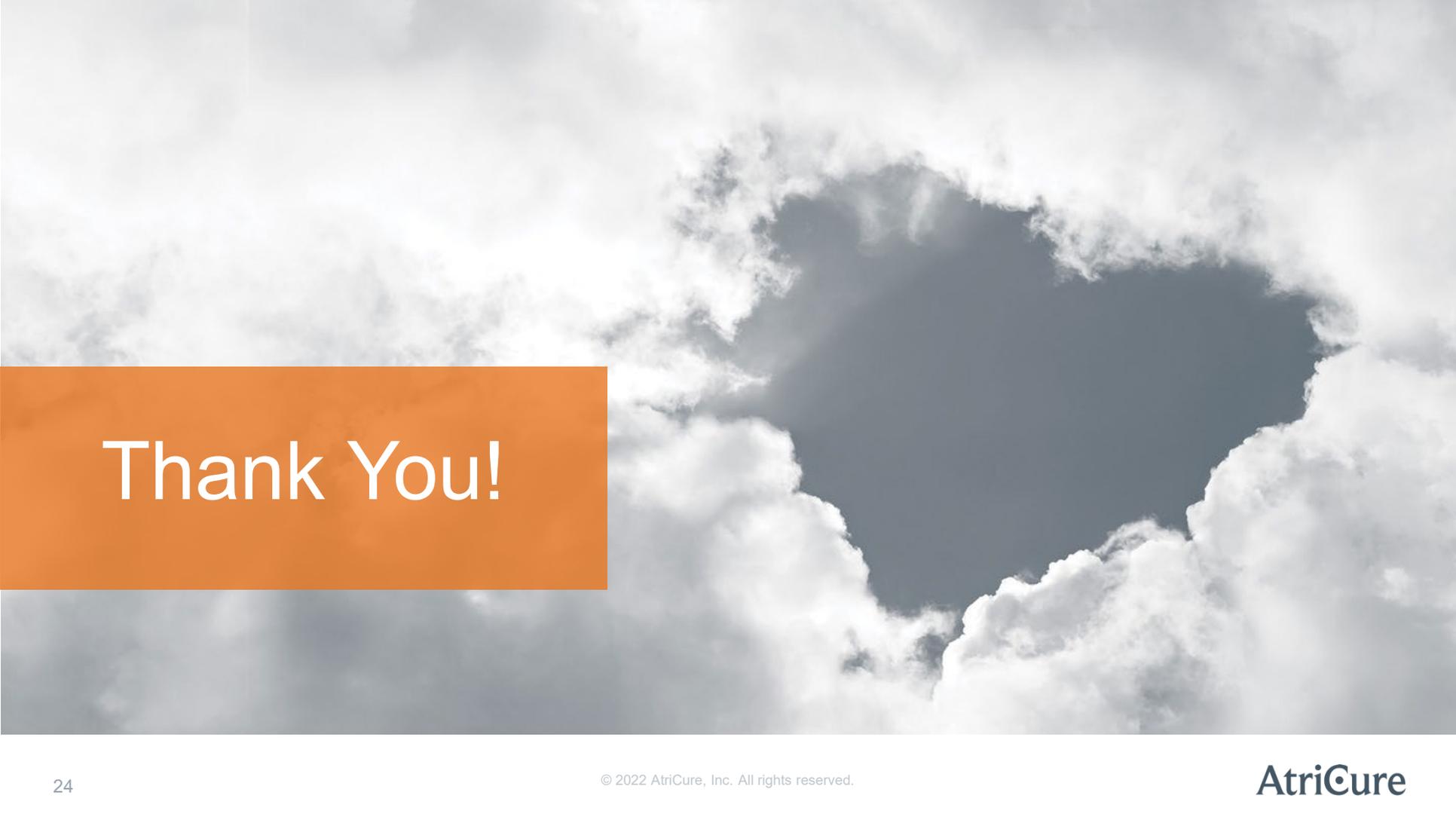
## **ACCELERATING GROWTH IN EP LANDSCAPE**

Hybrid AF Therapy

## **EXPANDING WITH PAIN MANAGEMENT**

Cryo Nerve Block





Thank You!

# Supplemental Information

References for any comments, statistics, or figures in this presentation are available upon request.

# Key Investment Rationale



## Large Markets

Addressing an underserved and growing patient population

- Approximately 33 million Atrial Fibrillation patients globally, with majority having advanced forms of the disease<sup>1</sup>
- Multibillion dollar annual market opportunity
- Current standard of care for intervention (catheter ablation) does not adequately address the most advanced forms of the disease



## Strong Portfolio

Existing products and solutions driving consistent growth

- Strong history of double-digit revenue growth, driven by great products, clinical evidence, commitment to education, and societal guideline support
- Only PMA product for the concomitant surgical treatment of Afib
- The AtriClip device is the most widely used Left Atrial Appendage device with over 300,000 sold to date
- Diverse and expanding product portfolio from internal development and acquisitions



## Bright Future

Novel therapies supported by growing body of clinical evidence

- Only PMA product for treatment of LS persistent Afib with Hybrid AF Therapy
- Growing pain management business to address pain associated with surgery
- Early in market development process – evolution to minimally invasive therapies expected to drive growth, diversifying and accelerating in 2022 and beyond

# COVID-19 Response

## *Positioning AtriCure for long-term growth*



### Health & Safety

**Provide a safe work environment  
for our employees**

- Enabling employees to work remotely; implemented hybrid workplans
- Providing personal protection and other measures to ensure the safety of those working in our offices and with customers



### Maintaining Operations

**Deliver products and support  
to our customers**

- Maintaining manufacturing, assembly, fulfillment – modified to adhere to safety recommendations
- Continuing case coverage support
- Utilizing online and mobile training venues to educate our customers

**While our plans will continue to evolve in response to changes caused by the COVID-19 pandemic, we remain committed to the AtriCure Team and to the execution of our strategic initiatives.**

# US Concomitant Market Opportunity



## Estimated Afib Opportunity in Cardiac Surgery

Annual Cardiac Surgeries <sup>13</sup>	300,000
Pre-Operative Afib Rate <sup>11</sup>	~28%
Cardiac Opportunity – Pre-Op Afib	85,000
ASP Mix (Ablation and Appendage Management) <sup>14</sup>	\$4,500
<b>Open Cardiac Surgery Opportunity – Afib</b>	<b>\$382M</b>

## Estimated Non-Afib Opportunity in Cardiac Surgery

Annual Cardiac Surgeries	300,000
Pre-Operative Non-Afib Rate	~72%
Cardiac Opportunity – Pre-Op Afib	215,000
ASP Mix (Appendage Management ONLY) <sup>14</sup>	\$1,750
<b>Open Cardiac Surgery Opportunity – Non-Afib</b>	<b>\$376M</b>

- US annual cardiac surgery volume steady over the past 5 years with shifts in procedure types<sup>10</sup>
- Pre-Op Afib occurs frequently in cardiac surgery patients<sup>11</sup>
- New onset Post-Op Afib is a well-documented complication of cardiac surgery, even if patients do not present with pre-op Afib<sup>12</sup>

# US Standalone Market Opportunity



## Estimated Standalone Afib Opportunity

	2020	Projected 2025
Long-standing Persistent Afib Catheter Ablation <sup>17</sup>	25,000	45,000
ASP Mix (Ablation + Appendage Management) <sup>14</sup>	\$15,000	\$15,000
<b>Immediate Standalone Afib Opportunity</b>	<b>\$375M</b>	<b>\$675M</b>
Additional penetration Long-standing Persistent Afib patients (estimated at 5% penetration)	150,000	175,000
ASP Mix (Ablation + Appendage Management) <sup>14</sup>	\$15,000	\$15,000
<b>Incremental Standalone Afib Opportunity (estimated at 5% penetration)</b>	<b>\$2B+</b>	<b>\$3B+</b>

## Market opportunity in analysis at left considers:

- Addition of ablation and LAAM to existing catheter ablation procedures
  - Catheter ablation procedures have grown 10-15% annually<sup>15</sup>
- Incremental penetration of advanced Afib patient population
  - Today, long-standing persistent Afib population represents more than 3 million patients in the United States, expected to grow to more than 4.4 million by 2025<sup>16</sup>
- ASP Mix reflects both ablation and AtriClip

## HIGHLIGHTS

- Completed enrollment August 2018
- Data released at virtual Heart Rhythm Society (HRS) conference May 2020
- PMA submission seeking approval for treatment of long-standing persistent Afib November 2020
- Trial results published in *Circulation: Arrhythmia and Electrophysiology* November 2020
- Long-standing persistent Afib patient sub-group analysis presented at 26<sup>th</sup> Annual Atrial Fibrillation (AF) Symposium January 2021 and 14<sup>th</sup> Annual Western AF Symposium February 2021
- **FDA approval of EPI-Sense System for treatment of long-standing persistent Afib April 2021**

# CONVERGE Overview

**SUPERIORITY TRIAL** designed to support FDA approval of the EPI-Sense device

***Achieved statistical superiority for primary endpoints***

## STUDY DESIGN

### Summary

Multi-center, prospective, open label randomized 2:1 (Hybrid Convergent procedure vs endocardial catheter ablation) pivotal study

### Number of Subjects and Sites

153 subjects  
27 sites (25 US and 2 OUS)

### Study Duration

12 month and 18 month monitoring, then 3 and 5 year follow-up of all subjects

## PRIMARY ENDPOINTS

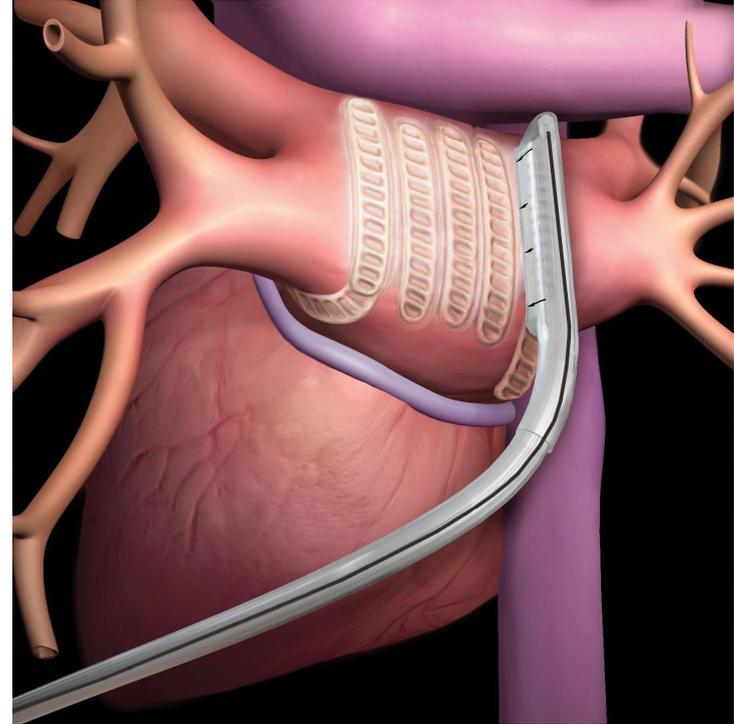
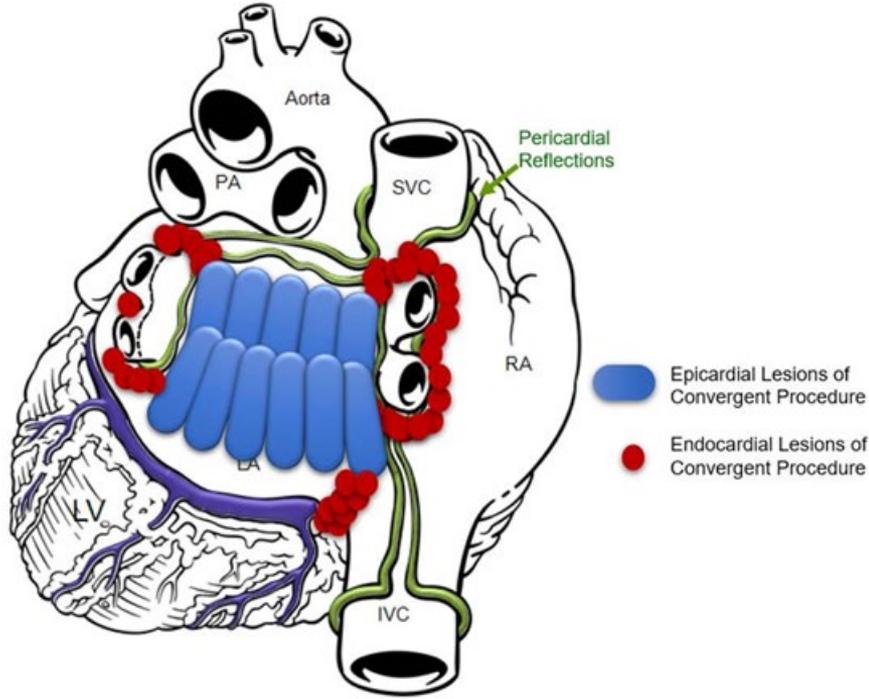
### Effectiveness

Primary efficacy endpoint is success or failure to be AF/AT/AFL-free absent class I and III AADs except for a previously failed or intolerant class I or III AAD with no increase in dosage following the 3 month blanking period through the 12 months post procedure follow-up visit

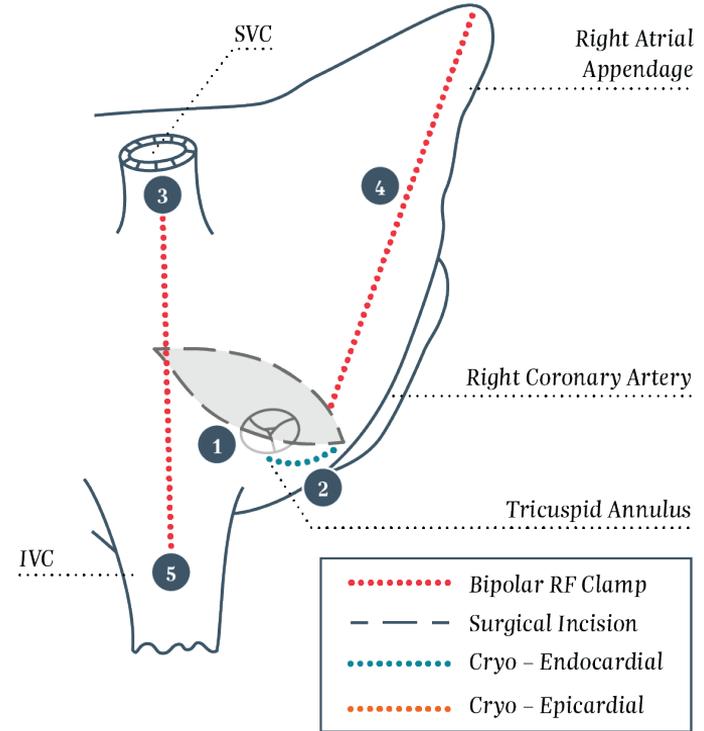
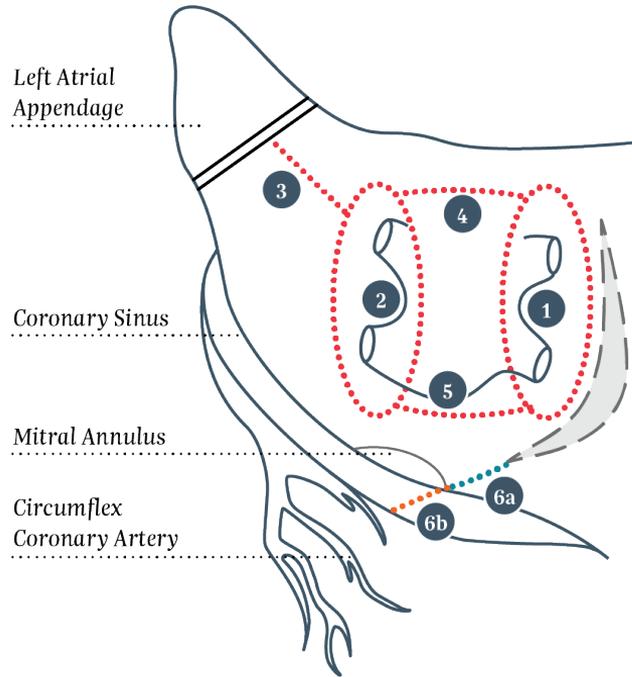
### Safety

Predetermined performance goal for the study is 12% freedom from MAE's as adjudicated by the CEC for the procedural to 30-day post procedure time period

# Hybrid AF Therapy: the Convergent Procedure



# The Cox-Maze IV Procedure



# References and Abbreviations

Note	Reference
1	Worldwide Epidemiology of Atrial Fibrillation: A Global Burden of Disease 2010 Study
2	The American Journal of Cardiology (2013), 112: 1142-1147
3	Lifetime risk for development of atrial fibrillation. Circulation, 110 (2004): 1042-1046. doi: 10.1161/01.CIR.0000140263.20897.42
4	J Geriatr Cardiol. 2016 Oct; 13(10): 880–882, doi: 10.11909/j.issn.1671-5411.2016.10.004
5	Santhanakrishnan R et al., “AF Begets Heart Failure and Vice Versa,” Circulation, 133 (2016):484-492
6	Odutayo, A. et al. (2016). Atrial fibrillation and risks of cardiovascular disease, renal disease, and deaths systematic review and meta analysis. BMJ 2016; 354:i4482
7	The Society of Thoracic Surgeons 2017 Clinical Practice Guidelines for the Surgical Treatment of Atrial Fibrillation
8	IFU for EPI-Sense® Guided Coagulation System Data: PMA# P200002
9	The Society of Thoracic Surgeons, Current News Release (1/30/2018): 1 in 7 Lung Surgery Patients at Risk for Opioid Dependence
10	STS Adult Cardiac Surgery Database, 2018/2019 Harvest Executive Summary
11	McCarthy, P.M. et al. (2019). Prevalence of atrial fibrillation before cardiac surgery and factors associated with concomitant ablation. J Thorac Cardiovasc Surg, PII: S0022-5223(19)31361-3, DOI: 10.1016/J.JTCVS.2019.06.062.
12	Lin et al, Stroke 2019 Jun; 50(6):1364-1371. doi: 10.1161/STROKEAHA.118.023921. Epub 2019 May 2.
13	Harvested from data previously available through the Society of Thoracic Surgeons
14	Average Selling Prices (ASPs) are management estimates based on a mix of products used for the various procedures
15	Estimated based on various catheter company presentations
16	Medical management estimate: Colilia, et al. Estimates of Current and Future Incidence and Prevalence of Atrial Fibrillation in the U.S. Adult Population. Am Journal of Cardiology 2013, 112: 1142-1147 Persistent patient estimate: Berisso et al Epidemiology of atrial fibrillation: European perspective Clin Epidemiol. 2014; 6: 213–220
17	Estimated based on Advisory Board data, along with various scientific presentations

Key Abbreviations	
Afib or AF	Atrial Fibrillation
AA	Atrial Arrhythmia
AAD	Anti-Arrhythmic Drugs
AFL	Atrial Flutter
AT	Atrial Tachycardia
CABG	Coronary Artery Bypass Graft
CEC	Clinical Events Committee
EP	Electrophysiologist
FDA	Food & Drug Administration
IST	Inappropriate Sinus Tachycardia
LAA	Left Atrial Appendage
LAAM	LAA Management
LS	Long-standing
MAE	Material Adverse Event
PMA	Pre-Market Approval
RF	Radio Frequency