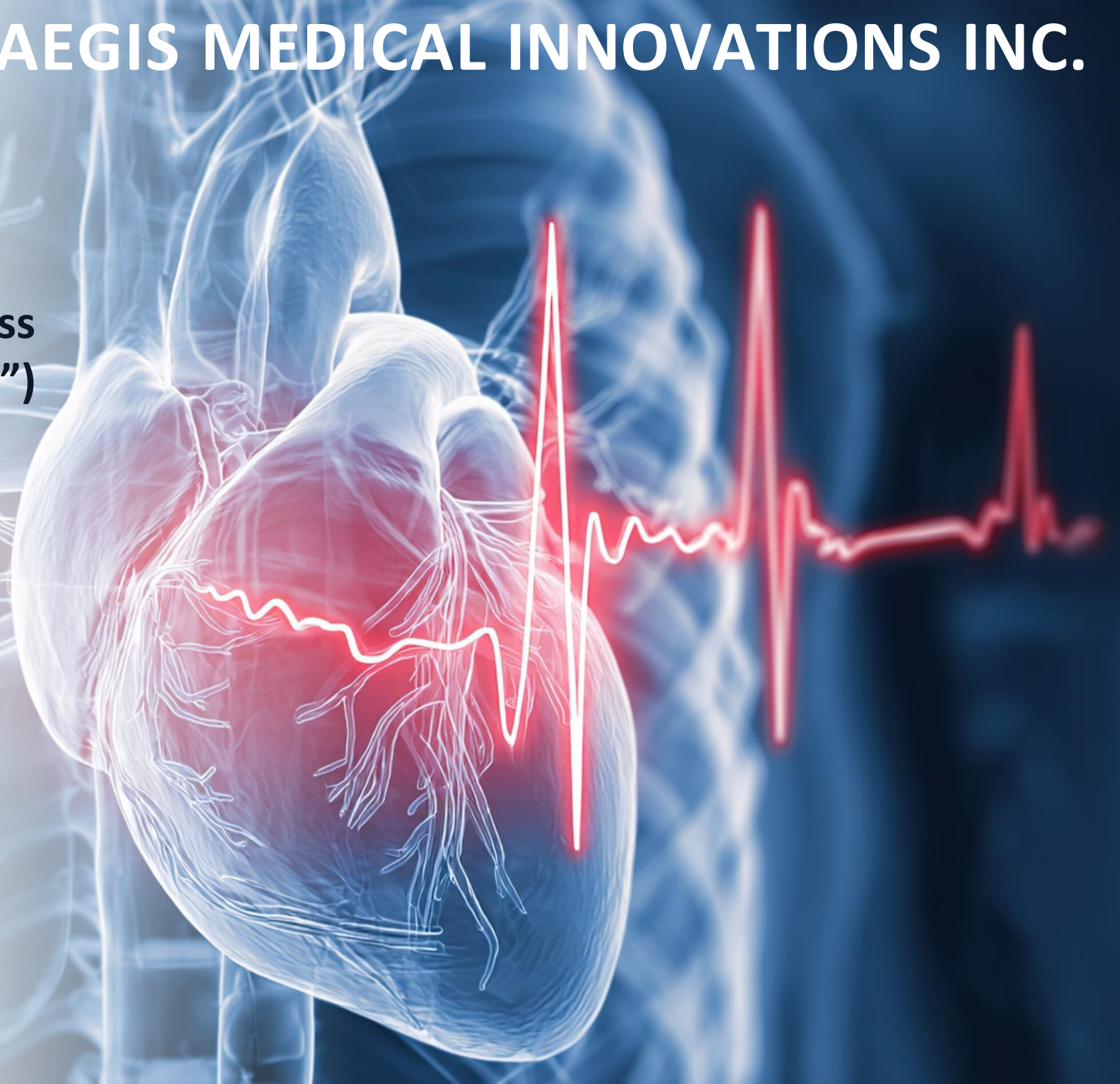
AEGIS MEDICAL INNOVATIONS INC.

Eliminating Fatal Stroke Risk in 20 Minutes

The world's only patented, single-access epicardial Left Atrial Appendage (“LAA”) closure device.
Proven 100% successful in published 7–year human trials.



TSXV RTO TRANSACTION PARTNER
Lincoln Ventures Ltd. (TSXV: LX.H)

RESULTING ISSUER NAME
Sierra Medical Innovations Inc.

TARGET CLOSING
January 31, 2027

Forward Looking Disclaimer

This presentation contains certain statements that may be deemed "forward-looking statements." All statements in this document, other than statements of historical fact, that address events or developments that the Company expects to occur, are forward looking statements. Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential" and similar expressions, or that events or conditions "will", "would", "may", "could" or "should" occur.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements. Factors that could cause the actual results to differ materially from those in forward looking statements include, failure to successfully negotiate or subsequently close such transactions, inability to obtain required shareholder or regulatory approvals, uncertainty with respect to findings under exploration programs and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward- looking statements.

Forward looking statements are based on the beliefs, estimates and opinions of the Company's management on the date the statements are made. The Company undertakes no obligation to update these forward-looking statements if management's beliefs, estimates or opinions, or other factors, should change.

The Opportunity

Aegis Medical Innovations Inc. built the world's only patented epicardial-only Left Atrial Appendage ("LAA") closure device (the "Sierra System")

- The Sierra System was developed & patented in collaboration with Mayo Clinic
- Demonstrably superior to every competitor across safety, speed, and patient burden
- Proven in 7 human patients followed for the past 10 years
- The LAA closure market has grown from US$500 million to over US$2.4 billion in 10 years and is accelerating

Three strategic buyers — Boston Scientific, AtriCure, and Johnson & Johnson — have collectively paid over US$1.5 billion for predecessors, all before regulatory approval.

The Transaction

RTO

- Aegis is combining with Lincoln Ventures Ltd. (“Lincoln”), by way of a reverse takeover (“RTO”) on the TSX Venture Exchange.
- US$5M raise to fund a 50-patient CE mark clinical trial of the Sierra System in Europe, in conjunction with European Union health, safety and environmental protection legislation, following the initial 100% successful human trial.
- The receipt of a CE mark allows for the commencement of commercial sales in Europe and expedited certification in several other countries.

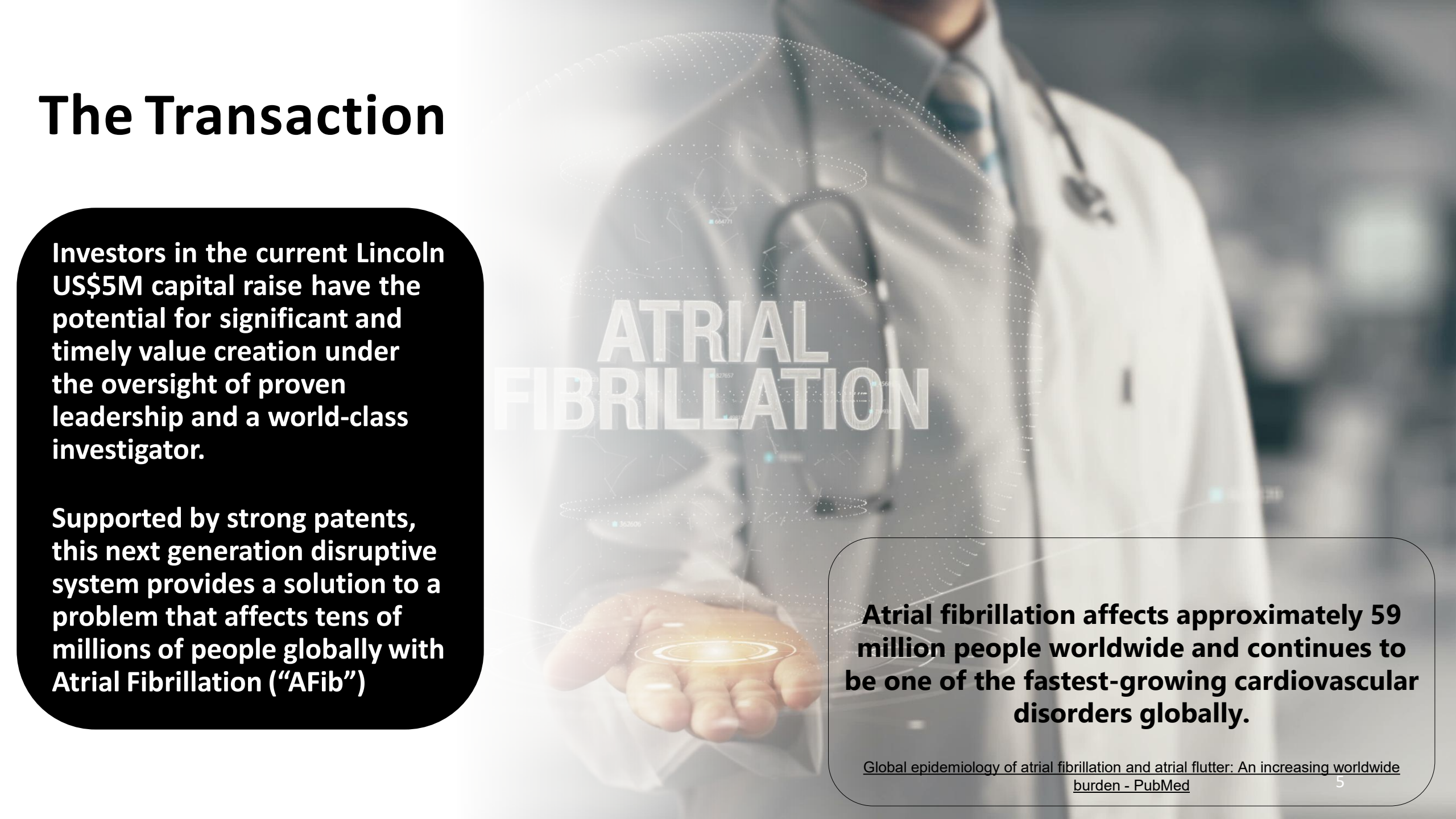
A CE mark clinical trial is a study conducted on medical devices to gather data required to secure a European Conformity (CE) mark under European Union regulations.

Advancing the CE mark clinical trial is also often the milestone that begins the acquisition conversation

The Transaction

Investors in the current Lincoln US$5M capital raise have the potential for significant and timely value creation under the oversight of proven leadership and a world-class investigator.

Supported by strong patents, this next generation disruptive system provides a solution to a problem that affects tens of millions of people globally with Atrial Fibrillation (“AFib”)



Atrial fibrillation affects approximately 59 million people worldwide and continues to be one of the fastest-growing cardiovascular disorders globally.

Global epidemiology of atrial fibrillation and atrial flutter: An increasing worldwide burden - PubMed

UNMET CLINICAL NEED

Atrial Fibrillation & Blood Thinner Contraindications

3–5x
INCREASED STROKE RISK WITH AFIB[1]

20–50%
PATIENTS UNABLE TO TAKE BLOOD THINNERS

90%
AFIB CLOTS ORIGINATE IN LAA [2]

80%
STROKE REDUCTION VIA LAA CLOSURE [3]

> "Up to 50% of [AFib] patients are deemed ineligible for anticoagulation"
>
> Ineligibility for Anticoagulation in Patients with Atrial Fibrillation
>
> (The American Journal of Medicine, 2013)

The Sierra System provides a permanent, external epicardial solution that eliminates blood thinner dependency entirely.

[1] Heart & Stroke Foundation: heartandstroke.ca/heart-disease/conditions/atrial-fibrillation
[2] Blackshear & Odell, *The Annals of Thoracic Surgery*, Vol 61, Issue 2, February 1996, pp. 755-759.
[3] *Journal of the American College of Cardiology (JACC)*, 2017; 70(24): 2964-2975

INVESTMENT THESIS

Why Sierra? Why Now?

SIERRA MEDICAL

01 Validated Technology

7 in-human procedures completed in 2014 with 100% success. 7-year follow-up published in 2026 confirms durable LAA closure. Proof-of-concept de-risked. CE mark clinical trial is the immediate next step.

02 Massive & Growing Market

US$2.4B[1] LAAC market growing rapidly. 10 million[2] Americans currently have atrial fibrillation. Hypertension represents a future market opportunity to potentially address 120M[3] Americans.

03 Demonstrably Superior Device

Epicardial-only (outside the heart) approach. One doctor, 20 minutes, no blood thinners. No bloodstream entry. The only patented single-access epicardial LAA closure — Sierra is not an incremental improvement; it is a disruptive category shift.

04 Proven Exit Pathway

Boston Scientific paid US$375M for Watchman. J&J paid US$900M for Laminar — with incomplete regulatory approval. Strategic acquirers are identified and motivated. US$5M funds the CE clinical trial that begins the acquisition conversation.

[1] *Market Publishers LAAC Device Market Outlook 2025-2034 October 2025.*
[2] *National Heart, Lung, and Blood Institute: nhlbi.nih.gov/news/2024/atrial-fibrillation-estimated-affect-about-1-22-americans.*
[3] CDC: cdc.gov/high-blood-pressure/data-research/facts-stats/index.html

EXECUTIVE SUMMARY

Four Pillars of Investor Value Creation

7–Year Human Data

100% LAA exclusion in human trial. Zero strokes or device thrombi in 7–year published study.

US$2.4B Total Market

Endocardial & epicardial market driven by patients contraindicated to blood thinners.

Mayo Clinic IP

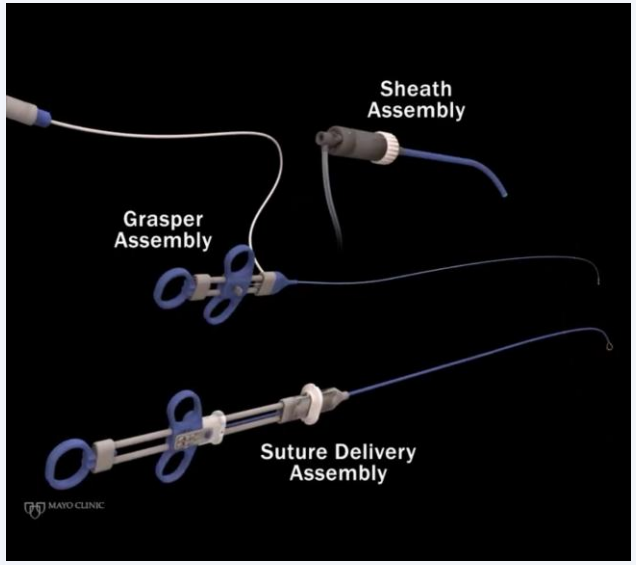
Developed & patented in collaboration with Mayo Clinic. Micro-invasive epicardial closure in 20 minutes.

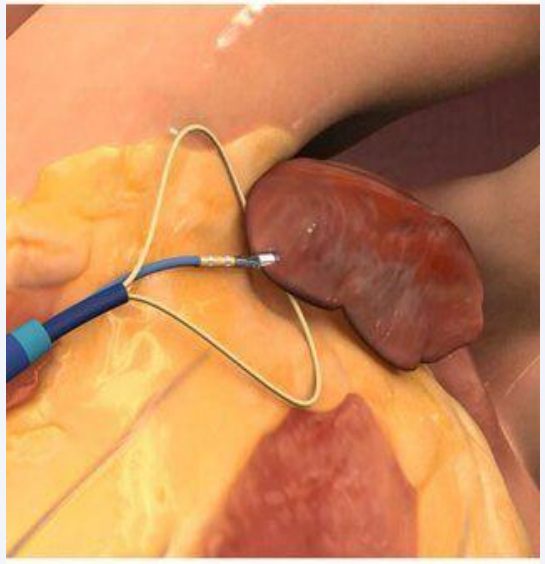
Public TSXV Listing

Reverse takeover of Lincoln Ventures including: US$5M in equity financing.

PRODUCT BREAKDOWN

Sierra System: Patented Micro-Invasive LAA Ligation





Note: Click on image for Aegis Sierra video link

20–Minute Proprietary Procedure

Single operator access point with universal one-size device fit.

Zero Anticoagulants

No post-op blood thinners needed. Complete epicardial exclusion.

Patented ECG Navigation

Integrated electrolocation guidance ensures precise hollow suture placement.

SIERRA MEDICAL

Sierra System: The World's Only Epicardial-Only LAA Closure Device

Developed and patented in collaboration with Mayo Clinic. Ready for CE mark clinical trial.

20 Minutes

- One trained professional
- One access point
- No second device needed

No Blood Thinners

- No Heparin during procedure
- No post-op anticoagulants
- Cleaner, safer recovery

Epicardial Only
(outside the heart)

- No bloodstream entry
- No transseptal puncture
- Avoids endocardial risks

One Size Fits All

- Universal fit
- Eliminates inventory complexity
- Fully repositionable

Patented ECG Navigation

- Electrolocation guidance (“ECG”) for accurate closure
- Patented hollow suture

CE Mark Lead Clinical Investigator

- Internationally recognized
- Dr. Krzysztof Bartus
- 100+ clinical trials

MARKET POSITION

Competitive Superiority vs. Legacy Alternatives

Feature	Watchman (Boston Scientific)	Amulet (Abbott)	Lariat (AtriCure)	SIERRA (Aegis)
Approach Type	Endocardial	Endocardial	Endo +Epicardial	**Epicardial Only**
Bloodstream Entry	**Yes**	**Yes**	**Yes**	**No (Zero Risk)**
Blood Thinners Required	**Yes**	**Yes**	**No**	**No**
Physicians Required*	2 Doctors	2 Doctors	2 Doctors	**1 Doctor**
Procedure Time	~60 mins	~60 mins	~60 mins	**20 mins**
Setting	Surgical	Surgical	Surgical	**Clinic**

***Note*: All surgical procedures will also require an Anesthesiologist. The clinic setting anesthetic is optional.**

MARKET POSITION

Competitive Superiority vs. Legacy Alternatives

	Watchman	Lariat	Laminar	Sierra
Procedure	Endocardial	Endocardial + Epicardial	Endocardial	Epicardial only
Implant	Y	N	Y	N
Number of Doctors	2	2	2	1
Time	1 h	1h	1h	20 mins
Requires:				
Entering the Bloodstream	Y	Y	Y	N
Transseptal Puncture	Y	Y	Y	N
Transseptal Needle & Sheath	Y	Y	Y	N
Full Hyperonization	Y	Y	Y	N
Blood Thinners	Y	N	Y	N
Complications:				
Thrombosis	Y	N	Less	N
Thrombus Formation	Y	N	Less	N
Migration	Y	N	Less	N
Contrast Given To The Blood	Y	Y	Y	N
Entering Vessels	Y	Y	Y	N
Entering Heart Chambers	Y	Y	Y	N
Increasing Hemorragic Stroke (Anticoagulation)	Y	N	Y	N
Benefits:				
Electrically Isolates LAA	N	Y	N	Y
Reduces Blood Pressure	N	Y	N	Y
1/10 Cured of A-Fib	N	Y	N	Y
Easy to Redo	N	N	N	Y
One Size Fits All	N	N	N	Y
Need For Anticoagulants	Y	N	N	N

PROVEN CLINICAL EVIDENCE SUPPORTS CE MARK APPLICATION

Published 7–Year Human Results & Future Regulatory Milestones

PUBLISHED SEP 2026

7–Year In-Human Follow-Up

100% Success | Zero Strokes

Zero thromboembolic events, peri-device leaks, or cardiac tamponade, all without anticoagulation medicine.

CE MARK TRIAL

European Clinical Trial

Post-RTO Closing

Conducting CE mark study under EU medical device legislation to gather regulatory filing data.

Q3/2027 - Q4/2027

REGULATORY CLEARANCE

CE Mark Approval

EU Commercial Rights

Unlocks European adoption and triggers pre-approval acquisition interest from tier-1 med techs.

Q4/2027 – Q1/2028

NORTH AMERICA

US FDA Pathway

IDE Multi-Center Trial

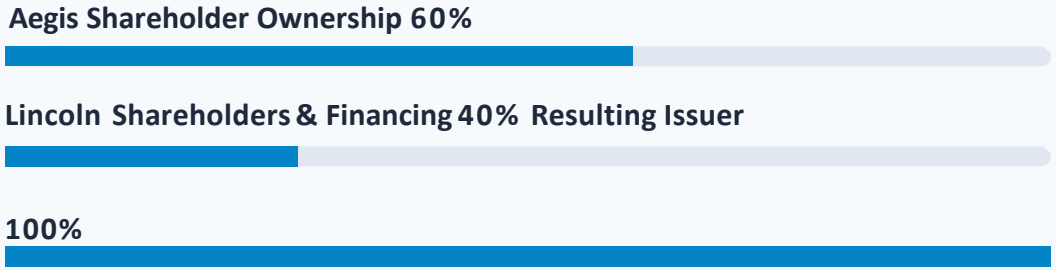
Leverages long-term human safety data to accelerate US Pivotal trial authorization.

Q2/2028 – Q3/2028

TRANSACTION OVERVIEW

RTO Structure & US$5M Financing

Aegis /Lincoln RTO Structure Post Financing



TSX Venture Exchange Listing

Lincoln Ventures (TSXV: LX.H) acquires 100% of Aegis via three-cornered amalgamation including US$5M financing.

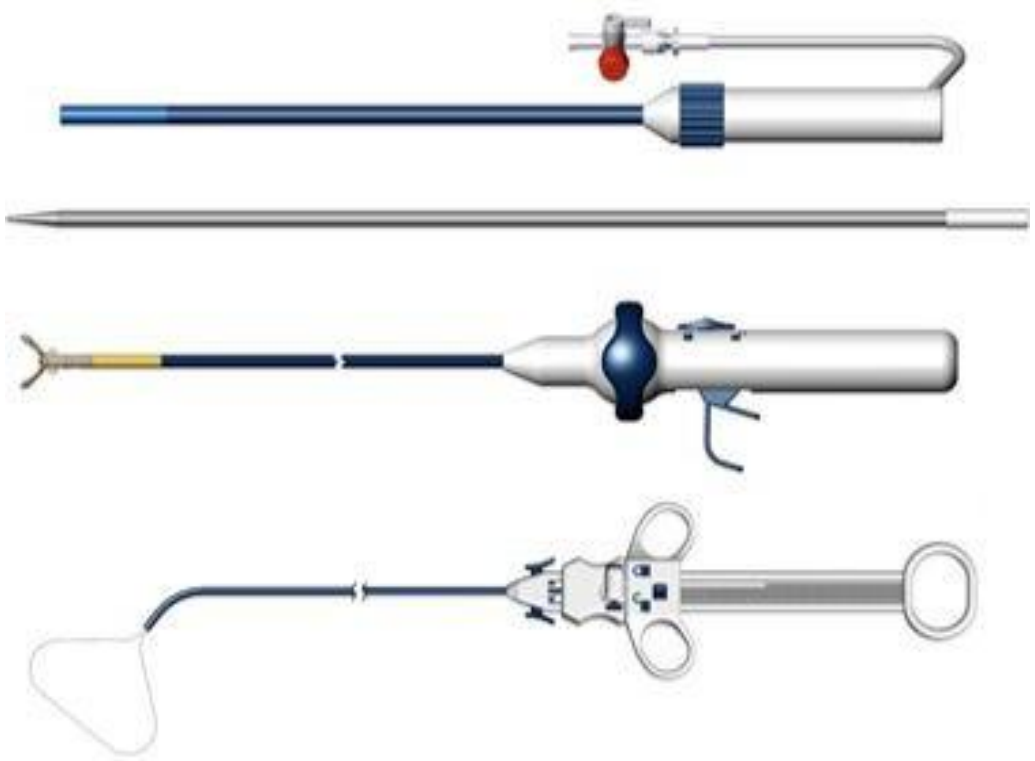
Name change to: Sierra Medical Innovations Inc.

Direct Development Capital

Up to C$1.0M of US$5M financing deployed directly into Aegis prior to closing, to immediately advance the Sierra System CE Mark clinical trial preparation.

Capital is structured to fund a complete 50-patient CE mark clinical trial

Use of Proceeds: US$5,000,000



Clinical Site & Patient Costs	**$1,500,000**	32%
Per-patient fees, site activation, imaging, 12-month follow-up across 3–5 Polish/EU centers. Eastern European sites reduce cost 30–40% vs. Western Europe.		
CRO Management	**$700,000**	14%
Contract Research Organization for trial monitoring, data management, regulatory compliance, and quality assurance throughout the study.		
Regulatory & Submissions	**$400,000**	8%
Ethics committee approvals, notified body fees, Clinical Investigation Plan, and CE Mark submission preparation.		
Device Manufacturing	**$1,500,000**	30%
Trial-ready Sierra device production at ISO 13485-certified manufacturer. FDA-registered facility.		
Operations & G&A	**$700,000**	14%
Management salaries, IP maintenance, legal, investor relations, and overhead over 12-month period.		
Contingency Reserve	**$200,000**	2%
Buffer for enrollment delays, protocol amendments, or additional ethics committee requirements.		
TOTAL RAISE		**$5,000,000**

EXIT POTENTIAL

Strategic M&A Precedent

SIERRA MEDICAL

BOSTON SCIENTIFIC (2011)

$375M

Watchman Acquisition

Acquired prior to established LAAC commercial market maturity.

ST. JUDE MEDICAL (2017)

$1.3B

Amplatzer Amulet Acquisition

Acquired portfolio from AGA Medical.

ATRICURE (2019)

$300M

Lariat Acquisition

Acquired with 510(k) soft tissue clearance only.

JOHNSON & JOHNSON(2023)

$900M

Laminar Acquisition

Acquired at only 67 patients without FDA or CE approval.

SIERRA OPPORTUNITY

M&A EXIT

Initial CE trial data provides direct catalyst for strategic acquirers.

LEADERSHIP

Proven Capital Markets & Clinical Leadership

Andre Beaulieu

CEO – Aegis Medical Innovations Inc.

25+ years corporate strategy advisor. Structured multiple complex M&A transactions across public and private markets.

John Proust

President – Lincoln Ventures Ltd.

Lifelong entrepreneur and active participant in Canadian capital markets 30+ years. Founder, builder, financier, and principal of numerous public and private companies.

Robert Pirooz

Co-Founder - Aegis Medical Innovations Inc.

Venture capitalist and lawyer. Managed 18+ companies with major transaction execution experience across multi-billion outcomes.

Dr. Krzysztof Bartus

MD PhD — Lead Clinical Investigator

Leading global authority on appendage seclusion; 100+ clinical trials as investigator (AtriCure, Lariat, Aegis).

Transforming Cardiovascular Care & Stroke Prevention

Join us in funding the 50–patient CE Mark clinical trial

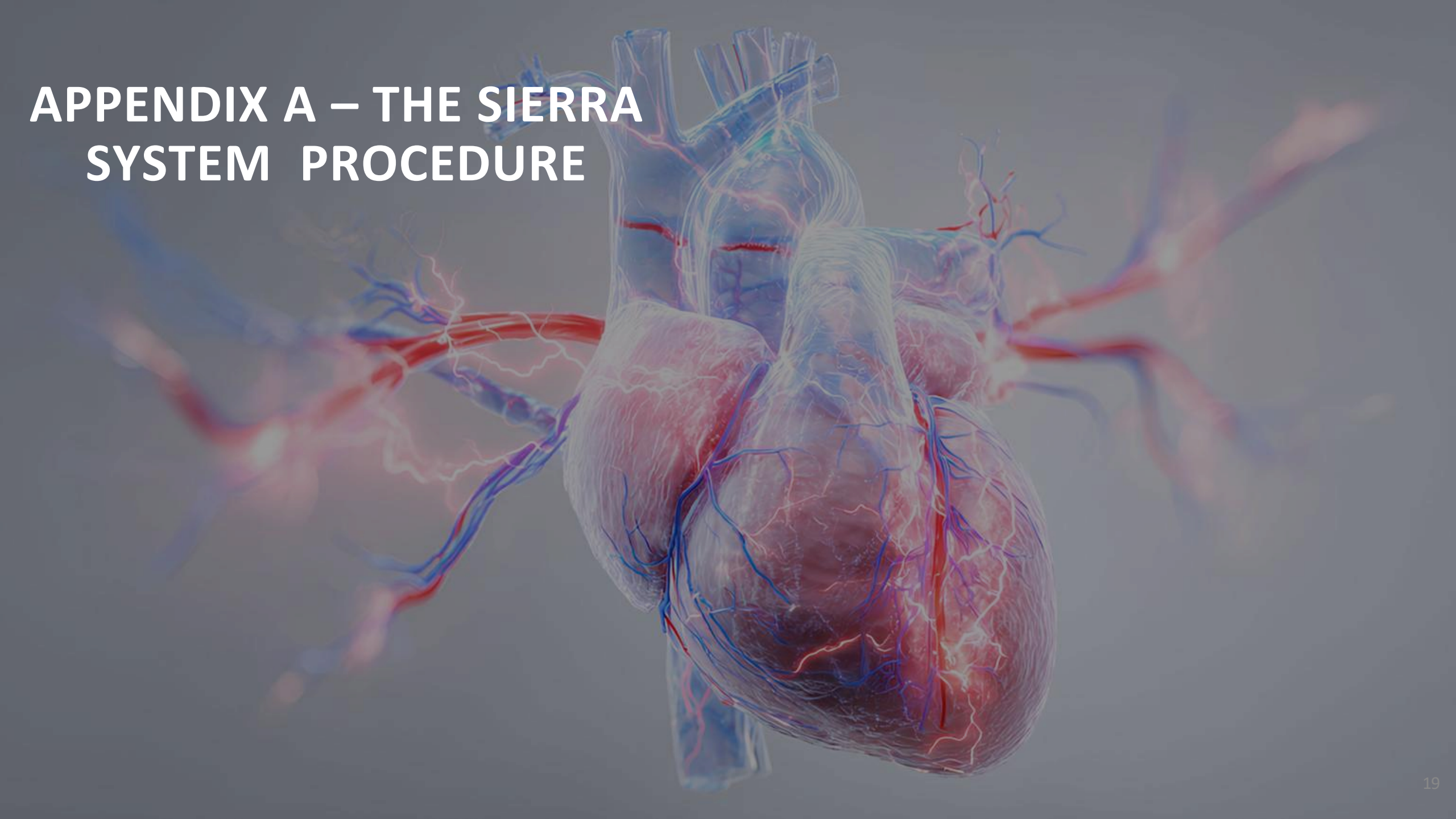
to unlock high-return strategic M&A opportunities

DIRECT CONTACT
John Proust, President
Lincoln Ventures Ltd.

EMAIL
jproust@jproust.ca

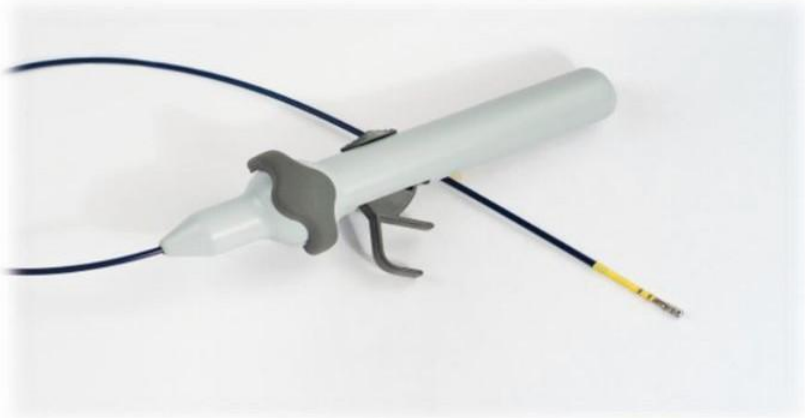
PHONE
+1 (604) 644–1470

APPENDIX A – THE SIERRA SYSTEM PROCEDURE



Aegis' Sierra device

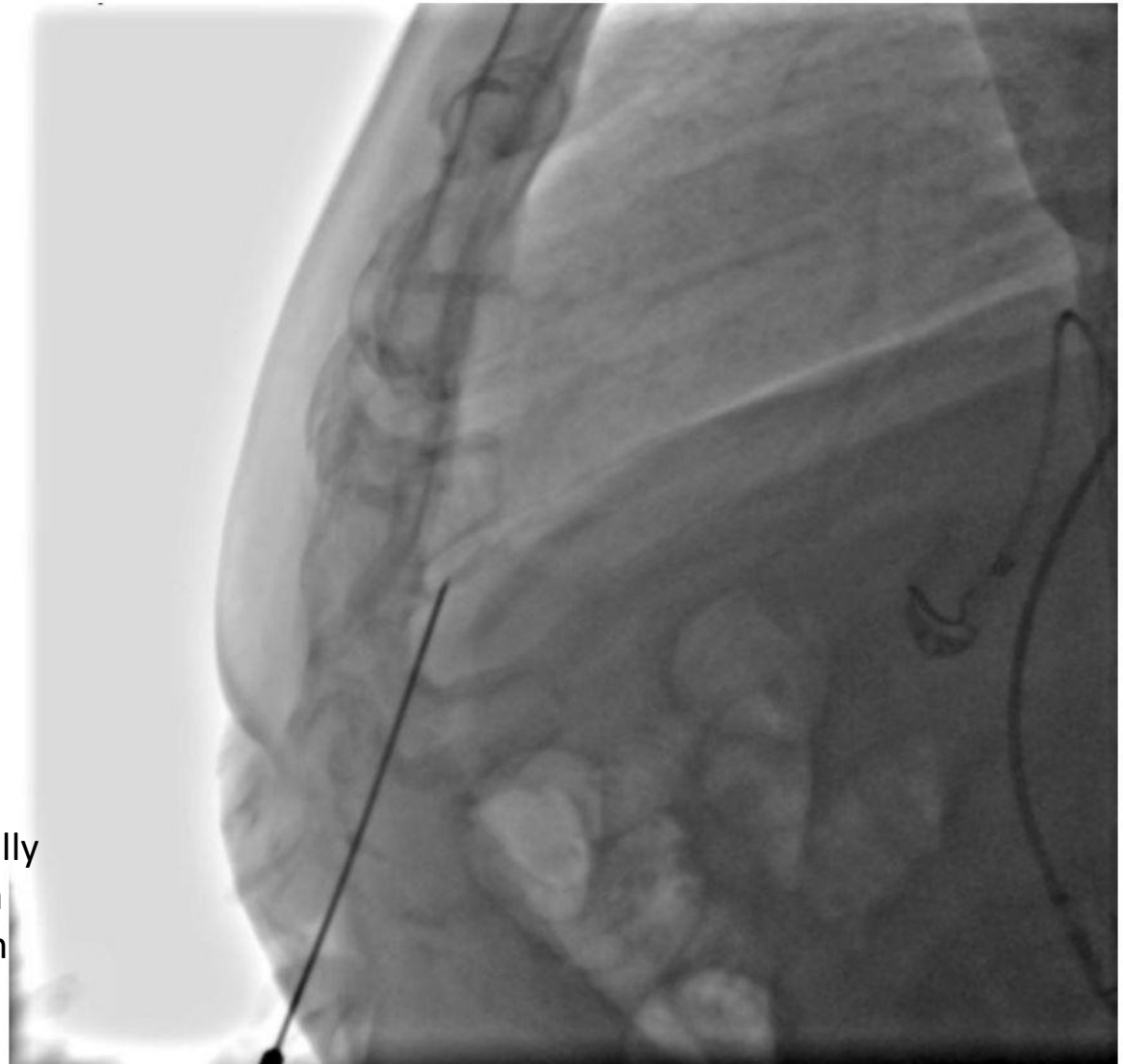
- **Developed in partnership with Mayo Clinic**
- Single subxyphoid access for epicardial LAA closure
- NO access to blood stream needed.
- Hollow suture ligation (external)
- ECG navigation to confirm and control LAA capture
- One-size fits all
- FIH study 2014 – 100% success





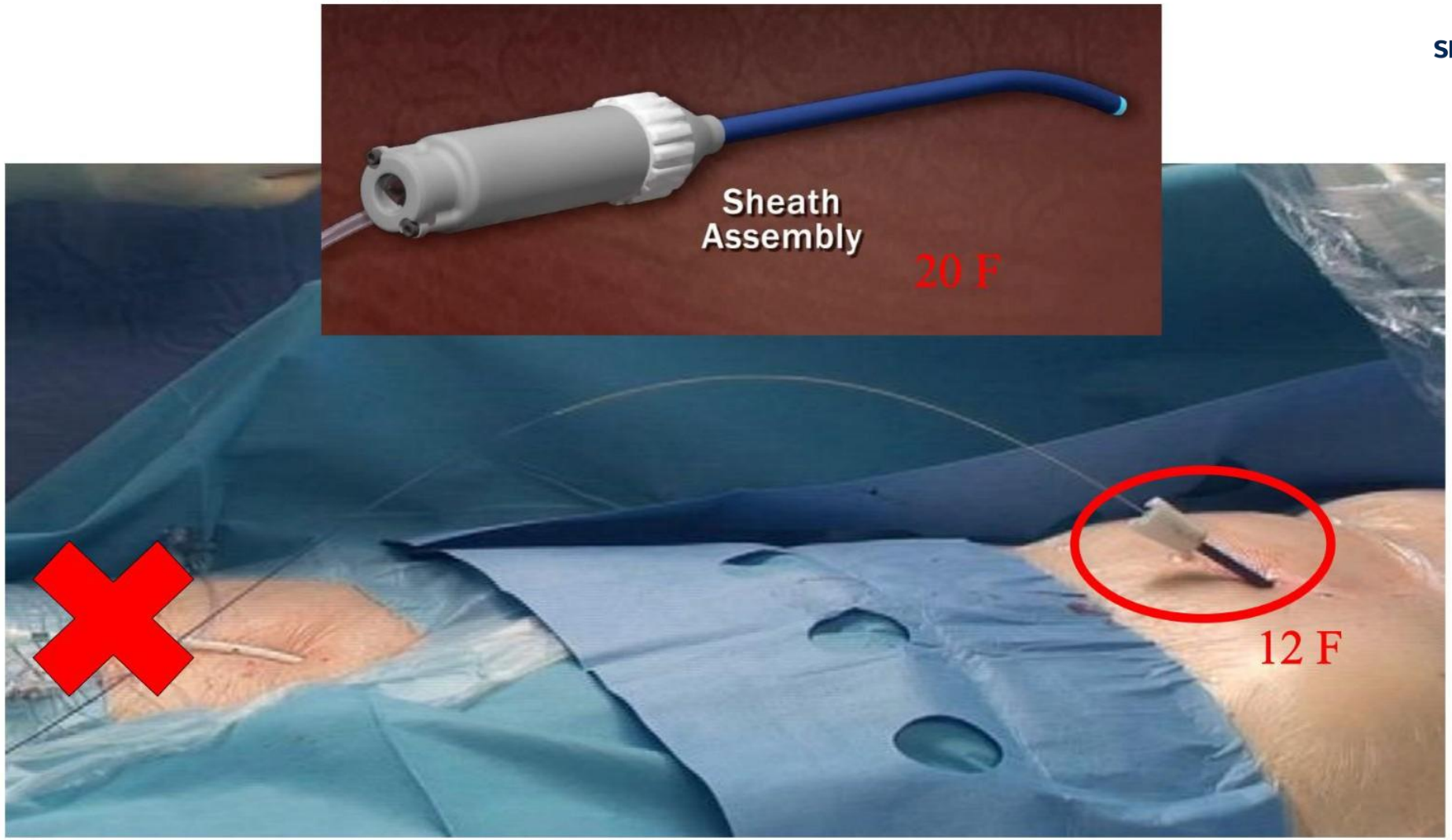


Pericardial access the same as LARIAT



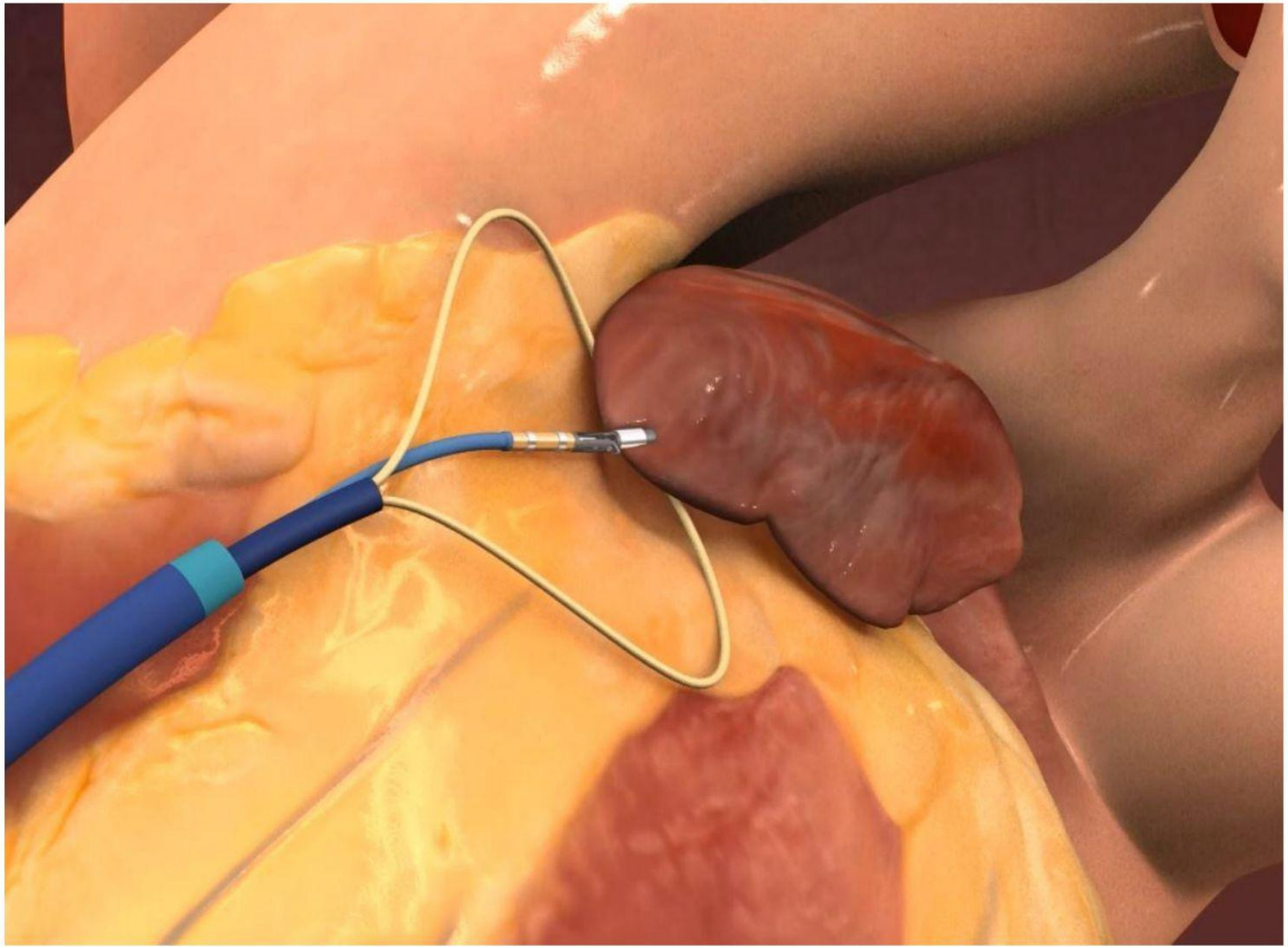
The **AtriCure LARIAT®** is a **left atrial appendage (LAA) closure system** used in selected patients with **atrial fibrillation (AFib)** to reduce stroke risk by mechanically closing the left atrial appendage, the area where most AFib-related blood clots form

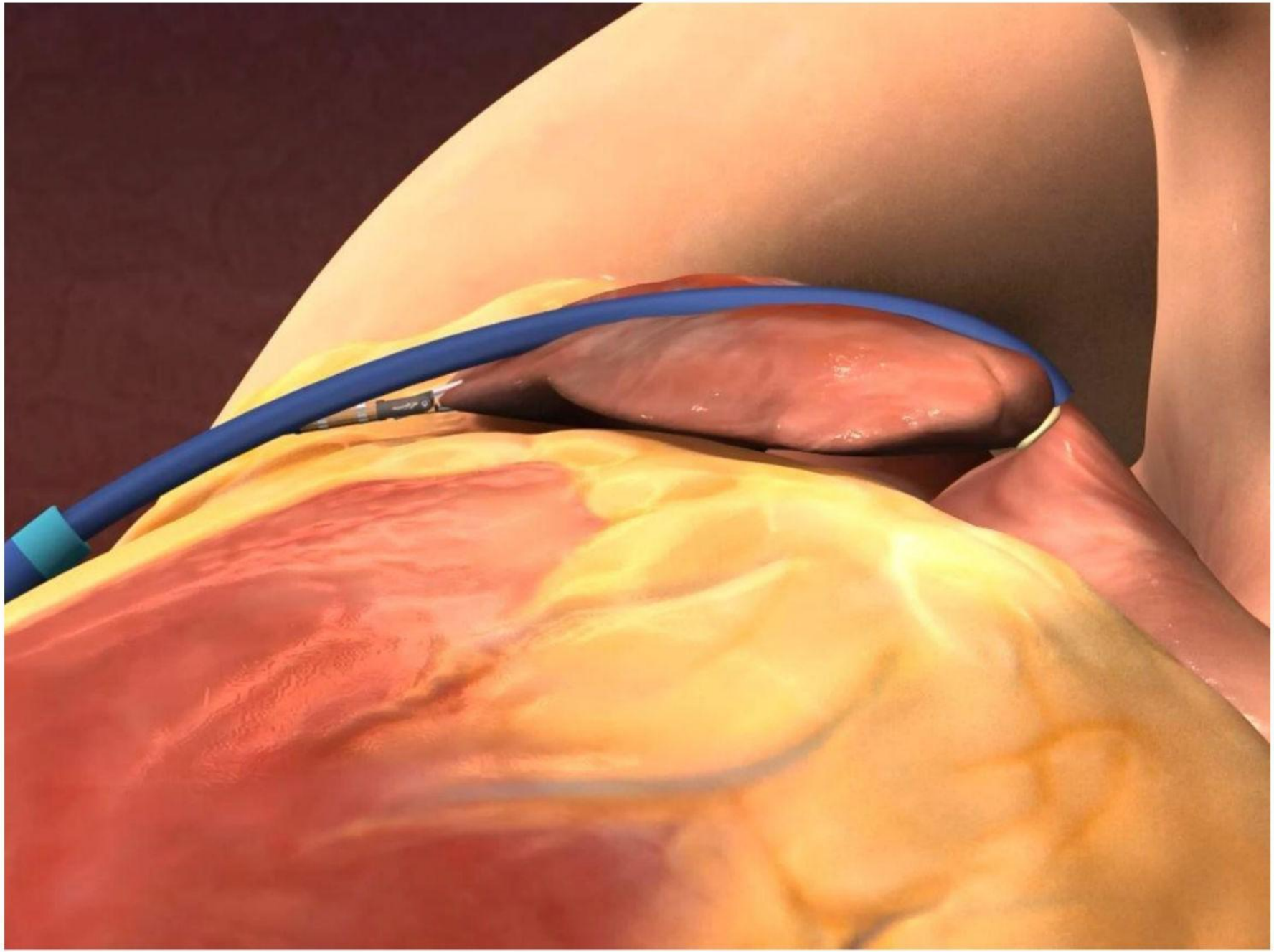
NO Transseptal access needed for AEGIS - Sierra



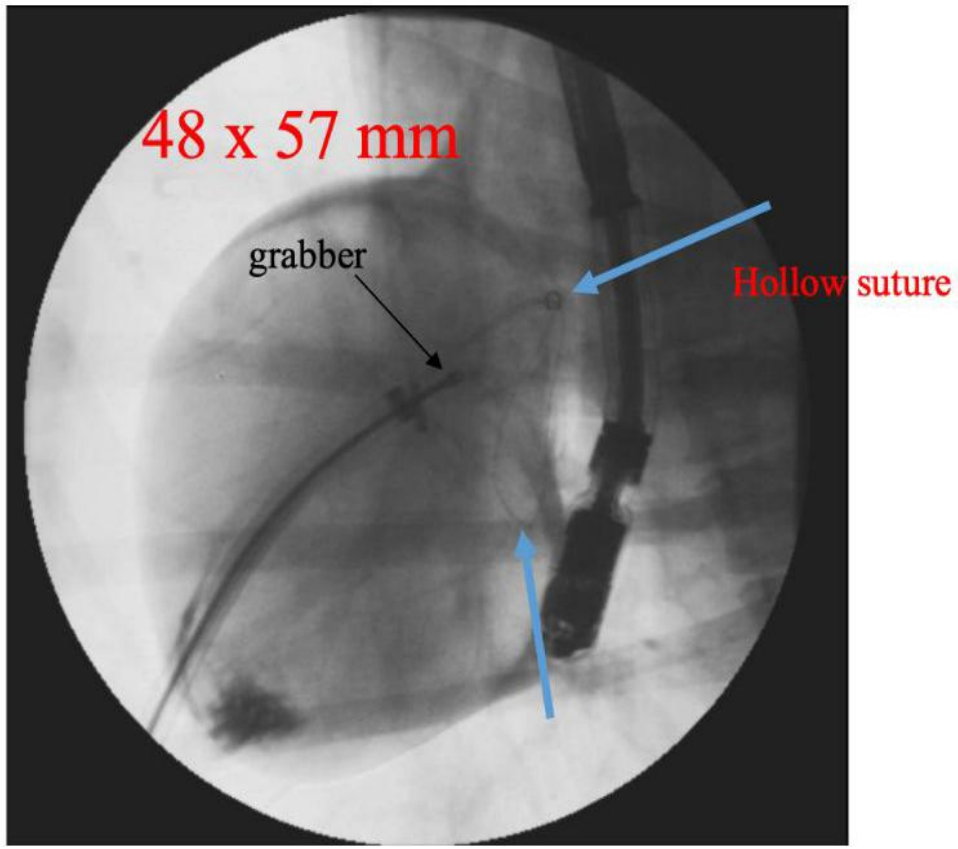
NO Entering blood streem

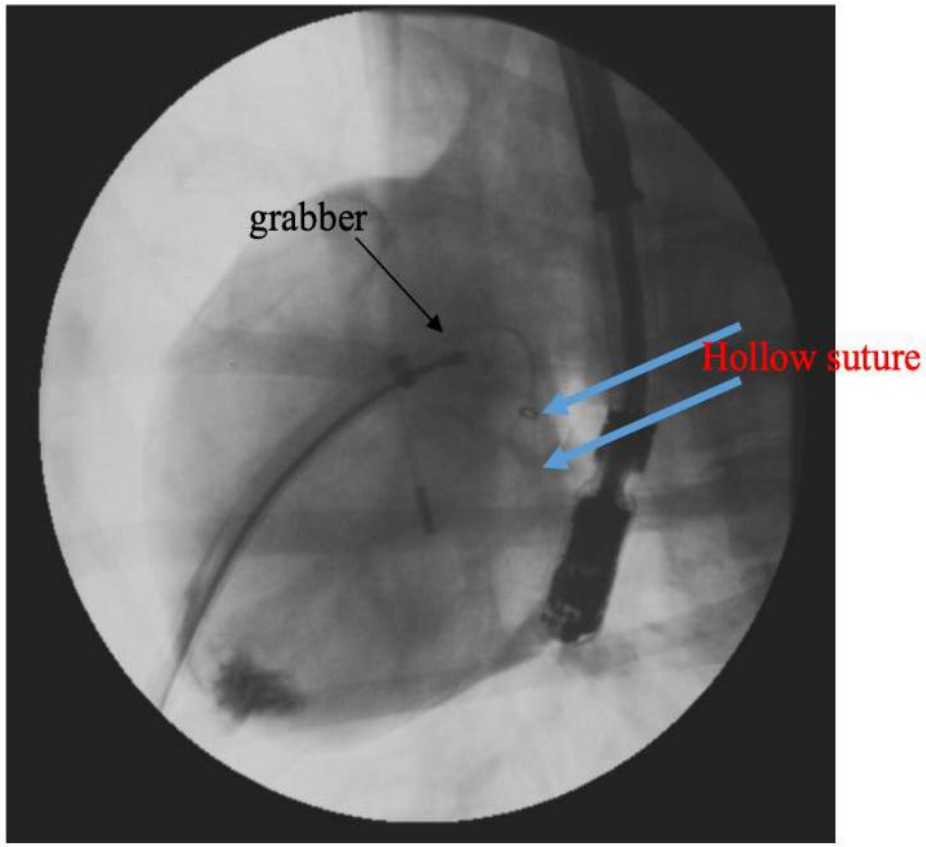
NO heparin or contrast to blood needed



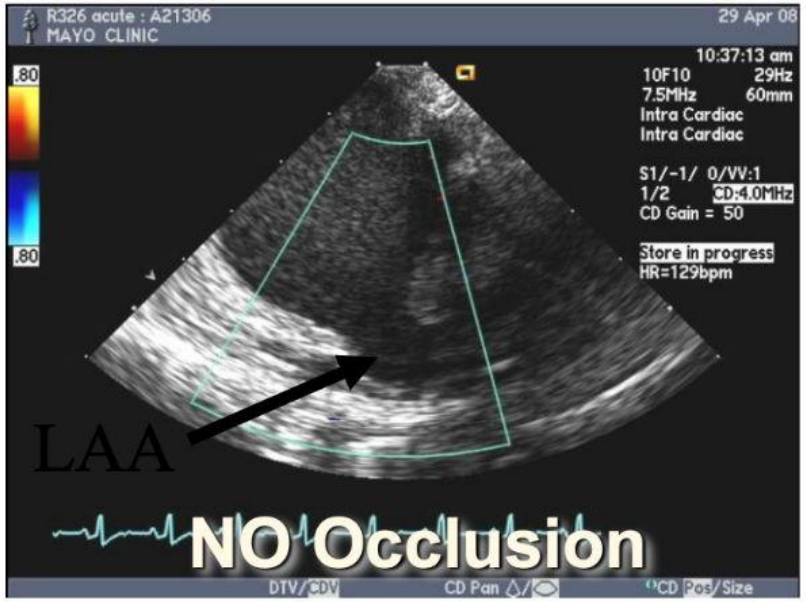


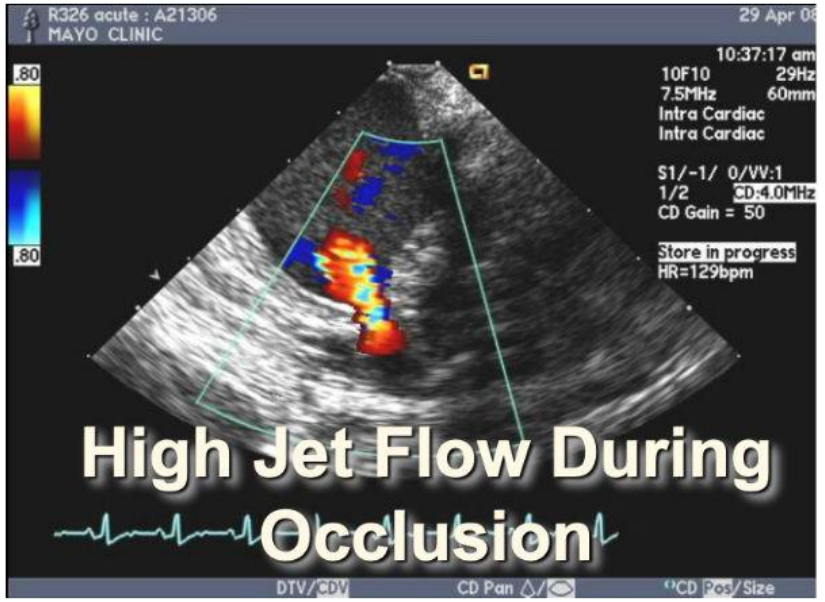
Closing Hollow Suture Around LAA

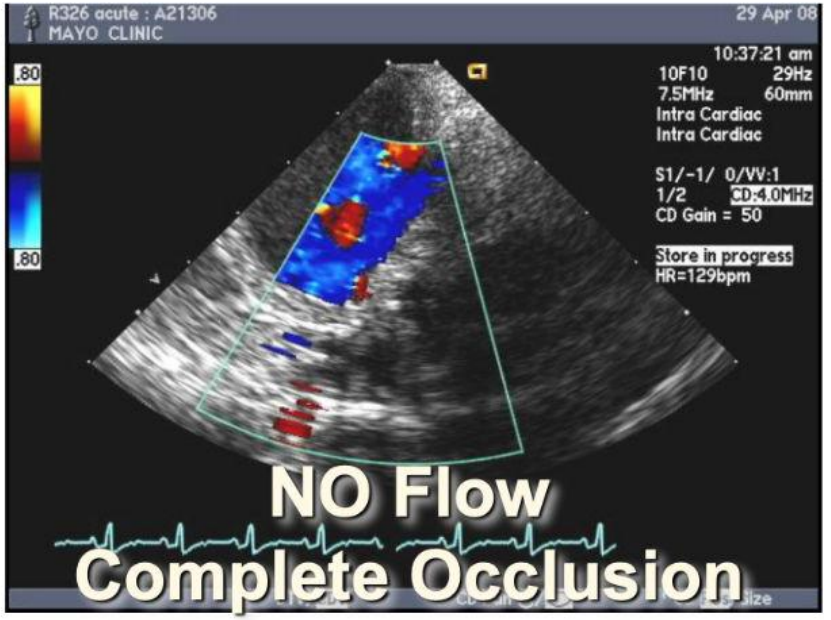




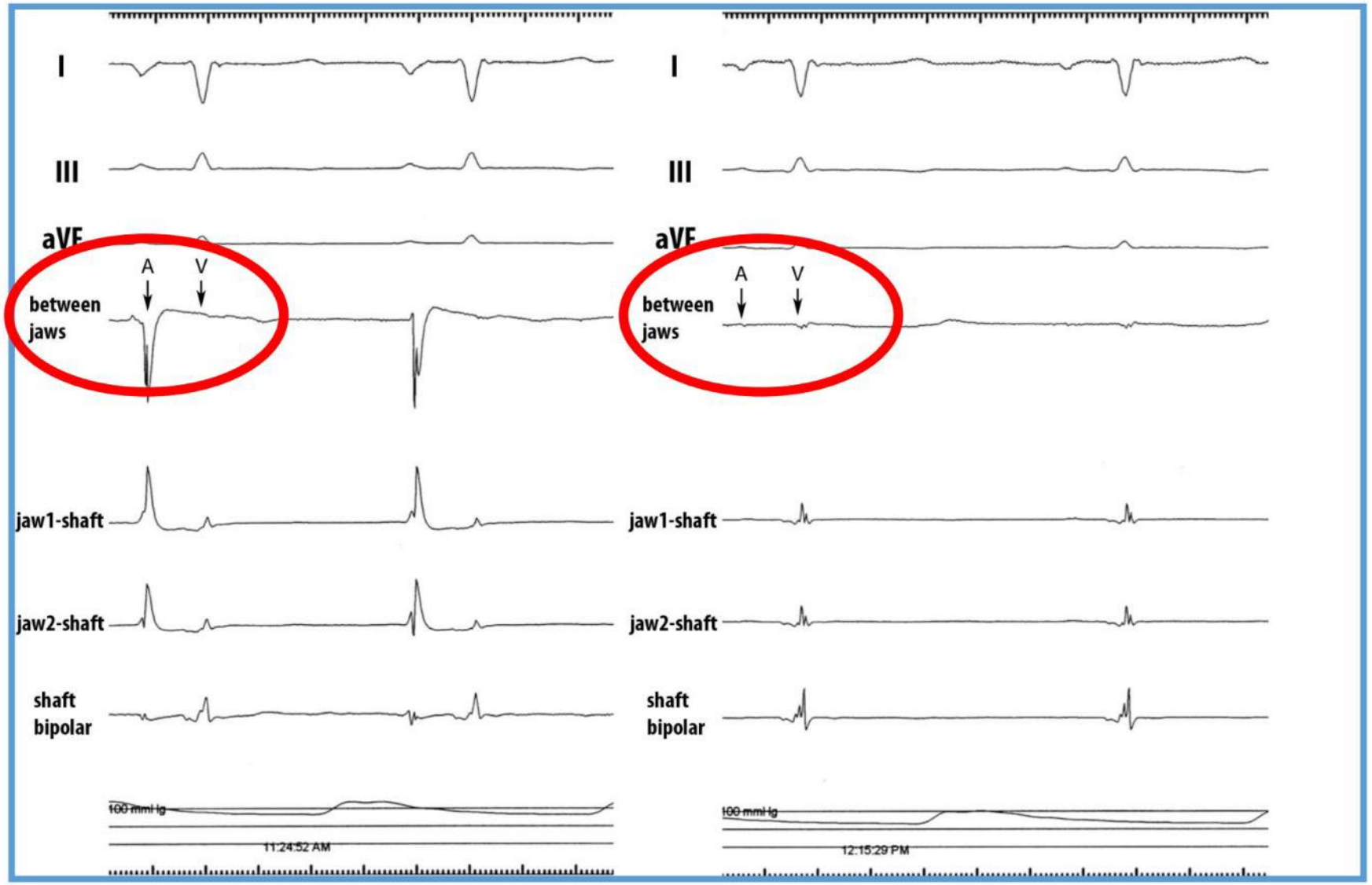
LAA Occlusion In TEE







Loss of Atrial Electrogram Following Occlusion



Loss of LAA electrical activity will help maintain NSR – Additional benefit

Clinical Results Aegis Sierra– EU Cases

- Cases performed at single site by K. Bartus in Krakow, Poland - 2014
- 7 Patients enrolled, 7 cases completed
  - 100% acute clinical success
  - 100% clinical success at 30 day follow up
  - No acute adverse events
  - 100% closure at 1 year
  - 100% closure at 2 years
  - 100% closure at 3 years
- Average procedure time less than 20 minutes
- Epicardial access average < 2 minutes
- NO late complications upto 4 years and 7 years

Clinical Results Case Summary – Aegis Sierra
K.Bartus - 2014

Patient	Acute Closure	12,18,24 and 36 months closure	Patient off OAC at 30 days	Overall Clinical Success	Procedure Time
001	✓	✓	Yes	✓	90 min
002	✓	✓	Yes	✓	13 min
003	✓	✓	Yes	✓	14 min
004	✓	✓	Yes	✓	33 min
005	✓	✓	Yes	✓	13 min
006	✓	✓	Yes	✓	29 min
007	✓	✓	Yes	✓	25 min

Journal of Clinical Medicine

MDPI

Article

First-in-Human Percutaneous Epicardial-Only Left Atrial Appendage Closure Using Sierra Left Atrial Appendage Ligation System

Jakub Batko [1,2,*], Radosław Litwinowicz [3], Boguslaw Kapelak [3] and Krzysztof Bartuś [3]

[1] Department of Anatomy, Jagiellonian University Medical College, 31-008 Krakow, Poland
[2] CAROL—Cardiothoracic Anatomy Research Operative Lab, Department of Cardiovascular Surgery and Transplantology, Institute of Cardiology, Jagiellonian University Medical College, 30-688 Krakow, Poland
[3] Department of Cardiovascular Surgery and Transplantology, Institute of Cardiology, Jagiellonian University Medical College, St. John Paul II Hospital, 31-202 Krakow, Poland
* Correspondence: kubabatko5@gmail.com; Tel.: +12-614-32-03, Fax: +12-614-25-25

Abstract: Background: In patients with atrial fibrillation and contraindications for oral anticoagulation, in which an increased risk of stroke remains, a left atrial appendage exclusion should be considered for elimination, because the left atrial appendage is the most common site of thrombus. The aim of this study is to present the first-in-human study results of the Sierra Aegis Left Atrial Appendage Ligation System, a new epicardial-only left atrial appendage closure system. **Methods:** This study was a prospective, first-in-human, single-center study evaluating the effectiveness and safety of the Sierra Aegis Left Atrial Appendage Ligation System device for epicardial left atrial appendage closure. Seven patients (mean age: 57.3 ± 10.6 years, 71.4% male) were qualified for a left atrial appendage closure because of an increased risk of bleeding with the need for lifelong anticoagulation pharmacology due to an increased risk of stroke. The patients' preoperative and intraoperative characteristics were collected. Patients were observed during their 1-month, 3-month, 6-month, and 1-year follow-up. **Results:** The mean procedure time was 21.2 ± 8.2 min. All patients spent 3 days in the hospital including monitoring, the performance of preoperative CT scans, and anatomical evaluation. No tamponade, bleeding, thrombus, or left atrial appendage leakage were observed during the procedure or in-hospital stay. During the 1-month, 3-month, 6-month, and 1-year follow-up visits, none of the patients reported any complications. No tamponade, leakage, or left atrial appendage thrombus were observed. **Conclusions:** This first-in-human study regarding Sierra use for left atrial appendage closure shows promising results regarding the effectiveness and safety of the Sierra device for use in humans.

check for updates

Citation: Batko, J.; Litwinowicz, R.; Kapelak, B.; Bartuś, K. First-in-Human Percutaneous Epicardial-Only Left Atrial Appendage Closure Using Sierra Left Atrial Appendage Ligation System. *J. Clin. Med.* **2024**, *13*, 7417.

Contents lists available at ScienceDirect

Cardiovascular Revascularization Medicine

journal homepage: www.sciencedirect.com/journal/cardiovascular-revascularization-medicine

Seven years of follow-up of first-in-human percutaneous epicardial-only left atrial appendage closure using Sierra device

Michał Piotrowski [a,*,1], Julia Izabela Karpierz [a,b,1], Radosław Litwinowicz [c,d,e], Bogusław Kapelak [c], Krzysztof Bartuś [c]

[a] CAROL—Cardiothoracic Anatomy Research Operative Lab, Department of Cardiovascular Surgery and Transplantology, Institute of Cardiology, Jagiellonian University Medical College, 31-008 Krakow, Poland
[b] Faculty of Medical Sciences in Katowice, Medical University of Silesia, 40-055 Katowice, Poland
[c] Department of Cardiovascular Surgery and Transplantology, Institute of Cardiology, Jagiellonian University Medical College, St. John Paul II Hospital, Krakow, Poland
[d] Faculty of Medicine, Bydgoszcz University of Science and Technology, Bydgoszcz, Poland
[e] Department of Cardiac Surgery, Regional Specialist Hospital, Grudziadz, Poland

ARTICLE INFO

Keywords:
Atrial fibrillation
Stroke prevention
Left atrial appendage closure
Sierra device

ABSTRACT

Background: It is estimated that at least one third of the population will suffer from atrial fibrillation in their lifetime. In order to prevent strokes and thromboembolism, anticoagulation treatment should be administered. In addition, exclusion of the left atrial appendage should be considered in certain cases to prevent fatal ischemic complications. In patients at high risk of intervention, the devices available to close the left atrial appendage are not suitable. In addition, their use is limited by the anatomy of the left atrial appendage, which may not be suitable for any of the available exclusion devices. The aim of this study is to present the long-term results of the Sierra Aegis Left Atrial Appendage Ligation System – a new, exclusively epicardial system for closure of the left atrial appendage - for the first time in a human study.

Methods: This was a prospective, first-in-human study investigating the efficacy and safety of the Sierra Aegis Left Atrial Appendage Ligation System for epicardial closure of the left atrial appendage. 7 patients (mean age: 57.3 ± 10.6 years, 71.4 % male) who underwent left atrial appendage exclusion with the Sierra system were followed for up to 7 years.

Results: No strokes, leaks, or other complications were observed in the study group during the 7-year follow-up period.

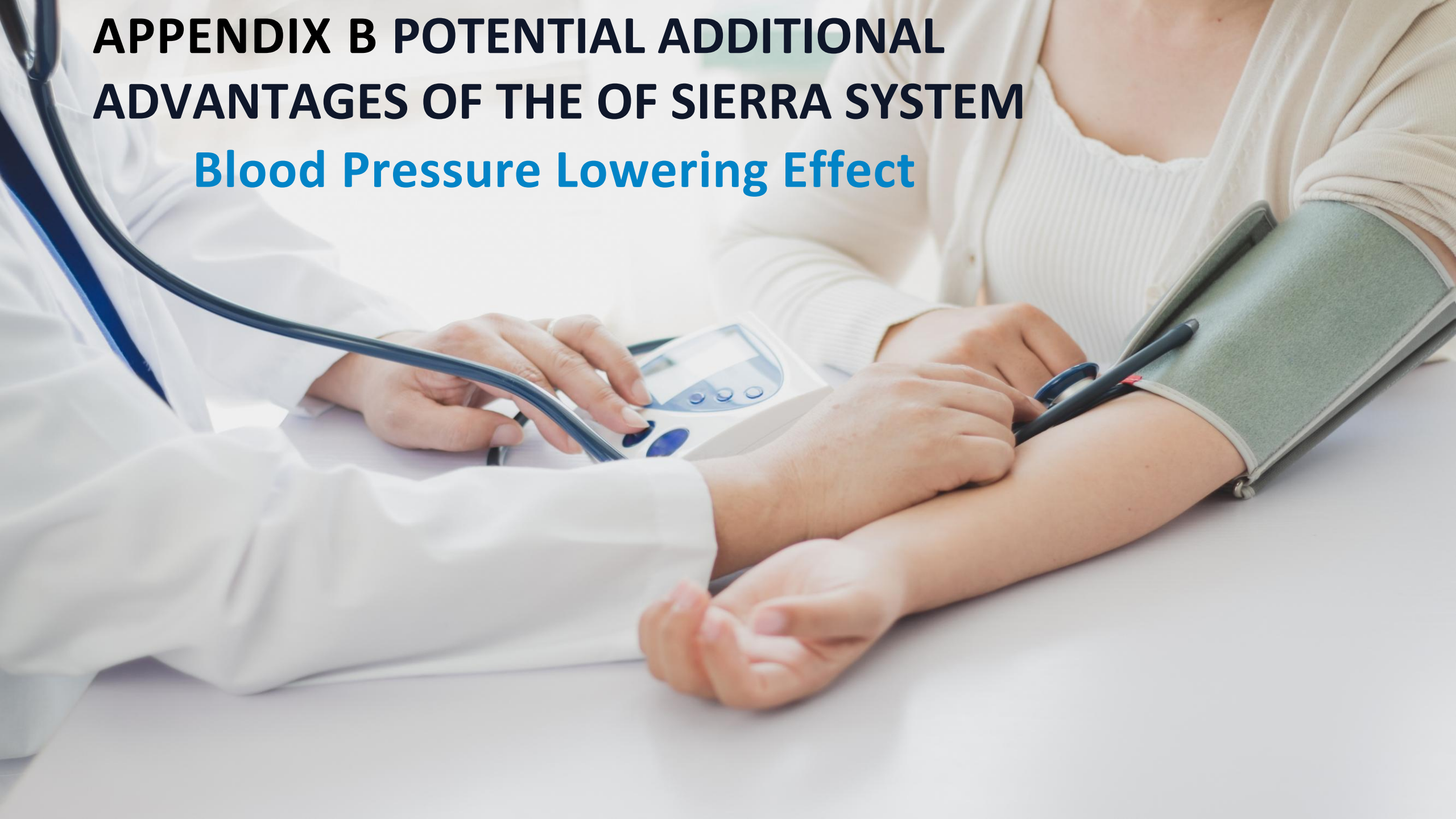
Conclusions: This 7-year follow-up of the first-in-human study of the Sierra Aegis Ligation System for left atrial appendage closure shows very good long-term results in terms of the efficacy and safety of this device when used in humans.

ADVANTAGES and Disadvantages

	Watchman	Lariat	**Sierra**
Procedure	Endocardial	Endocardial + Epicardial	Epicardial only
Implant	Yes	No	No
Number of Doctors	2	2	1
Time	1 h	1h	20 mins
Requires:			
Entering the Bloodstream	Y	Y	N
Transseptal Puncture	Y	Y	N
Transseptal Needle & Sheath	Y	Y	N
Full Hyperonization	Y	Y	N
Blood Thinners	Y	N	N
Complications:			
Thrombosis	Y	N	N
Thrombus Formation	Y	N	N
Migration	Y	N	N
Benefits:			
Electrically Isolates LAA	N	Y	Y
Reduces Blood Pressure	N	Y	Y
1/10 Cured of Afib	N	Y	Y
Easy to Re-do	N	N	Y
One Size Fits All	N	N	Y
Need for ANTCOAGULANT use	Y	N	N
Contrast given to the blood	Y	Y	N
Entering vessels	Y	Y	N
Entering Heart chambers	Y	Y	N
Increasing hemorragic stroke (Anticoagulation)	Y	N	N

APPENDIX B POTENTIAL ADDITIONAL ADVANTAGES OF THE OF SIERRA SYSTEM

Blood Pressure Lowering Effect



CENTRAL ILLUSTRATION: Role of LAA in Neurohormonal Modulation



Impact of Left Atrial Appendage (LAA) Closure Using the Epicardial and Endocardial Devices

Levels, compared to prior to procedure:	Post-procedure with epicardial device			Post-procedure with endocardial device		
	0 hours	24 hours	3 months	0 hours	24 hours	3 months
Adrenaline	No change —	↓	↓	—	—	—
Noradrenaline	↓	↓	↓	—	—	—
Aldosterone	—	↓	↓	—	—	—
Renin	—	—	↓	—	—	—
Adioponectin	—	—	↑	—	—	—
Free glycerol levels	—	—	—	—	↓	↓
Insulin	—	↑	↑	—	↑	—
Atrial and brain natriuretic peptides	↓	↑	—	↑	—	—
Systemic blood pressure	↓	↓	↓	↓	—	—

Substantial differences in hemodynamics and neurohormonal impacts.
Further studies are required to elucidate the underlying mechanism of these physiologic changes.

Lakkireddy, D. et al. J Am Coll Cardiol. 2018;71(2):135-44.

Role of EPICARDIAL LAAO on neurohormonal regulation

Factor	24h	7 days	1 month	6 months	12 months	24 months
Sodium	↓	-	-	-	-	-
Potassium	-	-	-	-	-	-
Chlorides	-	-	↓	-	-	-
NT-proANP	↑	↓	↓	-	-	-
NT-proBNP	-	-	-	-	↓	↓
Adrenaline	-	-	↓	↓	↓	↓
Noradrenaline	↓	↓	↓	↓	↓	↓
Aldosterone	-	-	-	↓	↓	↓
Renin	-	↓	↓	↓	↓	↓
Vasopressin	↑	↓	↓	↓	↓	↓
Endothelin	↑	↑	↑	-	-	-
Total cholesterol	↓	-	-	-	-	-
Glucose	-	-	-	-	-	-
HbA1c	-	-	↑	↑	↑	↑
Adiponectin	-	-	-	↑	↑	↑
Free fatty acids		-	-	-	-	-
Beta-hydroxybutyrate		-	-	-	-	-

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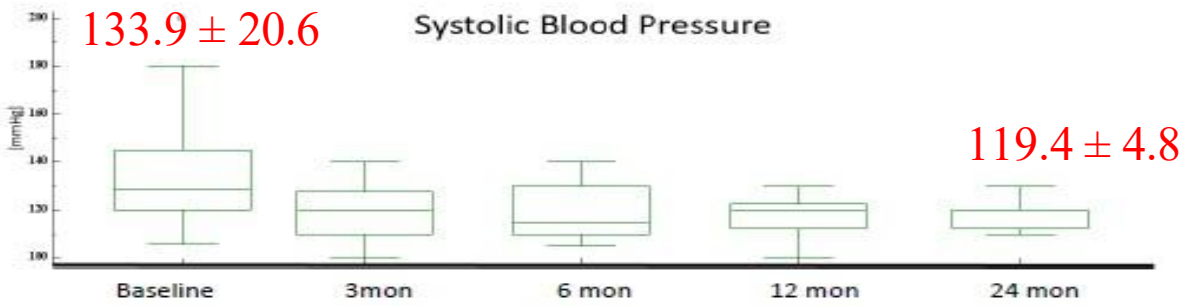
Article

Long Term Impact of Epicardial Left Atrial Appendage Ligation on Systemic Hemostasis: *LAA HOMEOSTASIS-2*

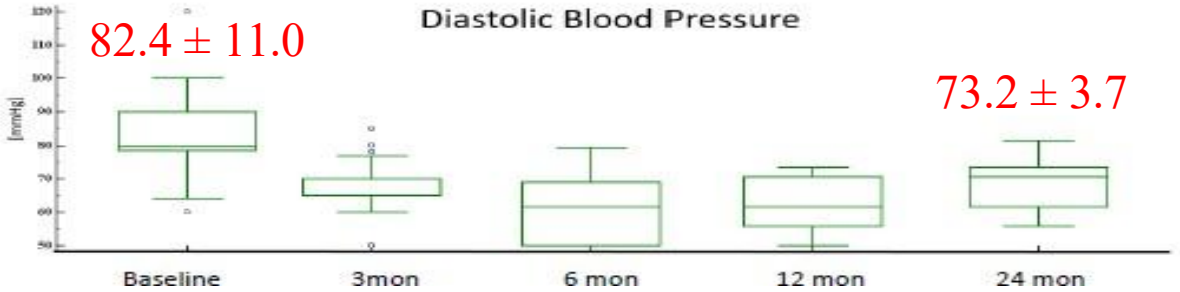
Krzysztof Bartus [1,2,†], Sri Harsha Kanuri [3,†], Radoslaw Litwinowicz [1,2,*], Mehmet Ali Elbey [3], Joanna Natorska [2], Michal Zabczyk [2], Magdalena Bartus [4], Boguslaw Kapelak [1,2], Rakesh Gopinnathannair [3], Jalaj Garg [5], Mohit K. Turagam [6], Maciej T. Malecki [7], Randall J. Lee [8] and Dhanunjaya Lakkireddy [3]

Impact of LARIAT EPICARDIAL LAA closure on Systolic and diastolic blood pressure

4A: Systolic blood pressure reduction after LAAO procedure - 2 year follow up



4B: Diastolic blood pressure reduction after LAAO procedure - 2 year follow up



There is significant reduction in systolic and diastolic blood pressure at 1 year following epi-cardial LAAO. In 2 year follow up, mean SBP and DBP in our study is (119.4± 4.8 mmHg) and (73.2 ± 3.7 mmHg) respectively.

Pts with optimal HT treatment. No changes in medicines.

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SIERRA MEDICAL

Article

Long Term Impact of Epicardial Left Atrial Appendage Ligation on Systemic Hemostasis: *LAA HOMEOSTASIS-2*

Krzysztof Bartus [1,2,†], Sri Harsha Kanuri [3,†], Radoslaw Litwinowicz [1,2,*], Mehmet Ali Elbey [3], Joanna Natorska [2], Michal Zabczyk [2], Magdalena Bartus [4], Boguslaw Kapelak [1,2], Rakesh Gopinnathannair [3], Jalaj Garg [5], Mohit K. Turagam [6], Maciej T. Malecki [7], Randall J. Lee [8] and Dhanunjaya Lakkireddy [3]

Abstract: Background: Recent data suggest that epicardial left atrial appendage closure (LAAC) is associated with several short-term neurohormonal effects. However, the long-term effects are currently unknown. Objective: To investigate the effects of percutaneous epicardial left atial appendage (LAA) exclusion using LARIAT on neurohormonal profiles at long-term follow-up. Methods: In a prospective single centre study, 60 patients with long-standing, persistent atrial fibrillation (AF) LARIAT were treated. The major hormones of the adrenergic system, renin-angiotensin-aldosterone system (RAAS), and natriuretic peptides were assessed before the intervention and at regular intervals during the following two years. Results: In patients with epicardial LAAC, atrial natriuretic peptide (ANP) levels were significantly increased from baseline at 24 h and decreased at 7 days, 1 month, and 3 months, while remaining unchanged at 12 and 24 months. Noradrenaline levels were significantly lower at 24 h, 7 days, 1 month, 6 months, 12 months, and 24 months, while epinephrine levels decreased significantly at 1 month, 6 months, 12 months, and 24 months. Plasma renin activity significantly decreased at 7 days, 1 month, 6 months, 12 months, and 24 months, while aldosterone levels significantly decreased at 6 months, 12 months, and 24 months. Endothelin-1 and vasopressin showed a significant increase and decrease, respectively, at 24 h, 7 days, 1 month, 6 months, 12 months, and 24 months. There was also a significant decrease in systolic and diastolic blood pressure at 3 months, 6 months, 1 year, and 2 years after the intervention. Conclusions: Epicardial LAAC in AF patients is associated with persistent neurohormonal changes favouring blood pressure reduction.

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Thank You !

