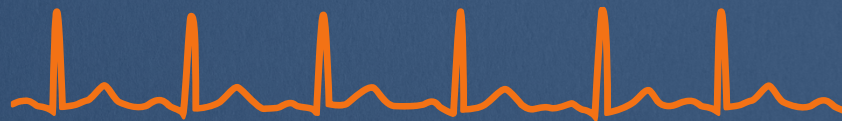


# AtriCure Investor Presentation

Creating a World Class Afib Platform



*Oppenheimer Healthcare Conference  
March 2021*

# Forward Looking Statements

This presentation contains “forward-looking statements,” which are statements related to future events that by their nature address matters that are uncertain. All forward-looking information is inherently uncertain and actual results may differ materially from assumptions, estimates or expectations reflected or contained in the forward-looking statements as a result of various factors. For details on the uncertainties that may cause AtriCure’s actual results to be materially different than those expressed in its forward-looking statements, see its Annual Report on Form 10-K and Quarterly Report on Form 10-Q filed with the SEC and available at <http://www.sec.gov>, which contain risk factors. Forward-looking statements address AtriCure’s expected future business, financial performance, financial condition as well as results of operations, and often contain words such as “intends,” “estimates,” “anticipates,” “hopes,” “projects,” “plans,” “expects,” “seek,” “believes,” “see,” “should,” “will,” “would,” “target,” and similar expressions and the negative versions thereof. Such statements are based only upon current expectations of AtriCure. Any forward-looking statement speaks only as of the date made. 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. Forward-looking statements include statements that address activities, events or developments that AtriCure expects, believes or anticipates will or may occur in the future. 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, but are not limited to: whether CONVERGE will be approved by FDA and any other required regulatory authorities; whether any additional clinical trials will be initiated or required for CONVERGE prior to approval of FDA, or at all; whether AtriCure will be able to successfully implement its commercialization plans for CONVERGE, if approved; whether the market opportunity for CONVERGE is consistent with the Company’s expectations and market research; AtriCure’s ability to execute on the commercial launch of CONVERGE, if and when approved, on the timeline expected, or at all; whether AtriCure will be able to generate its projected net product revenue on the timeline expected, or at all; the effects of the COVID-19 outbreak on AtriCure’s business and results of operations, including the effects of suspension or halting of elective surgeries; other matters that could affect the availability or commercial potential of CONVERGE and AtriCure’s other products and product candidates; competition from new and existing products and procedures in the highly competitive medical device industry; and other important factors, including, AtriCure’s expectations regarding its financial performance and capital requirements, any of which could cause AtriCure’s actual results to differ from those contained in the forward-looking statements or otherwise discussed in AtriCure’s reports filed with the SEC. With respect to the 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. AtriCure undertakes no obligation to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise unless required by law.

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>**

**5x**

Risk of ***Stroke***<sup>3</sup>

**>5x**

Higher risk of ***Heart Failure***<sup>4</sup>

**46%**

Greater risk of all cause ***Mortality***<sup>5</sup>

# 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, LARIAT®

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

# Significant Global Market Opportunity

## US Market Focus

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

# 2021 Priorities: Building for the Future



## Standalone Hybrid Procedures

Ablation and LAAM



## Concomitant Open Ablation

## Pain Management



## COVID Recovery

- **CONVERGE PMA approval and launch**
  - Re-engaging sites and training new accounts
  - Addition of AtriClip to the Convergent procedure
  - Continued global expansion of commercial and training teams
- **aMAZE™ clinical trial**
  - PMA submission to FDA
  - Release of clinical trial data
- **ENCOMPASS® Clamp clearance and launch**
- **Expansion of commercial team, training programs**
- **Supporting our people, patients and partners**



# CONVERGE Overview

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

## 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



**CONVERGE**

Clinical Trial

## HIGHLIGHTS

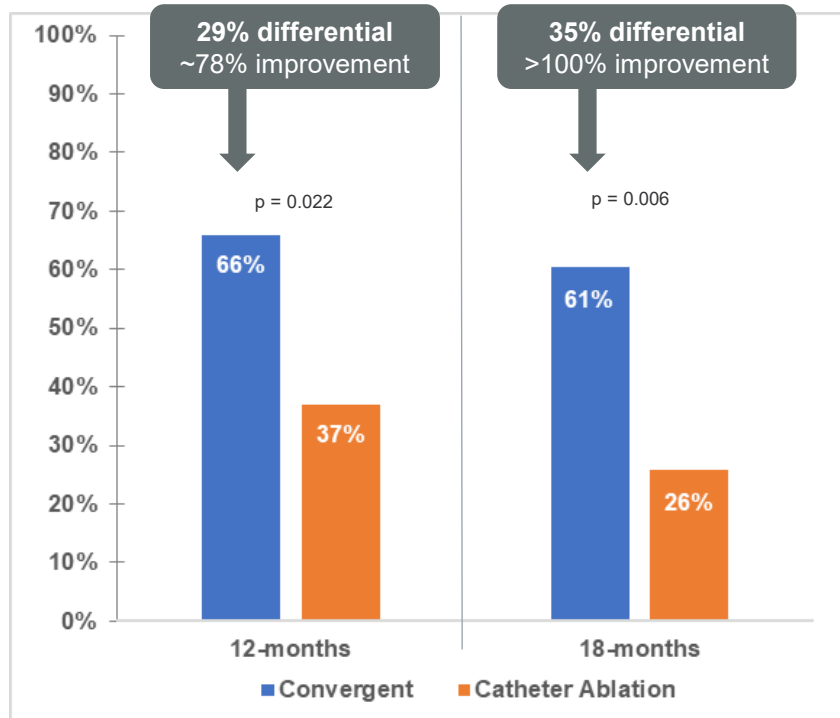
- Completed enrollment August 2018
- Data released at virtual Heart Rhythm Society (HRS) conference May 2020
- PMA submission seeking approval for treatment of long-standing persistent Afib November 2020
- Trial results published in *Circulation: Arrhythmia and Electrophysiology* November 2020
- Long-standing 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

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



# 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 particularly **compelling efficacy and durability**
- **Improved EP lab efficiency demonstrated** by reduction in endocardial ablation time as a result of adding epicardial ablation

# Persistent / Long-Standing Persistent AF Clinical Trial Patient Landscape

**Paroxysmal (30%)<sup>1</sup>**  
2.4 Million Patients

**Persistent (25%)<sup>1</sup>**  
2.0 Million Patients

**Long-Standing Persistent (45%)<sup>1</sup>**  
3.6 Million Patients

**Terminates spontaneously  
or with intervention  
within 7 days of onset**

**Sustained beyond  
7 days but is less than  
12 months in duration**

**Sustained beyond 12 months duration**

**Early Persistent  
Indication  
(> 7 days - ≤ 6 months)**

Medtronic

**Persistent Indication  
(> 7 days - ≤ 12 months)**

Biosense Webster

**Medtronic® STOP Persistent AF** ± 9, 10  
(AF < 6 mo, LAD ≤ 5.0 cm) Primary efficacy endpoint of 54.8%

**Biosense Webster® PRECEPT** ± 11  
(AF < 12 mo, LAD ≤ 5.0 cm) Primary efficacy endpoint of 61.7%

**Medtronic® (EPIX) Therapeutics, Inc. DIAMOND-AFII** 10  
(AF < 12 mo, LAD ≤ 5.5 cm) 8

**Abbott® PERSIST-END** ± 12  
(AF < 12 mo, LAD ≤ 5.0 cm)

**Adagio™ AF Cryoablation System (iCLAS™)** 13  
(AF < 12 mo)

**SentreHeart® aMAZE®\***  
(AF < 3 yrs, LAD ≤ 6.0 cm)

**AtriCure DEEP<sup>7</sup>**  
(AF < 10 yrs, LAD ≤ 5.5 cm)

**AtriCure CONVERGE<sup>8</sup>**  
(No cap on AF duration, LAD < 6.0 cm)

**CONVERGE**

Emphasizes  
value of **team-  
based approach**  
for advanced AF  
treatment

**Additive to  
endocardial  
catheter ablation**

± Companies with paroxysmal label

\* SentreHEART was acquired by AtriCure

LAD – Left Atrial Diameter

Cautions: The DEEP, aMAZE and CONVERGE IDE studies are Investigational Device/procedures. Limited by Federal (or US) law to investigational use only. Information included on this slide is available through ClinicalTrials.gov. This material is intended to provide general information. Such information is not intended to be a substitute for professional medical advice, diagnosis or treatment. The material is not intended to direct clinical care in any specific circumstance. The judgment regarding a particular clinical procedure or treatment plan must be made by a qualified physician in light of the clinical data presented by the patient and the diagnostic and treatment options available.

<sup>1</sup> Percentages reflect the percentage of diagnosed AF patients in each disease stage in the AF Progression

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**AtriCure**

# aMAZE Overview

**SUPERIORITY TRIAL** designed to evaluate safety and effectiveness of the LARIAT System to percutaneously isolate and ligate the Left Atrial Appendage for the treatment of persistent or longstanding persistent Afib

## STUDY DESIGN

- **Summary**  
Multi-center, prospective, open label randomized 2:1
  - Control Arm – PVI
  - Treatment Arm – PVI + Ligation of LAA with Lariat System
- **Number of Subjects and Sites**  
600 subjects; 65 sites, all U.S.
- **Study Duration**  
12 month monitoring and then 5 year follow-up of all subjects

## PRIMARY ENDPOINTS

- **Effectiveness** - Freedom from episodes of Afib >30 seconds at 12 months post index pulmonary vein isolation
- **Safety** - Primary safety endpoint for the study is 10% freedom from MAE's as adjudicated by the CEC for the period from the procedure through 30 days
- **Time Frame:** 12 months following pulmonary vein isolation catheter ablation procedure, measured by 24-hour Holter monitoring

**amaze**  
LARIAT® Clinical Trial

## HIGHLIGHTS

- Acquired SentreHEART® August 2019
- Trial enrollment completed December 2019
- Final Patient follow-up expected 1H 2021
- Expect PMA submission to FDA in 2H 2021
- Anticipated PMA approval in 2022-2023

# Innovative and Expanding Product Portfolio



ISOLATOR®  
SYNERGY™  
CLAMP



cryoICE®  
CRYOABLATION  
PROBE



EPI-SENSE®  
DEVICE



cryoSPHERE®  
CRYOABLATION  
PROBE

**Future Product Launch:**  
ISOLATOR SYNERGY  
ENCOMPASS® CLAMP

## Ablation

**2000 to 2015:** Foundation in surgical Afib tools  
*Future pipeline expansion across franchises*

**2015 and Beyond:** Building the future in minimally invasive therapies  
*Innovation toward less invasive, simpler, and more efficient products*

## Appendage Management

ATRICLIP®  
FLEX DEVICE



ATRICLIP PRO®  
DEVICE



ATRICLIP PRO•V®  
DEVICE



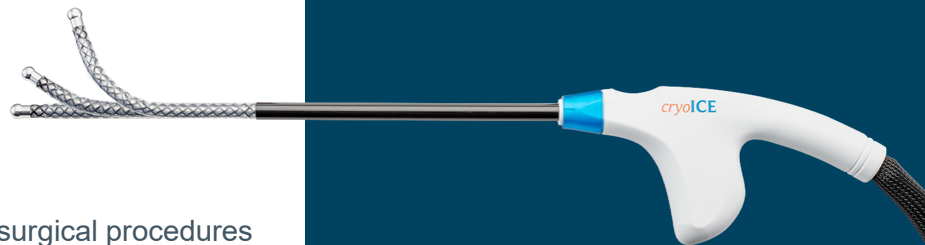
ATRICLIP FLEX•V®  
DEVICE



LARIAT®  
DEVICE



# SPOTLIGHT: Cryo Nerve Block for Pain Management



## Therapy Overview

- Long-lasting pain management therapy, designed for use in thoracic surgical procedures
- 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)



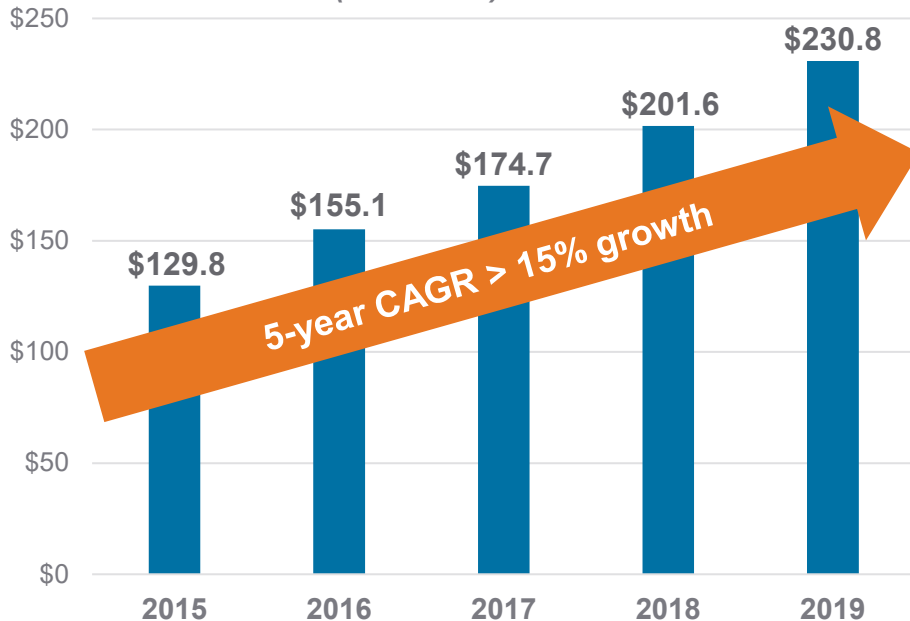
## HIGHLIGHTS

- \$350M U.S. market opportunity\*
- Dedicated commercial team established in 2019 and expanding
- Q1 2019 launch of cryoSPHERE probe
- **Q4 2020 label expansion includes adolescent patients as young as 12 years of age**
- **~5% of worldwide revenue in 2020**
- Continuing to gather data to support evidence development for therapy
- Potential to contribute to combatting the opioid epidemic – 1 in 7 thoracic surgery patients become reliant upon opioids after their procedure<sup>14</sup>

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

# History of Strong Financial Performance

Worldwide Revenue (\$ Millions)



Revenue Growth	20.8%	19.5%	12.6%	15.4%	14.5%
Gross Margin	71.6%	71.6%	72.2%	73.0%	73.8%

## Historical Results

**Consistent Revenue Growth**

Strong double-digit YoY growth

**Steady Improvement  
to Gross Margin**

**\$258 million Cash & Investments**  
as of December 31, 2020

## 2021 Financial Outlook

**Annual Revenue ~\$250 million**

Continued variability from COVID;  
anticipate sequential quarterly growth

**Adjusted EBITDA Loss ~\$10 million**

Investments in strategic initiatives  
and expansion of our team

# Key Investments Driving Growth

## AtriCure Pillars

*Foundation of our past and strengthening our future*

### Innovation

Expanding pipeline to drive Open ablation penetration and build MIS market

### Clinical Science

CONVERGE & aMAZE trials are complimentary and differentiated as the ONLY randomized control trials for advanced Afib

### Education

Significant investment in physician education, providing multiple training options

## Aligning Expertise with Opportunity

*Dedicated commercial and education teams*

### U.S. Cardiac

54 Sales Managers and 64 Clinical Specialists

### U.S. Hybrid Therapies

35 Sales and Clinical Specialists

### U.S. Cryo Nerve Block

18 Sales and Clinical Specialists

### U.S. Sales Leadership

21 Area Directors across our specialized teams

### U.S. Education

35 Physician + Field Supporting Roles

### International

40 Sales and Education Professionals



# Expecting an Exciting Future...

**Core double-digit growth business  
with accelerators in EP landscape**  
(Hybrid Convergent + aMAZE)

**2021**

Anticipated  
approval for  
CONVERGE  
PMA

**2022**

CONVERGE  
contribution

Anticipated  
approval  
for aMAZE  
PMA

**2023**

LARIAT  
contribution

**2024+**

Full  
complement  
of therapies  
available for  
differentiated  
population of  
Afib patients

Core Technology  
Surgical Ablation  
AtriClip  
Cryo Nerve Block



Thank You!