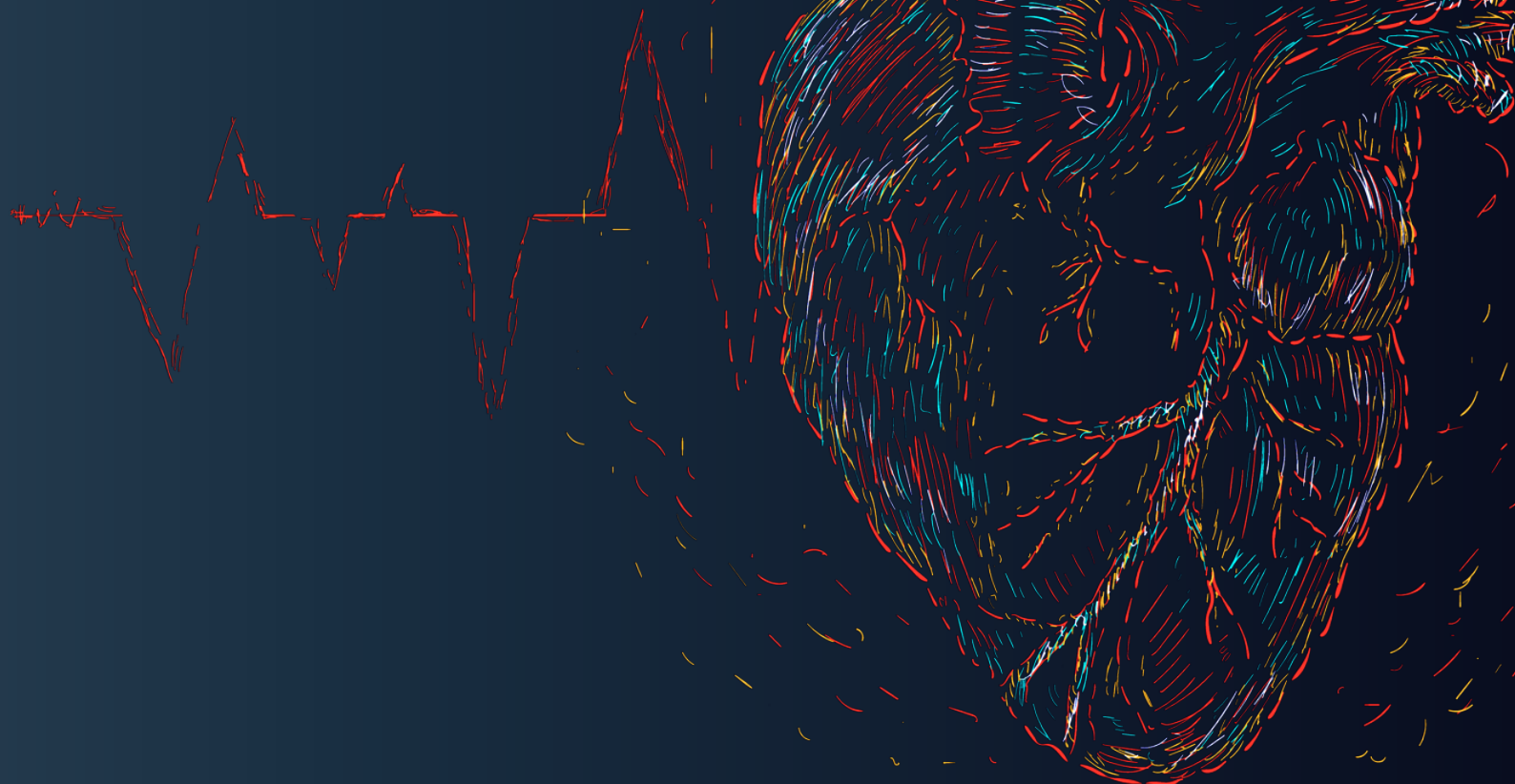


AtriCure

Creating a World Class Platform

INVESTOR PRESENTATION

February 2023





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,” “drives,” “seek,” “believes,” “see,” “focus,” “should,” “will,” “would,” “can,” “opportunity,” “target,” “outlook,” 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
healing the lives
of those affected
by Afib and pain
after surgery

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 37 million people worldwide.¹



8 Million

People estimated to have Afib in the US²



3.5 Million

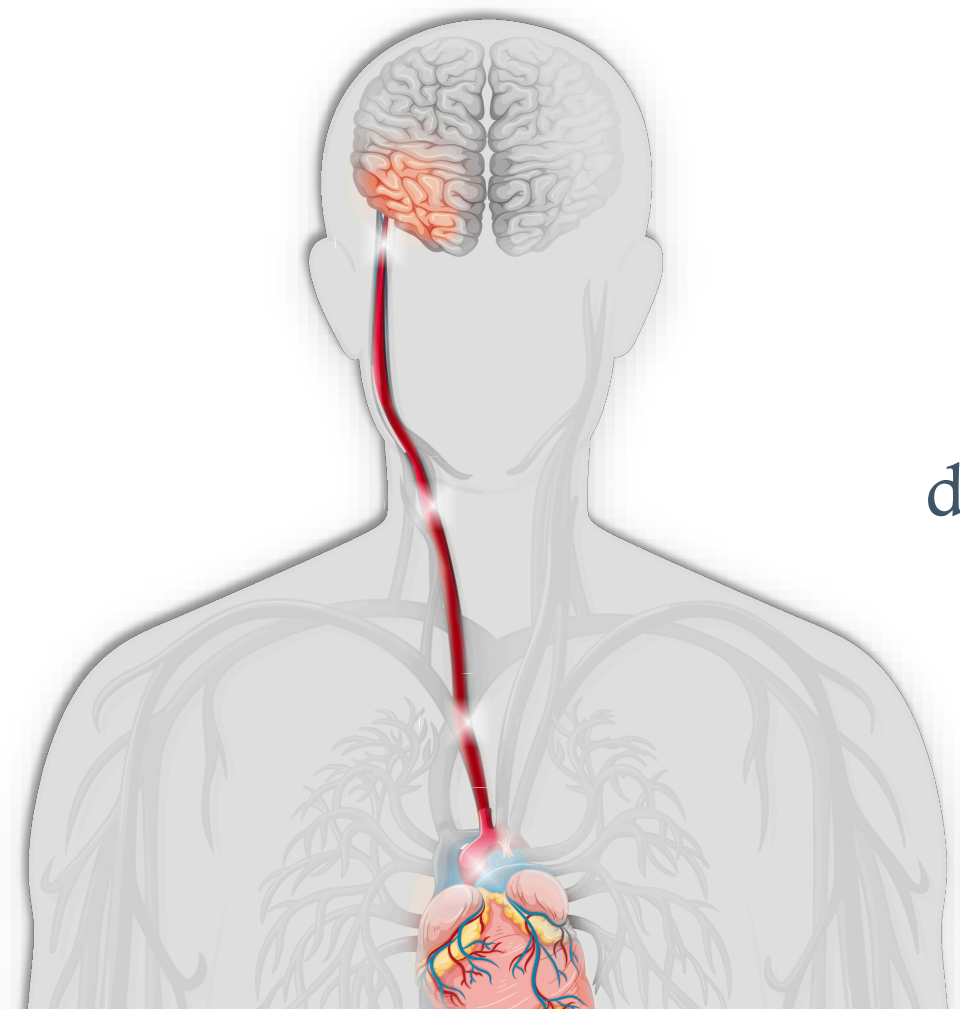
People estimated to have long-standing persistent Afib in the US³



1 in 4 Adults

Over 40 will develop Afib in their lifetime⁴

Afib: A Serious Problem



Afib
is tied to
higher risk
of stroke,
heart failure,
dementia, and
other health
problems

5x
Higher Risk of Stroke⁵

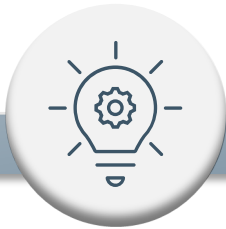
46%
Greater Risk of Mortality⁶

>5x
Higher Risk of Heart Failure⁷

AtriCure: Foundation for Success

Innovation

Continuous improvement, increasing pipeline



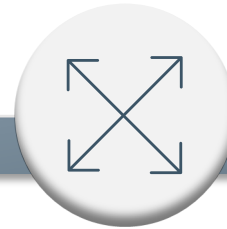
Clinical Science

Differentiated clinical trials with superior patient outcomes



Expansion

Developing addressable markets and expanding patient impact globally



Durable Growth

Strong history of revenue growth and acceleration from multiple catalysts



Innovative and Expanding Product Portfolio



ISOLATOR®
SYNERGY™ CLAMP



cryoICE®
CRYOABLATION PROBE



EPI-SENSE®
DEVICE



cryoSPHERE®
CRYOABLATION PROBE



ISOLATOR SYNERGY
ENCOMPASS® CLAMP

Ablation

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

LAA Management

ATRICLIP® FLEX
DEVICE



ATRICLIP PRO®
DEVICE



ATRICLIP PRO•V®
DEVICE



ATRICLIP FLEX•V®
DEVICE



Differentiated and Growing Clinical Evidence

Isolator® Synergy Ablation System approved by FDA for treatment of persistent or long-standing persistent Afib concomitant to open heart procedures

CONVERGE IDE Trial: EPI-Sense® Guided Coagulation System approved by FDA for treatment of long-standing persistent Afib

2011

2020

2021

2022

FROST Study: Pain Management in Post Thoracic Procedures via intercostal Cryoanalgesia

CAPLA Study⁸: Catheter ablation for persistent Afib – a multicenter randomized study of PVI alone vs. PVI with PWI

HEAL-IST IDE Trial procedure for treatment of IST

Registries and Studies
Cryoanalgesia
Hybrid Therapy
LAAM
IST

LeAAPS IDE Trial prophylactic LAA exclusion for prevention of ischemic stroke in cardiac surgery patients without pre-operative AF diagnosis

Future evidence expanding markets, changing standards of care

Significant Global Market Opportunity

\$5B+ Global Opportunity

LOW PENETRATION IN EXISTING MARKETS
EXPANSION OPPORTUNITIES IN FOCUS

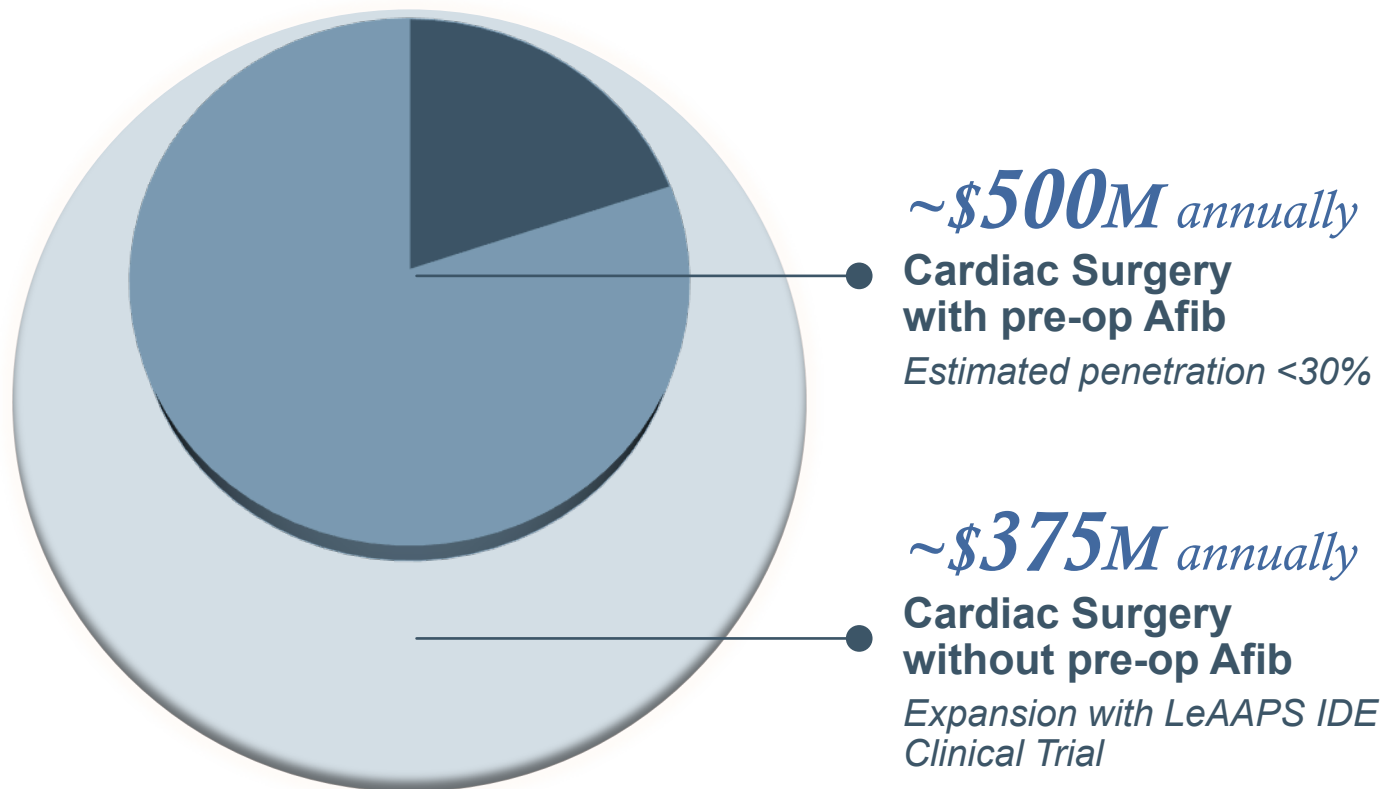


Market opportunity and penetration estimates based on internal estimates and research, as well as from publicly available information.

Cardiac Surgery Opportunity (US)

~\$900M

Concomitant Open Procedures (Open Ablation/LAAM)



AtriCure Difference

Innovation

- Isolator Synergy **EnCompass® Clamp**
- **AtriClip®** platform and **expansion of labeling** (electrical isolation of LAA)

Science

- Isolator® Synergy Ablation System **first medical device with FDA approval** for treatment of persistent Afib

Education

- **Advanced Ablation Courses endorsed** by the Society of Thoracic Surgeons

Guidelines⁹

- Surgical Ablation is **recommended**
- LAA management is **reasonable**

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.

Left

Atrial

*Appendage Exclusion for
Prophylactic
Stroke Reduction*



CLINICAL TRIAL

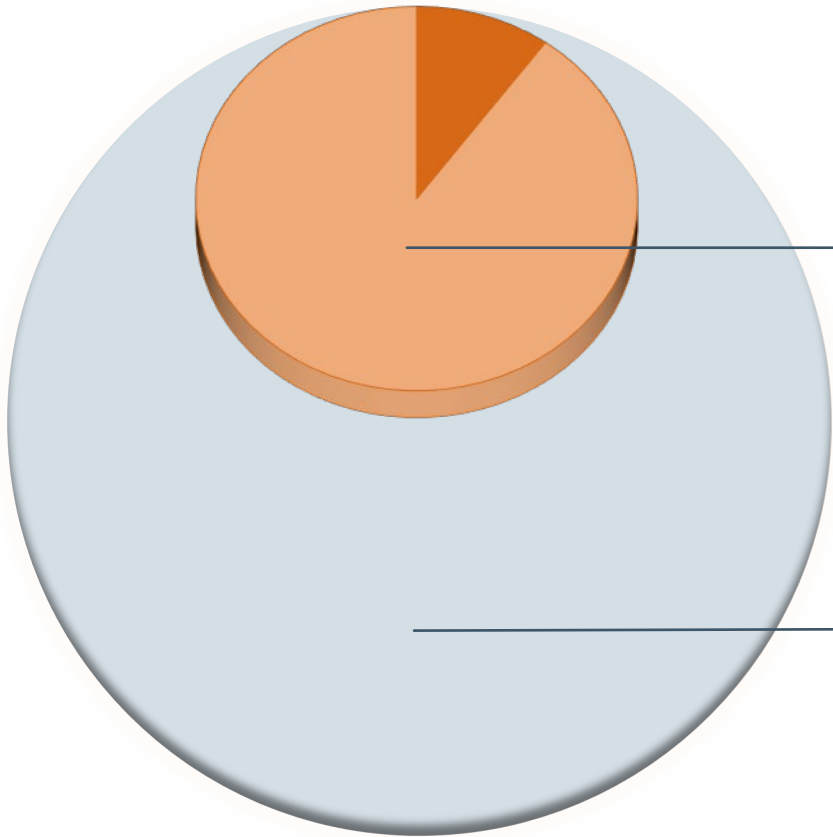
Highlights

- **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 (Q2 2022)
- First patient treated (Q1 2023)

Hybrid Opportunity (US)

\$2B+ and Growing

Standalone Hybrid Procedures (MIS Ablation/LAAM)



~\$500M annually

Long-Standing Persistent Afib catheter ablations

Hybrid Therapy complementary to existing catheter ablations; Estimated penetration <15%

>\$2B and growing

Long-standing Persistent Afib patients (untreated)

Market size estimated at 5% penetration

AtriCure Difference

Innovation

- **Multiple approaches** to treatment: Hybrid AF Therapy + AtriClip[®], DEEP
- **EPI-Sense ST** approval

Science

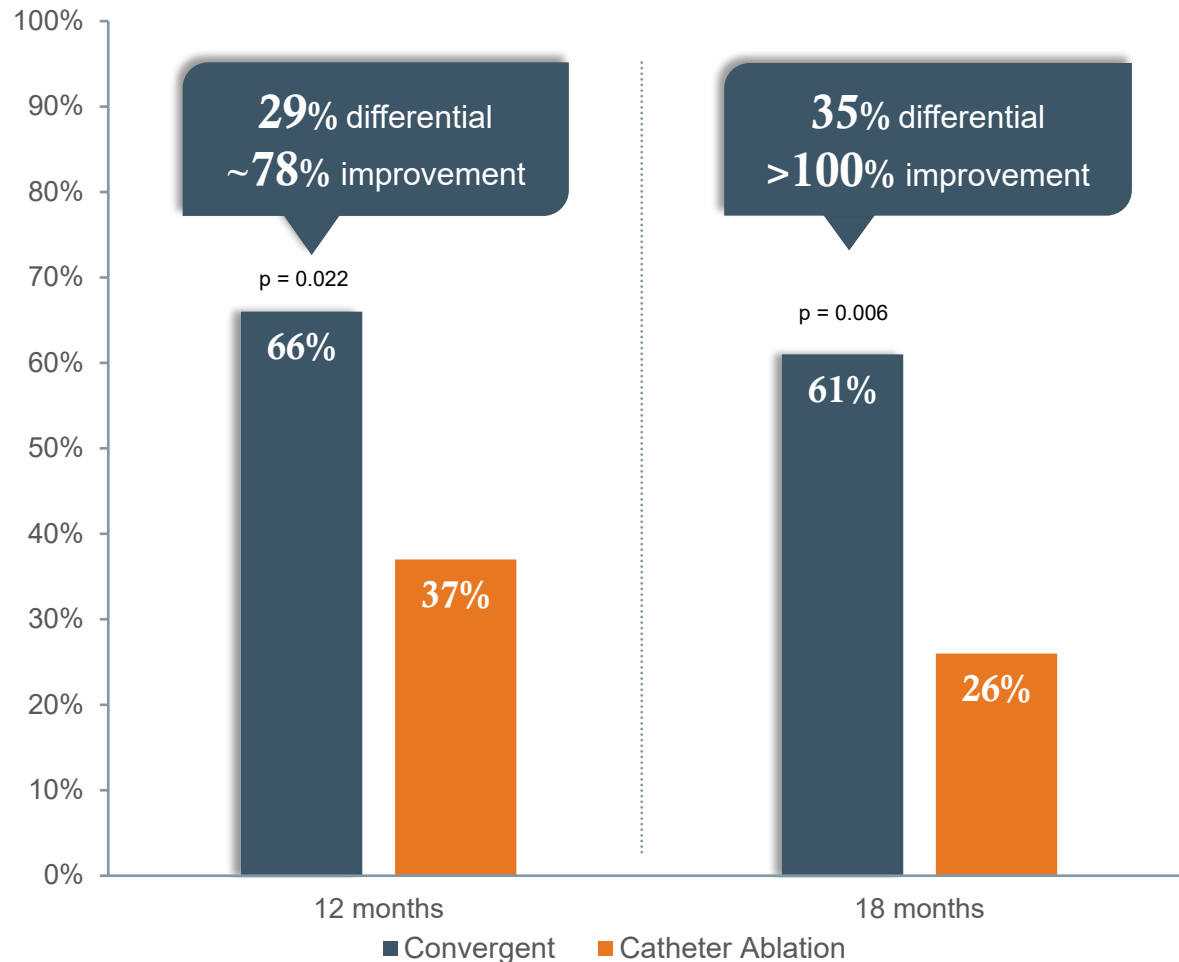
- **EPI-Sense[®] System approved by FDA** for treatment of long-standing persistent Afib

Education

- **Hybrid Training Course** co-sponsored by the Hearth Rhythm Society

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, with majority of patients experiencing:
 - + **Over 100% improvement** at 18 months
 - + **Over 90% burden reduction** at 12 months
 - + **Freedom from Afib** through 12 months
- **Improved EP lab efficiency** demonstrated by reduction in endocardial ablation time as a result of adding epicardial ablation
- **Emphasizes value of team approach for advanced AF treatment**, targeting trigger areas (epi-cardial and endo-cardial) where AF begins

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
90bpm 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.



CLINICAL TRIAL

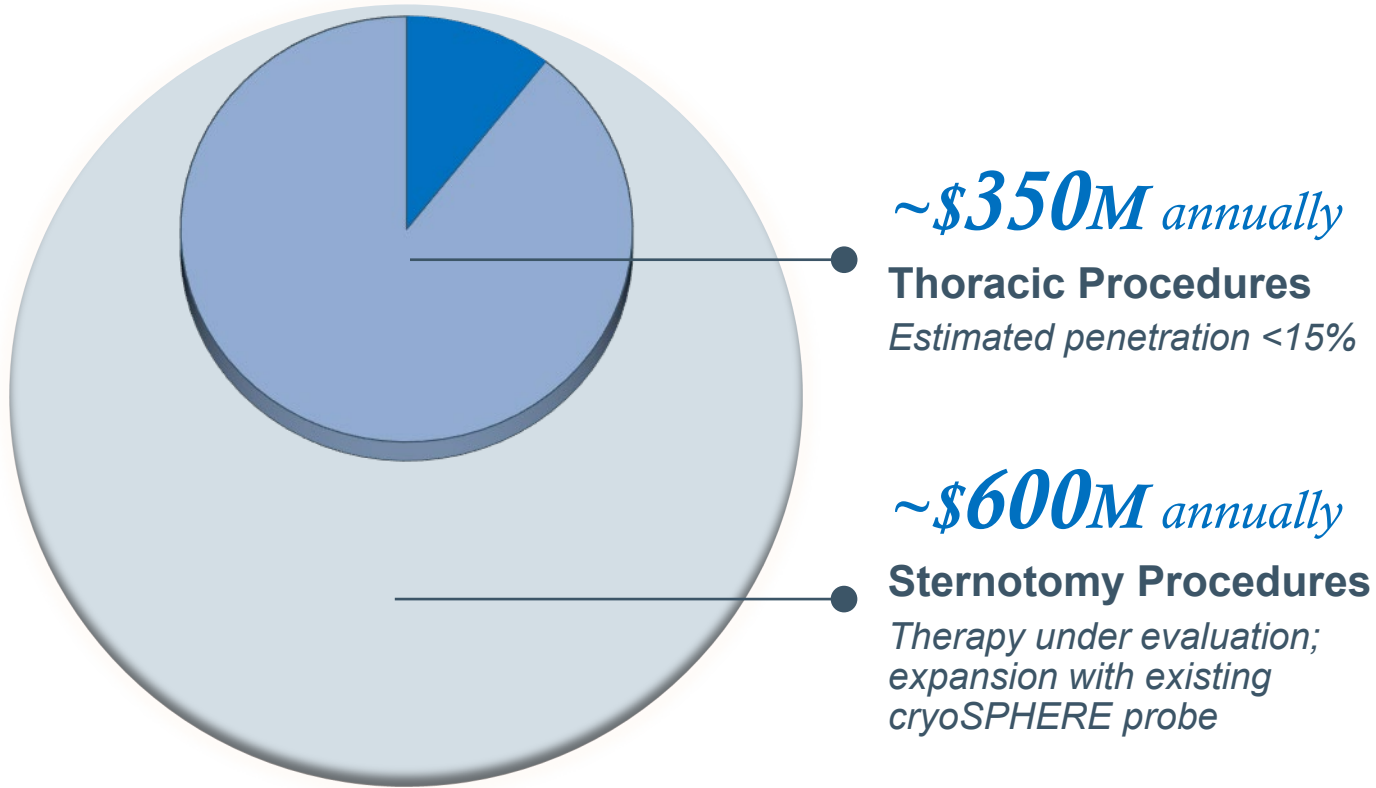
Highlights

- **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
 - ✓ 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 (Q1 2022)
- First patient treated (Q2 2022)

Pain Management Opportunity (US)

~\$1B

Pain Management Procedures (Ablation)



AtriCure Difference

Innovation

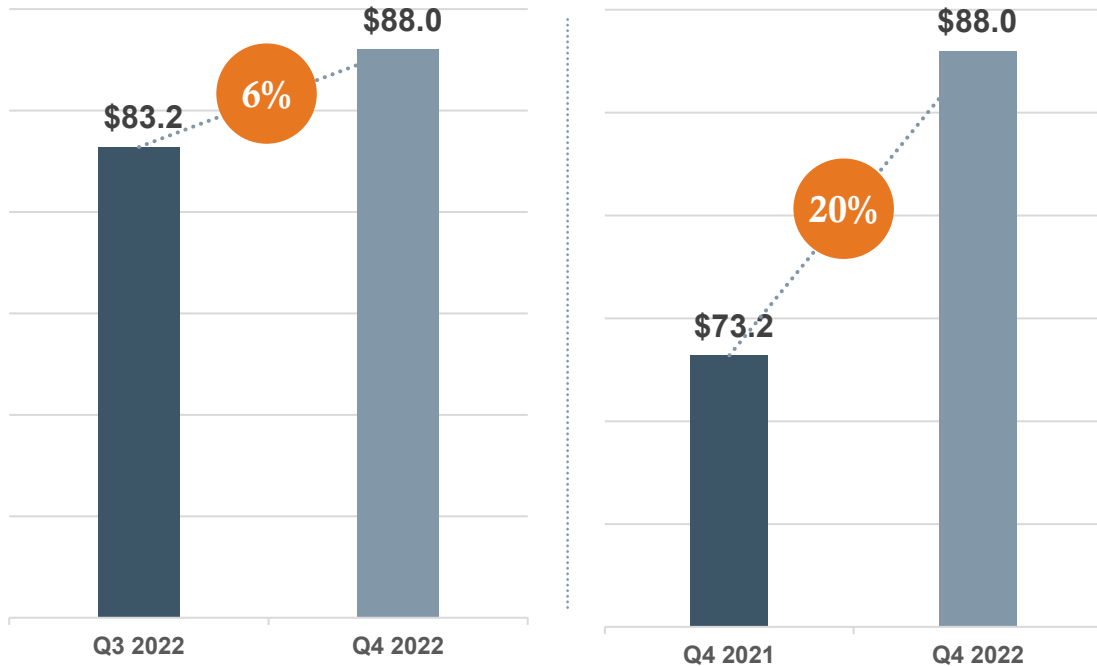
- **cryoSPHERE®** cryoablation probe
- **Expanded labeling** for Cryo Nerve Block Therapy in adolescents (patients as young as 12 years of age)

Science

- **FROST Study**
- **Can be an important tool in combatting the opioid epidemic** – 1 in 7 thoracic surgery patients become reliant upon opioids after their procedure¹⁰

Fourth Quarter 2022 Financial Highlights

Worldwide Revenue (\$M)



Strong activity and growing demand across key product lines demonstrating our many growth catalysts

- U.S. revenue of \$73.9M (84% of revenue)
- International revenue of \$14.1 (16% of revenue)

Key Metrics

	Q4 2021	Q4 2022
GROSS MARGIN	75.1%	74.0%
OPERATING EXPENSES	\$67.5M	\$69.2M
ADJUSTED EBITDA⁺	(\$2.1M)	\$6.0M
ADJ. LOSS PER SHARE⁺	(\$0.30)	(\$0.09)
CASH & INVESTMENTS	\$223M	\$173M

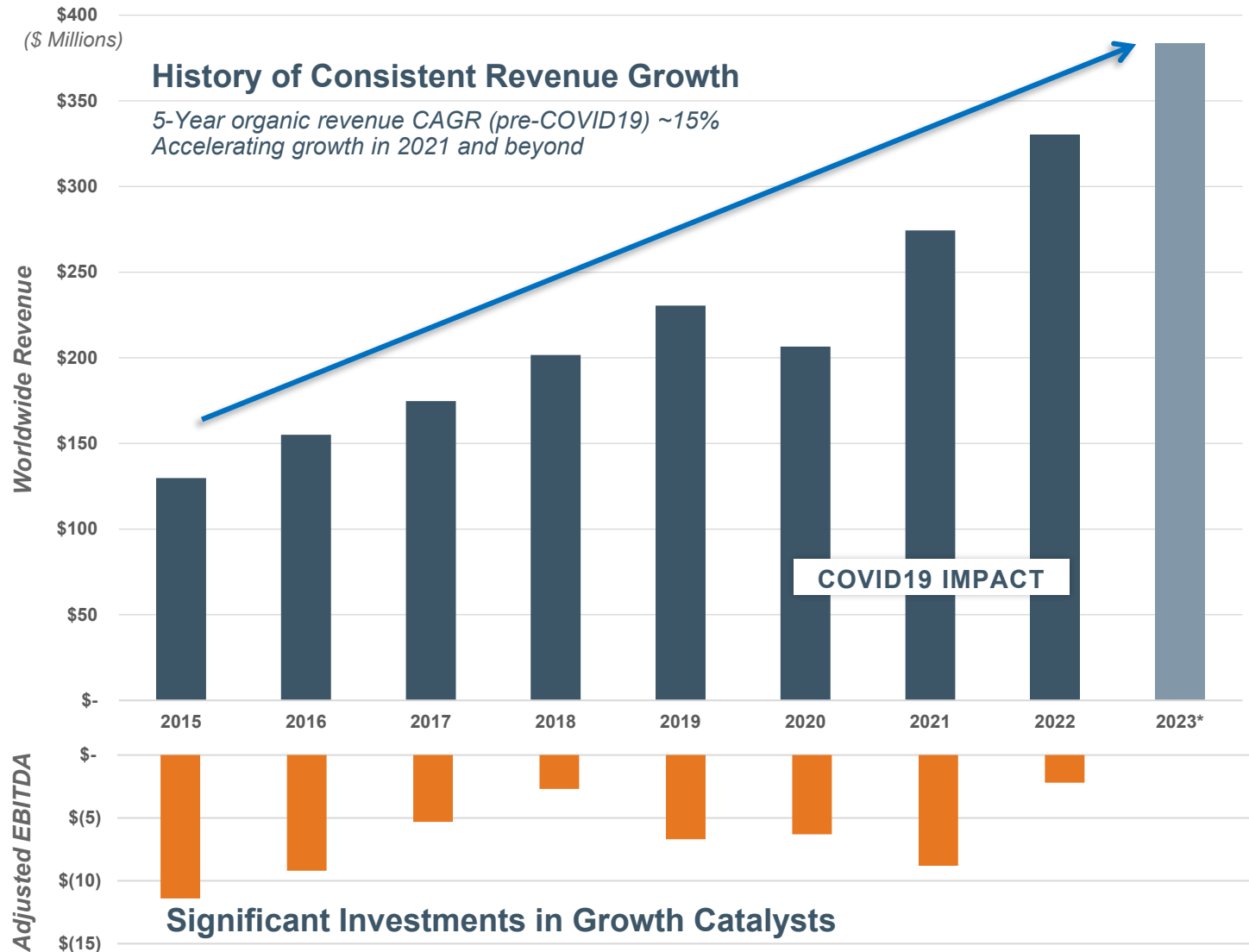
⁺ Reconciliation of Adjusted EBITDA and Adjusted Loss per share to relevant GAAP measures may be found in Q4 2022 earnings release.

Financial Results and 2023 Outlook

2023 Guidance

- **Worldwide revenue of \$380-387 million (~15-17% annual growth)**
- **Maintaining Gross Margin**
- **Improving Adjusted EBITDA to break even for 2023**

* 2023 Revenue based on midpoint of Revenue guidance range.
2023 Adjusted EBITDA based on guidance to breakeven for 2023.



Commitment to Sustainability

Inaugural sustainability report published



Top Workplace Honors
Cincinnati, Minneapolis, Amsterdam

Diversity & Inclusion award recognizing ATRC Board



35th Anniversary of Cox-Maze Procedure



>1,000 Employees

Global headcount passes the millennium mark – with improvement to diversity metrics!



800 attendees
At our Women's Cardiac Health Awareness Initiative in 2022



All Top 10 Heart Hospitals Use AtriCure Products

US NEWS & WORLD REPORT BEST HOSPITALS: CARDIOLOGY AND HEART SURGERY 2022-23





Thank You!

AtriCure

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 37 million Atrial Fibrillation patients globally, with majority having advanced forms of the disease¹
- 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
- AtriClip device is the most widely used Left Atrial Appendage device with over 400,000 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 future

US Concomitant Market Opportunity

- US annual cardiac surgery volume steady over the past 5 years with shifts in procedure types¹¹
- Pre-Op Afib occurs frequently in cardiac surgery patients¹²
- New onset Post-Op Afib is a well-documented complication of cardiac surgery, even if patients do not present with pre-op Afib¹³



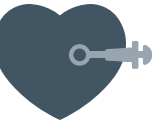
Estimated **Afib** Opportunity in Cardiac Surgery

Annual Cardiac Surgeries ¹⁴	300,000
Pre-Operative Afib Rate ¹²	~28%
Cardiac Opportunity – Pre-Op Afib	85,000
ASP Mix (Ablation and Appendage Management) ¹⁵	\$6,000
Open Cardiac Surgery Opportunity – Afib	\$500M

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) ¹⁵	\$1,750
Open Cardiac Surgery Opportunity – Non-Afib	\$375M

US Standalone Market Opportunity



Market opportunity in analysis at right considers:

- Addition of ablation and LAAM to existing catheter ablation procedures
 - Catheter ablation procedures have grown 10-15% annually¹⁶
- 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 2025³
- ASP Mix is both ablation and AtriClip

Estimated Standalone Afib Opportunity

	2022	Projected 2025
Long-standing Persistent Afib Catheter Ablation ¹⁷	32,000	45,000
ASP Mix (Ablation + Appendage Management) ¹⁵	\$15,300	\$15,300
Immediate Standalone Afib Opportunity	\$500M	\$700M
Additional penetration Long-standing Persistent Afib patients (estimated at 5% penetration)	150,000	175,000
ASP Mix (Ablation + Appendage Management) ¹⁵	\$15,300	\$15,300
Incremental Standalone Afib Opportunity (estimated at 5% penetration)	\$2B+	\$3B+

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

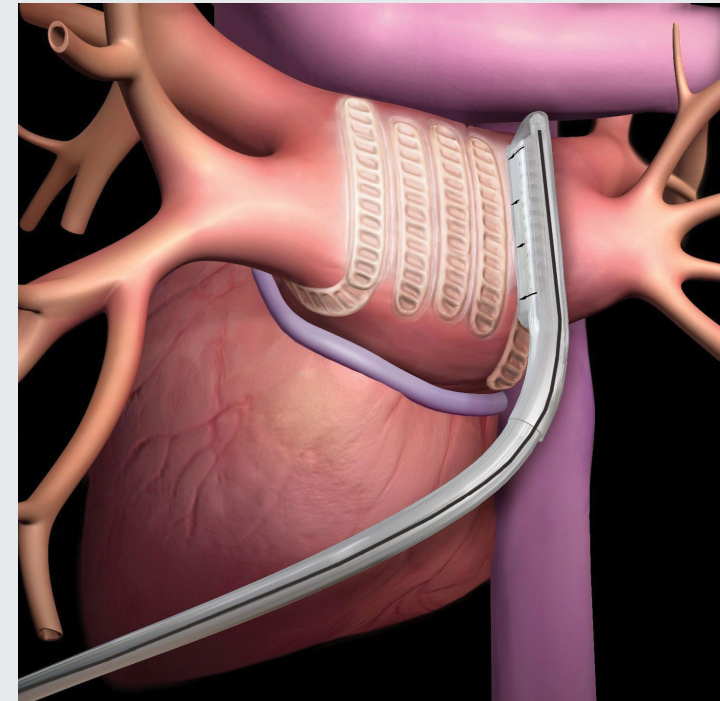
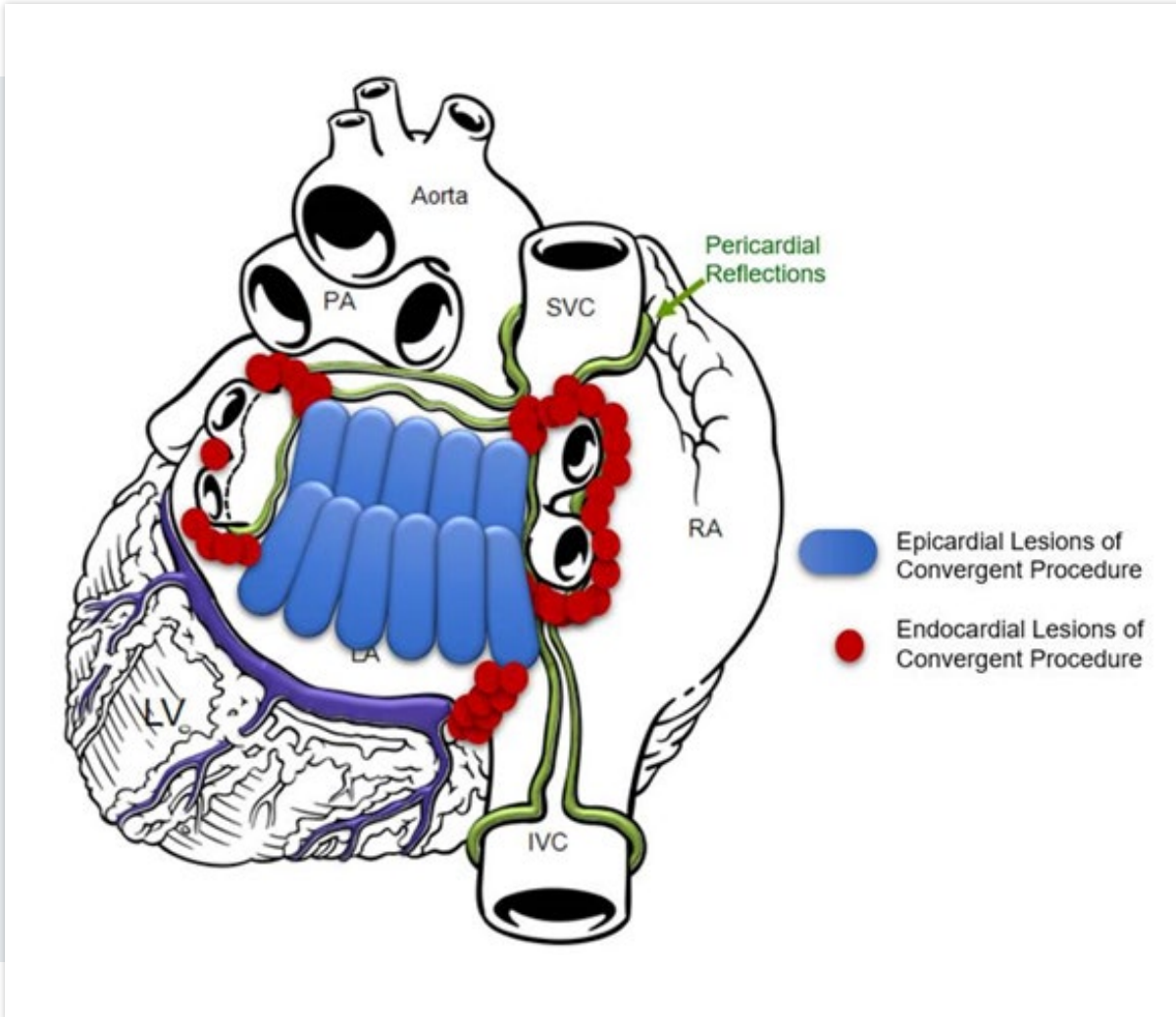
Predetermined performance goal for the study is 12% freedom from MAE's as adjudicated by the CEC for the procedural to 30-day post procedure time period



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 subgroup analysis presented at 26th Annual Atrial Fibrillation (AF) Symposium January 2021 and 14th Annual Western AF Symposium February 2021
- **FDA approval of Epi-Sense System for treatment of long-standing persistent Afib April 2021**

Hybrid AF Therapy: The Convergent Procedure



The Cox-Maze IV Procedure



References and Abbreviations

Note	Reference
1	European Heart Journal – Quality of Care and Clinical Outcomes (2021) 7, 574-582 doi: 10.1093/ehjqcco/qcaa061
2	The American Journal of Cardiology (2013), 112: 1142-1147
3	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
4	Lifetime risk for development of atrial fibrillation. Circulation, 110 (2004): 1042-1046. doi: 10.1161/01.CIR.0000140263.20897.42
5	J Geriatr Cardiol. 2016 Oct; 13(10): 880–882, doi: 10.11909/j.issn.1671-5411.2016.10.004
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	Santhanakrishnan R et al., “AF Begets Heart Failure and Vice Versa,” Circulation, 133 (2016):484-492
8	American Heart Journal. 2022 Jan; 243:210-220. doi: 10.1016/j.ahj.2021.09.015
9	The Society of Thoracic Surgeons 2017 Clinical Practice Guidelines for the Surgical Treatment of Atrial Fibrillation
10	The Society of Thoracic Surgeons, Current News Release (1/30/2018): 1 in 7 Lung Surgery Patients at Risk for Opioid Dependence
11	STS Adult Cardiac Surgery Database, 2018/2019 Harvest Executive Summary
12	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
13	Lin et al, Stroke 2019 Jun; 50(6):1364-1371. doi: 10.1161/STROKEAHA.118.023921. Epub 2019 May 2.
14	Harvested from data previously available through the Society of Thoracic Surgeons
15	Average Selling Prices (ASPs) are management estimates based on a mix of products used for the various procedures
16	Estimated based on various catheter company presentations
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
IDE	Investigational Device Exemption
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