



inomagenTM
THERAPEUTICS



Series Seed

September 2023

Rishi Arora MD, Founder & CEO

NOTE REGARDING FORWARD LOOKING STATEMENTS

Some of the statements in the following presentation, our business plan, and elsewhere constitute “forward-looking statements.” These statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results expressed or implied by such forward-looking statements. All statements that address expectations or projections about the future, including statements about product development, market position, expected expenditures, and financial results, are forward-looking statements. Some of the forward-looking statements may be identified by words like “expects,” “estimate,” “continue,” “may,” “anticipates,” “plans,” “intends,” “projects,” “indicates,” and similar expressions. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, these statements are not guarantees of future performance and involve various risks, uncertainties, and assumptions and we cannot guarantee future results, levels of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of such statements. Accordingly, actual results or performance of the Company may differ significantly, positively or negatively, from forward-looking statements made herein. All information provided in this presentation is as of the date of the presentation and we undertake no obligation to update this information, unless required by law.

EXECUTIVE SUMMARY

Problem	<ul style="list-style-type: none">• Atrial Fibrillation (AF) is a growing epidemic affecting >6M in U.S.; major cause of stroke; annual incremental cost of AF in U.S. is \$26B• Current AF therapies including drugs and ablation are ineffective for many patients; only 50% efficacy for persistent AF
Solution	<ul style="list-style-type: none">• Supported by grants totaling >\$20M, our gene therapy targets major molecular mechanisms underlying AF with demonstrated effectiveness in proof-of-concept studies in two pre-clinical canine models• Inomagen is also developing the first transvenous method of facilitating endocardial gene delivery using reversible electroporation, overcoming known AAV challenges, with potential to transform the cardiac gene therapy industry• Inomagen's gene delivery procedure is similar to AF catheter ablation, with the potential for improved effectiveness surpassing ablation as the therapy of choice for AF treatment• Inomagen has an exclusive License Agreement with Northwestern University for a patent portfolio protecting the biologic and electroporation device therapies
Latest Progress	<ul style="list-style-type: none">• Demonstrated high levels of marker gene transfection in all regions of the left atrium (>70%) using a transcatheter approach; finalized electroporation parameters for gene delivery• Completed Phase I development with an engineering firm of a proprietary electroporation catheter for gene delivery• Two years remaining of a multi-year \$3.67M SBIR Fast Track Grant to determine optimal dose response before initiating IND enabling studies
Team	<ul style="list-style-type: none">• A team of industry veterans and key opinion leading cardiovascular physicians bring biotechnology and medical device experience to the company
Ask	<ul style="list-style-type: none">• Aim to raise \$2.0M Series Seed in Q4 2023 to advance development of a proprietary gene delivery system for IND enabling gene therapy studies, positioning company for a larger Series Seed round in 2024

THE SCIENCE

- The Problem
- The Solution
- How Our Therapy Works
- Advantages Over Ablation
- Procedural Ergonomics

THE PROBLEM: ATRIAL FIBRILLATION (AF)

AF is a **global epidemic** in the aging population with largely ineffective treatments available.

AF Epidemiology

- Prevalence has increase 3-fold in the past 50 years
- Lifetime risk of AF is 1 in 3 for people over 50
- The population >65yrs old will double by 2040
- Estimated by 2050 over 100M people worldwide will have AF
- Presently 6M Americans with AF increasing to 16M by 2050

AF Causes Significant Morbidity and Mortality

- Leading cause of Congestive Heart Failure (~50%)
- Risk of Stroke increases ~4-5x
- Risk of Heart Attack (MI) increases ~ 2x

The Consequences of AF

454,000

Hospitalizations annually in
the US

158,000

Number of AF related deaths in
the US annually

THE PROBLEM: INEFFECTIVE PRESENT THERAPIES

Drugs

- Less than 50% efficacy
- Can cause life threatening arrhythmias

Cardiac Ablation (Paroxysmal)

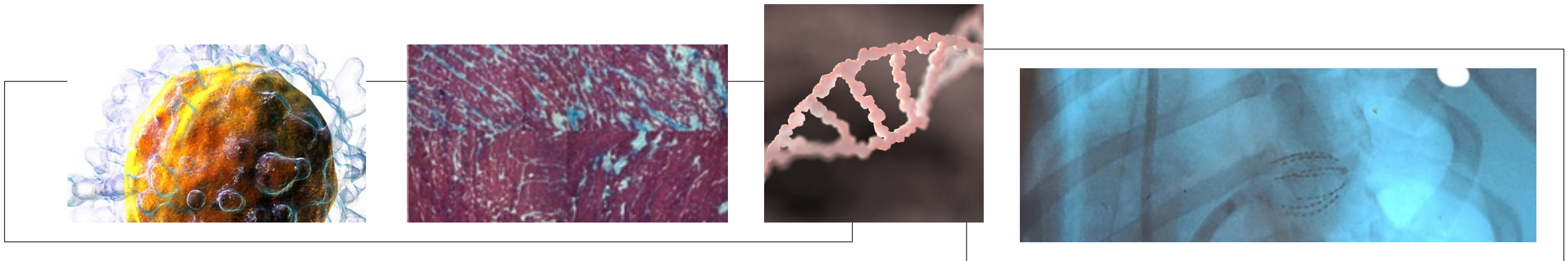
- 60-70% efficacy for early stage (paroxysmal)
- Irreversibly destroys cardiac tissue
- Risks of serious complications including mortality

Cardiac Ablation (Persistent AF)

- Ablation only 50% effective for Persistent AF
- Nearly 50% of all AF patients progress to Persistent (Chronic) AF
- Majority of these patients require a **second destructive ablation**

**Current
therapies do not
treat the
underlying
mechanism of the
disease**

THE SOLUTION: TARGETING MOLECULAR MECHANISMS



AF Induced Damage **Reactive Oxygen Species**

AF causes molecular changes in the heart resulting in the generation of damaging reactive oxygen species (ROS).

ROS Cardiac Changes **Remodeling of the Heart**

ROS result in ionic channel changes (electrical remodeling via defective Na⁺ and K⁺ channels) and fibrosis (structural remodeling) within the heart.

These changes progress as one goes from a paroxysmal AF to a persistent AF state making the disease increasingly more difficult to treat

Targeting the Problem **NADPH Oxidase (NOX2)**

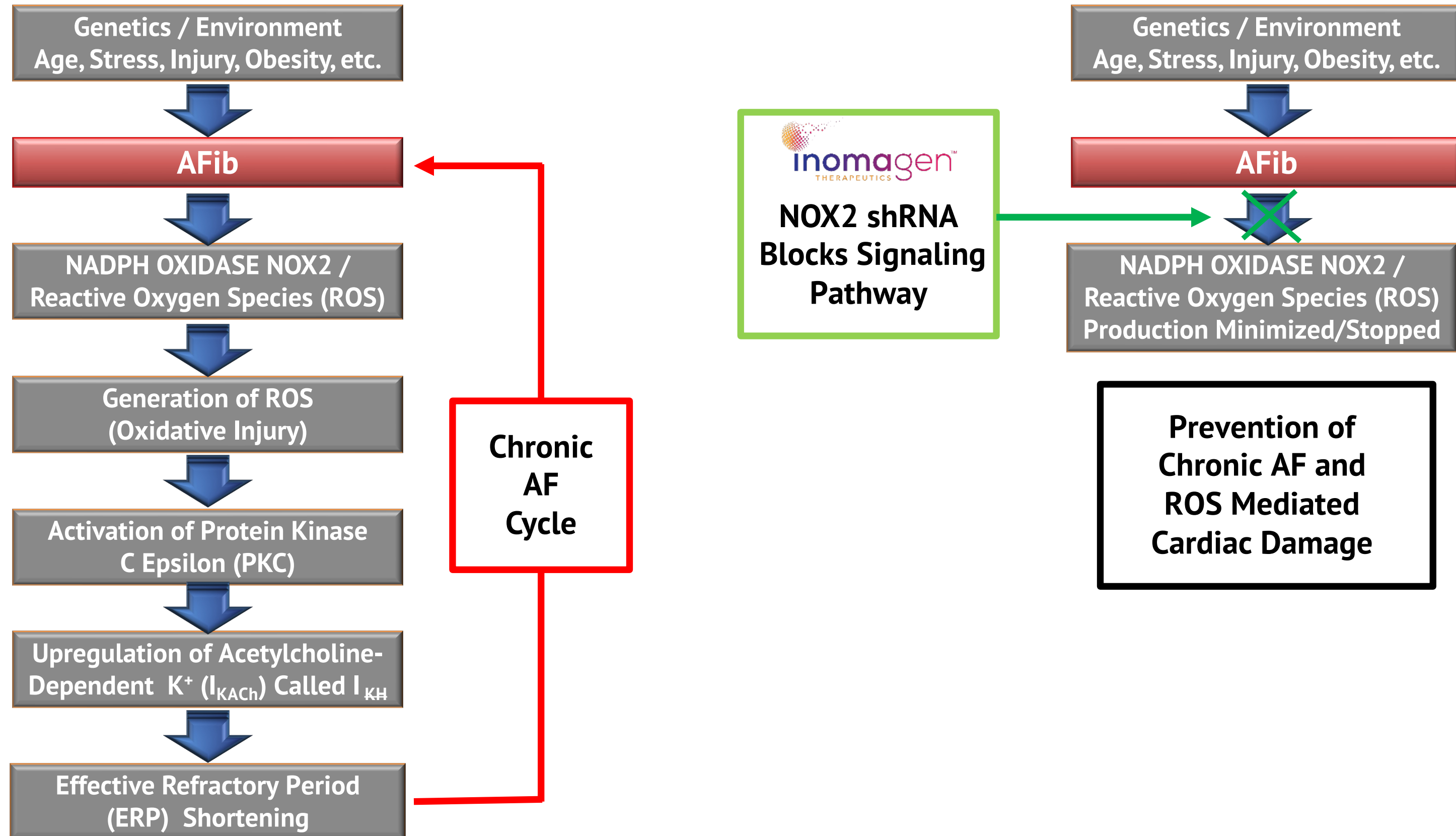
Inomagen has identified a transgene known as NADPH oxidase isoform (NOX2) as a major enzymatic source of oxidative injury in the atria.

Our Solution **Targeted shRNA Therapy**

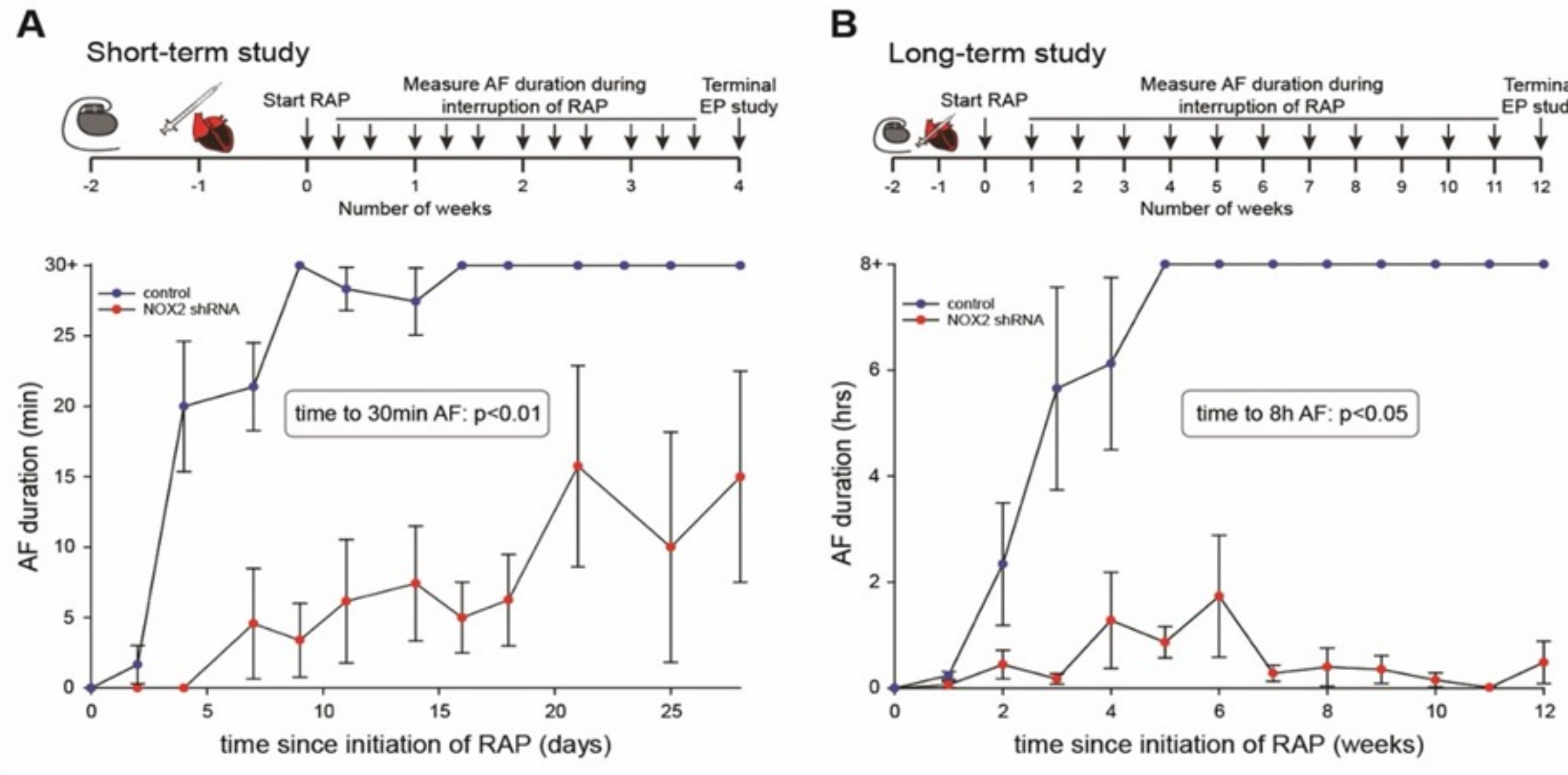
Inomagen demonstrated in over 40 Large Animal Studies that suppressing NOX2 gene expression using shRNA prevents chronic AF and can even reverse cardiac electrical and structural damage

Inomagen has obtained similar data for other proprietary targets and continues to expand our portfolio

HOW INOMAGEN'S NOX2 SUPPRESSION WORKS

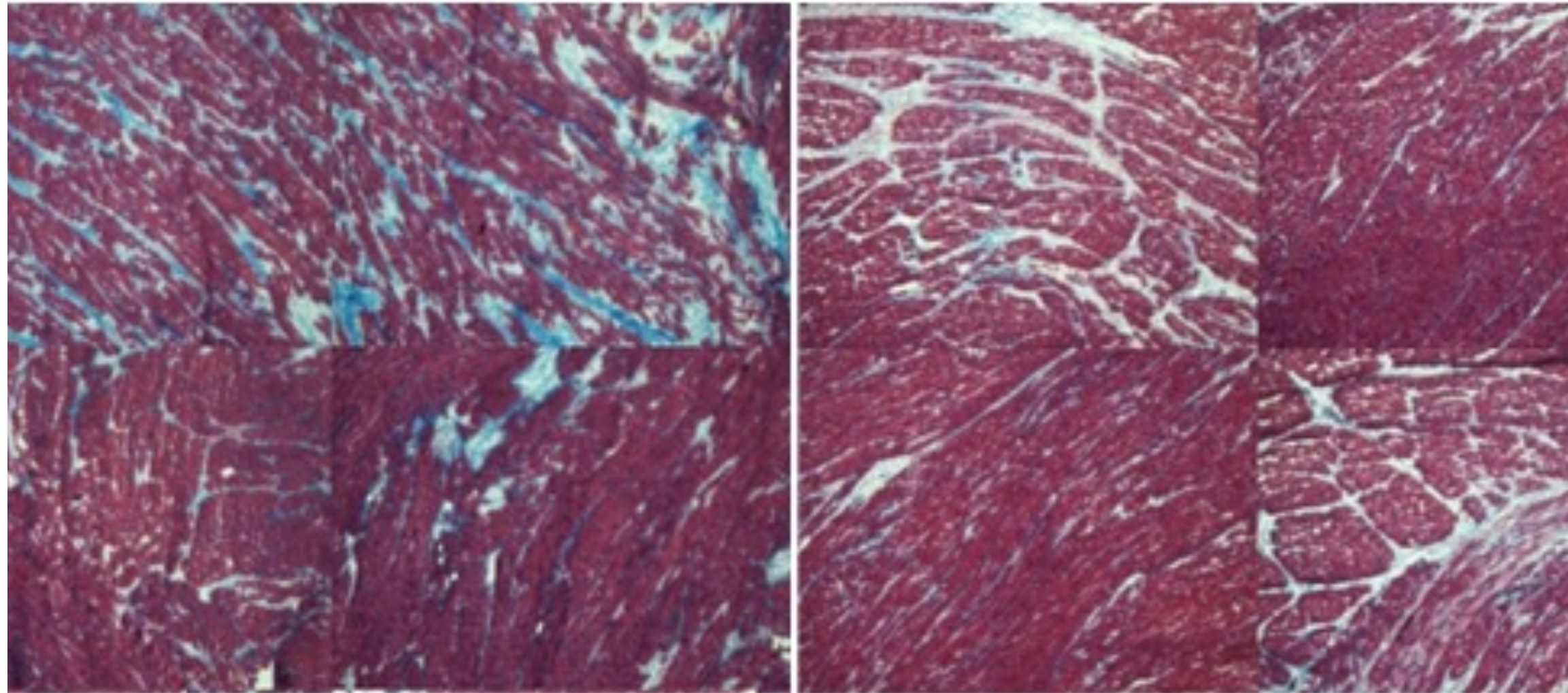


THE SCIENCE: PREVENTING ELECTRICAL REMODELING



Inomagen's Gene Therapy (NOX2 shRNA) prevented onset of AF in both a short and long term rapid atrial pacing (RAP) model

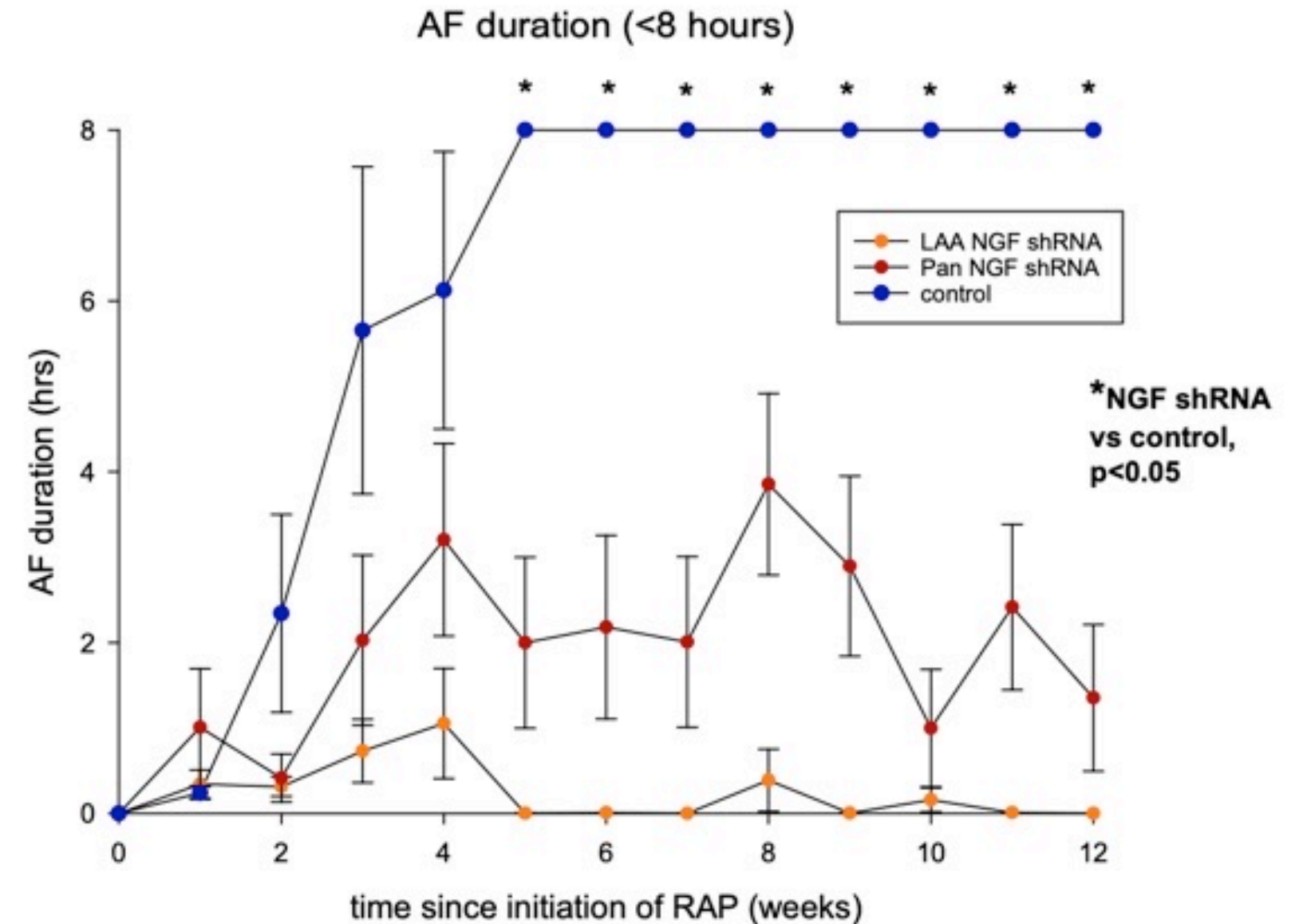
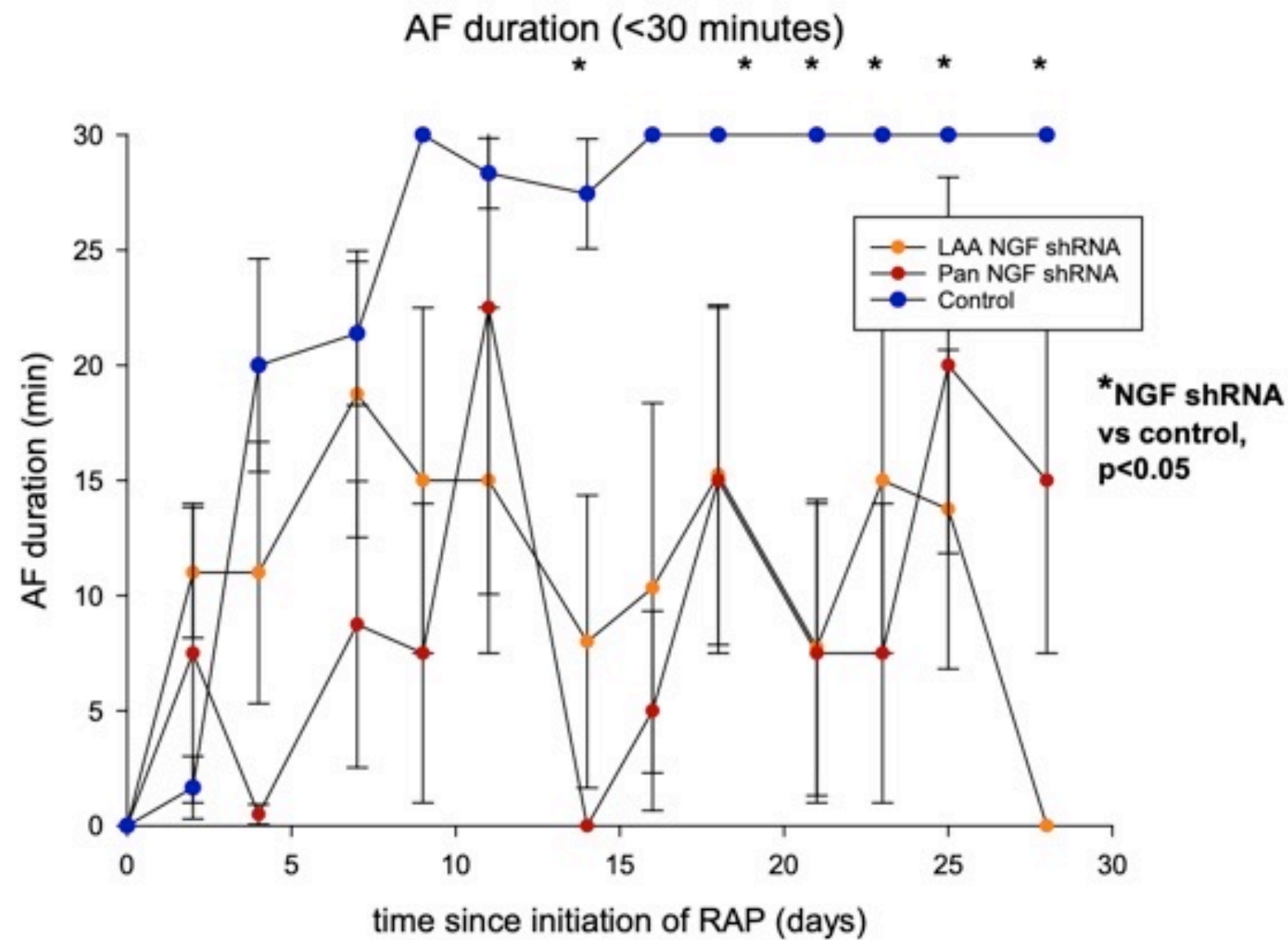
THE SCIENCE: MINIMIZING FIBROSIS



Blue=Fibrotic Tissue

Inomagen's Gene Therapy (NOX2 shRNA) Dramatically Reduced AF Induced Fibrosis (i.e., structural remodeling)

THE SCIENCE: ADDITIONAL TARGETS




Inomagen has identified other promising proprietary targets for future development (e.g., NGF shRNA targets autonomic nervous system)

POTENTIAL ADVANTAGES OVER AF ABLATION

	AF Ablation Shortcomings	Inomagen AF Gene Therapy Advantages
Efficacy	<50% for non-paroxysmal (persistent) AF representing a majority (2/3 rd s) of drug refractory patients	Goal of achieving >70% efficacy for all AF patients including persistent AF
Procedure Success	Up to 40% requires repeat procedures to identify and successfully ablate atrial heart tissue	Projected to be a single procedure with a consistent, reproducible atrial application of gene
Impact on Future AF Treatment	Destroyed atrial tissue from ablation procedures can limit future treatment options	None as no damage to heart tissue is expected
Safety	Higher risk of phrenic nerve damage (primary nerve of the diaphragm) and esophageal injury; Longer Procedure increases risk from a number of sources	Low risk as thermal energy sources are not utilized to burn heart tissue; Shorter Procedure decreases risk

A PROCEDURE FAMILIAR TO PROVIDERS

Catheter-based Procedure Steps	Cardiac Ablation	
1. Gain access via femoral vein	✓	✓
2. Navigate to the right atrium	✓	✓
3. Cross the atrial septal wall to the left atrium	✓	✓
4. Deliver non-destructive energy through the catheter	✗	✓
5. Deliver genetic material via catheter	✗	✓
6. Perform multiple therapeutic maneuvers in L and R atria	✓	✓
7. Remove catheters	✓	✓
8. Recovery in 24hr observation	✓	✓

Inomagen's Large Area Multi-polar Electroporation (LAMPE) procedure mirrors the steps of existing ablation – leveraging existing provider skills and facilitating easy adoption while allowing for targeted gene delivery instead of destructive ablation

GENE DELIVERY SYSTEM

- The Problem
- Our Method
- Our System
- Our Proprietary Parameters

AN EMERGING PROBLEM

Gene therapy in the ventricle is a rapidly growing area, with many companies developing AAV-based gene therapies for heart failure/cardiomyopathy.

AAV has been the main vector for delivering these gene therapies into the heart, however recent major setbacks in the field have exposed AAV's shortcomings including inflammation-related toxicity and even death in recent trials

Many well-funded gene therapy companies are seeking safe and effective gene delivery solutions to bring their life-saving therapies to patients

Gene therapy community grapples with toxicity issues, as pipeline matures

Cancer, hepatotoxicity, haematological and neurotoxicity concerns cause experts to call for more transparency and better manufacturing standards for AAV-based candidates.

Asher Mullard



News in Brief | [Published: 05 August 2020](#)

High-dose AAV gene therapy deaths

[Nature Biotechnology](#) 38, 910 (2020) | [Cite this article](#)

18k Accesses | 59 Citations | 89 Altmetric | [Metrics](#)

AAV for Cardiac Gene Therapy

Low Transfection Rates/ Off-Target Effects/ Immunogenic Mediated Toxicity

REVERSIBLE ELECTROPORATION MEDIATED GENE DELIVERY

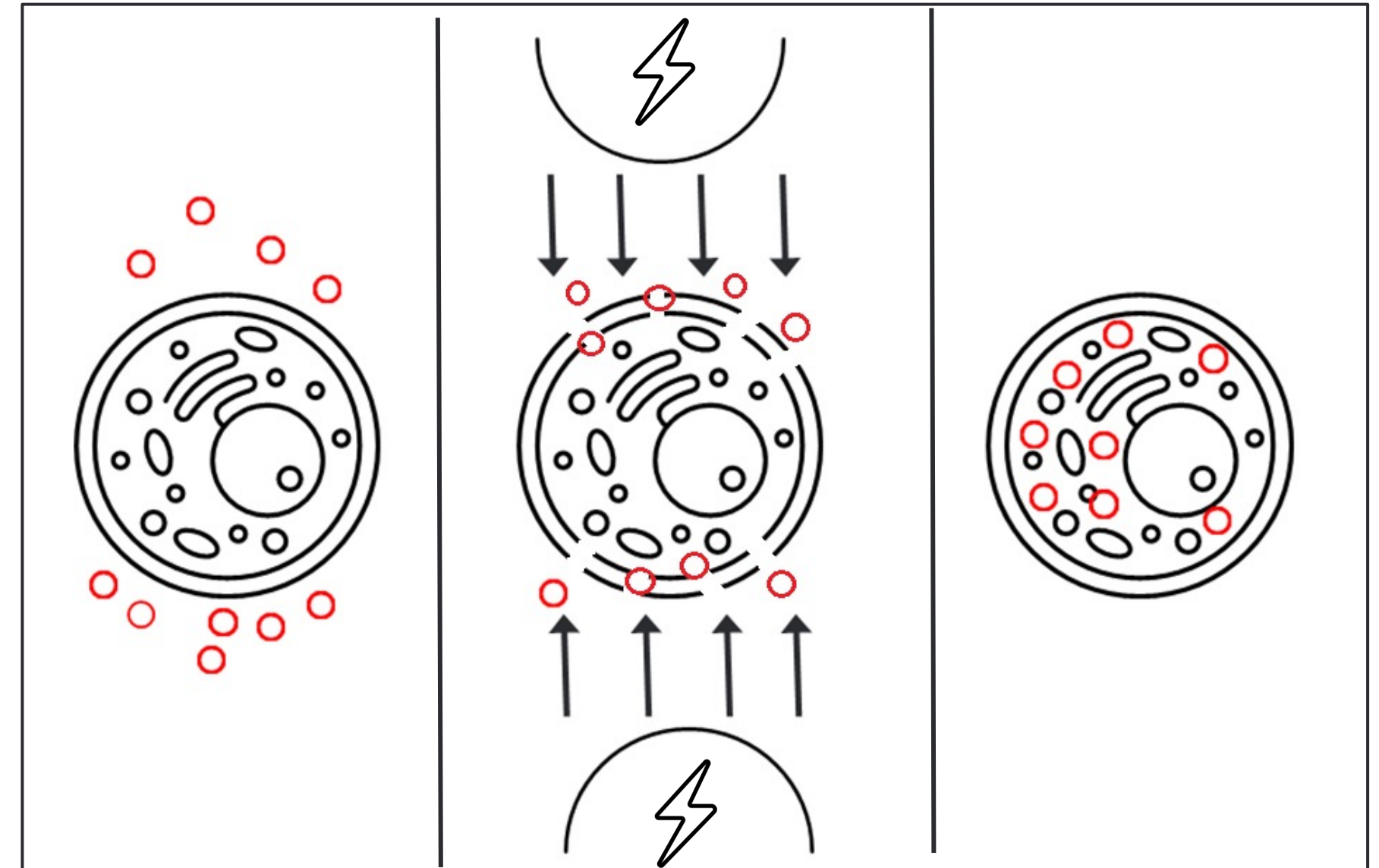
Delivery of genetic material to the cardiac atrium (the source of AF) is notoriously difficult with existing methods.

Inomagen has solved for this with a novel trans-venous method of facilitating endocardial gene delivery using Reversible Electroporation.

Our catheter applies a low voltage electric field to cells. This increases the permeability of the cell membrane wall, allowing DNA to be introduced.

This method allow for genetic material, packaged in Naked Plasmid DNA, to only be delivered directly to a specific site with no off-target effects!

Given the market and the need, Inomagen's gene delivery system has the potential to become a **platform technology** for endovascular gene delivery



Cardiac Myocyte

*Cell with DNA
package outside
the cell membrane*

Electroporation

*Low energy field
applied to cells by
Inomagen's Gene
Delivery System*

Transfection

*DNA package now
inside cell
membrane, cell
remains healthy*

OUR GENE DELIVERY SYSTEM

Exposed Ports For:

- Generator Leads
- ECG Leads
- Electroporation Catheter

Closed Tower Contains:

- Generator
- Pacer
- EPEL Box
- Recording System Amplifier

Electroporation Catheter (LAMPE):

- Catheter Basket
- Catheter Handle



PROPRIETARY GENE THERAPY PARAMETERS

Inomagen's extensive SBIR Phase I large animal work has developed valuable gene therapy parameters

(confidential)

- Gene Parameters
- Electroporation Parameters
- Timing Parameters

BUSINESS

- Business Model
- Target Market
- IP Estate
- Recent Inomagen Progress
- Timeline to Key Milestones
- Advocacy and Potential Exits
- Maximizing Investor ROI
- Our Team, Board, and Advisors
- Our Ask and Use of Proceeds

BUSINESS MODEL: SOLVING MULTIPLE NEEDS

Inomagen Therapeutics

Gene Therapy

NOX2 shRNA and
additional gene targets

Gene Delivery System

Targeted gene delivery
to cardiac tissue

Treating Chronic AF

- Prevention of Chronic AF
- Reversal of AF-induced electrical and structural damage

Gene Target Pipeline

- Additional proprietary targets; 2nd generation therapies
- Out-licensing opportunities

Inomagen's Therapy

- Deliver primary and future gene targets to atrial tissue

Platform Technology

- Expansion into cardiac ventricles (e.g., Heart Failure) for companies in need of a gene delivery solution

INOMAGEN'S TARGET MARKETS

\$10.2B

Atrial Fibrillation

\$12.5B

Ventricular Arrhythmia

\$17.5B

Heart Failure

AF Market (\$10.2B)

The lack of an ideal effective therapy creates the need for a new generation of treatments. If successful, Inomagen's gene therapy can ultimately surpass cardiac ablation.

Heart Failure Gene Therapy Market (\$17.5B)

As of 2022, there are 18 gene therapies under development. Given the expansive nature of the disease state, many more therapies are expected to be developed and in need of a gene delivery solution

Ventricular Arrhythmia Market (\$12.5B)

VA's have been targeted by gene therapy approaches to overcome the limitations of current treatments. As of 2022, there are 4 new molecular-based gene therapies in development with a strong market demand for new solutions.

ROBUST IP ESTATE

Extensive Patent Portfolio

Patent portfolio includes 13 issued U.S. patents covering:

- Biologics – multiple genes protected
- Gene delivery system

Exclusive License Agreement with Northwestern University

Inomagen has an exclusive and highly favorable license agreement with Northwestern University (NU) for the company's gene therapy technology

Additional IP Generation

Several patent applications are pending with additional IP filings expected in areas related to our studies outside of the AF application (e.g., heart failure, ventricular arrhythmias)

NU Reference No.	Patent Title	Issued Patents	Pending Applications
2007-044	Methods for Treating Atrial or Ventricular Arrhythmias.	United States 8,193,151	N/A
2009-022	Devices for Material Delivery, Electroporation, Sonoporation, and/or Monitoring Electrophysiological Activity.	United States 10,369,350	United States 16/533,265
2010-060	Compositions and Methods for Treating or Preventing Atrial Fibrillation.	United States 9,931,333	N/A
2012-055	Compositions and Methods for Treating Atrial Fibrillation.	United States 8,518,884	N/A
2012-059	Inhibition of Fibrosis and AF by TGF-Beta Inhibition in the Posterior Left Atrium (PLA).	United States 9,078,918	United States 16/458,326
2012-066	Using Intracardiac Electrograms to Predict Location of Fibrosis and Autonomic Nerves in the Heart.	United States 9,149,200 9,955,892	N/A
2012-144	Contribution of Oxidative Stress to AF Electrograms.	United States 9,615,758 9,907,479	N/A
2013-181	Inhibition of Oxidative Stress in Atrial Fibrillation.	United States 10,988,767 9,932,588 Germany/France/UK EP 3068440	United States 17/240,659
2017-178	Targeted Delivery of Biologic Therapeutic Agents.	United States 11,185,674	N/A

RECENT INOMAGEN PROGRESS

Product Development

- Demonstrated high levels of marker gene transfection in all regions of the left atrium ($\geq 70\%$) using a transcatheter approach; finalized electroporation parameters for gene delivery
- Confirmed NOX2 as our primary target for AF, with ongoing development of gene target pipeline
- Completed initial lead-in animals at CRO to achieve readiness for gene dosing studies
- Completed Phase I development of proprietary electroporation catheter with engineering firm
- Refined program timelines and regulatory strategy; preparing INTERACT submission in Q3'23

Business

- Hired Chief Medical Officer, Dr. Gerard Abate
- Formally added two new Advisors to the company: Dr. Kenneth Ellenbogen, 2023-2024 President-Elect of the Heart Rhythm Society; and Gregg Sutton, veteran medical device engineer and executive
- Raised additional \$400k on convertible note, including 1st angel group (Chicago Arch Angels in Jan'23)

OUR ASK

SEEKING EQUITY INVESTORS

\$2M Series Seed Offer

Inomagen is raising up to \$2M Series Seed round to ensure that the company can achieve key milestones and progress towards our IND filing in late 2025.

TARGET CLOSE

Q4 2023

ANTICIPATED RUNWAY

12-14 Months

Use of \$2M Series Seed Proceeds

Gene Delivery System Development

Continue design, development, and testing of our Gene Delivery System (Low-Energy Electroporation Cardiac Catheter and Pulsed Field Generator).

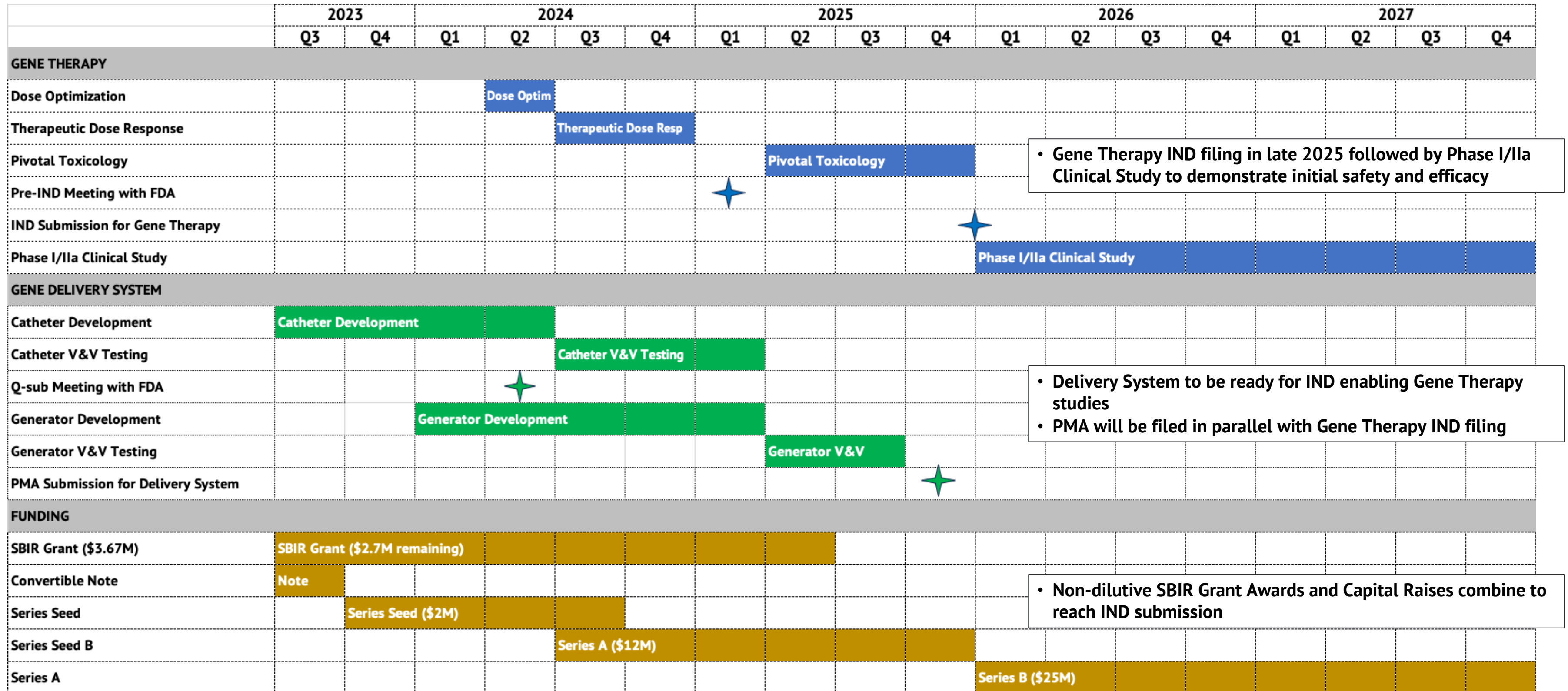
Regulatory Consultant Support

Continue to fund our team of gene therapy and medical device regulatory experts to ensure successful FDA Q-Sub and Pre-IND Submissions

Planned Achievements with Series Seed Proceeds

1. Fully built Cardiac Gene Delivery Catheters for IND enabling studies
2. Optimization of Proprietary Plasmid Vector
3. First NOX2 Therapeutic Dose Response results
4. Completion of FDA INTERACT and Q-sub meetings

GENE THERAPY PROGRAM TIMELINE



• Gene Therapy IND filing in late 2025 followed by Phase I/IIa Clinical Study to demonstrate initial safety and efficacy

• Delivery System to be ready for IND enabling Gene Therapy studies
 • PMA will be filed in parallel with Gene Therapy IND filing

• Non-dilutive SBIR Grant Awards and Capital Raises combine to reach IND submission

ADVOCACY AND POTENTIAL EXITS

Advocacy and Business Development

Inomagen continues to build awareness of our scientific advancements at major conferences and with key opinion leaders

Potential Exits

Two likely exit windows:

- Filing of IND with proof-of-concept in large animal models
- End of Phase I/IIa clinical study with preliminary human safety and efficacy data

Prospective Acquirers

- Strategic Device Companies with a stake in AF therapies and pulse field ablation platforms
- Large Pharma seeking novel therapeutic solutions for AF, and/or non-AAV gene delivery solutions for CHF

MAXIMIZING INVESTOR ROI

Inomagen Leverages Non-Dilutive Funding Opportunities

Inomagen has been able to minimize early investor dilution and maximize potential returns through the use of Government Grant Funding

- \$3.67M NIH/NHLBI SBIR I and II Grants
- \$20M+ NIH Grants to NU Arora Lab

Industry Highly Values Next Generation AF Solutions

In 2021, Boston Scientific acquired pre-revenue Farapulse, Inc. for \$786M in total value

In 2022, Medtronic acquired pre-revenue Affera, Inc. for \$904M



National Institutes
of Health



MEET THE TEAM



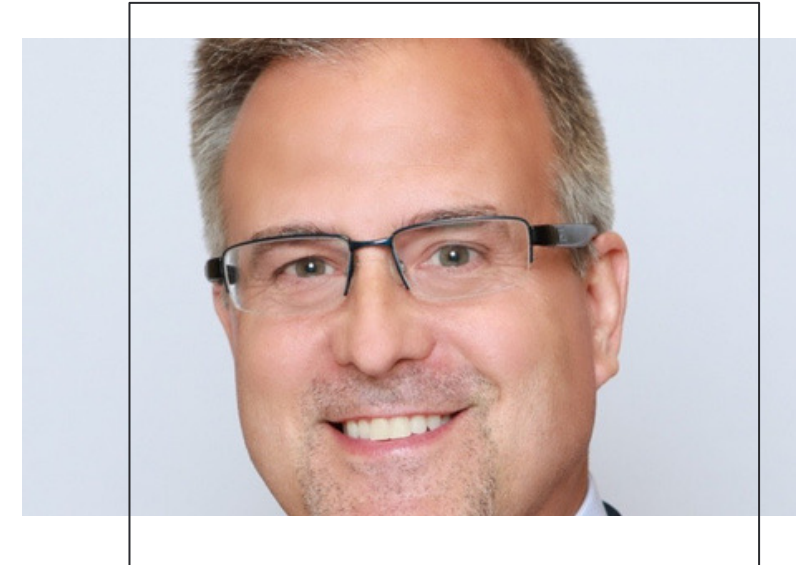
Founder & CEO
Rishi Arora MD

Dr. Arora is a well-published physician-scientist and a key thought leader in the area of atrial fibrillation. In addition to being a practicing electrophysiologist, Dr. Arora runs one of the busiest laboratories at Northwestern University where he has raised over \$20M in NIH grants for his work on AF therapies.



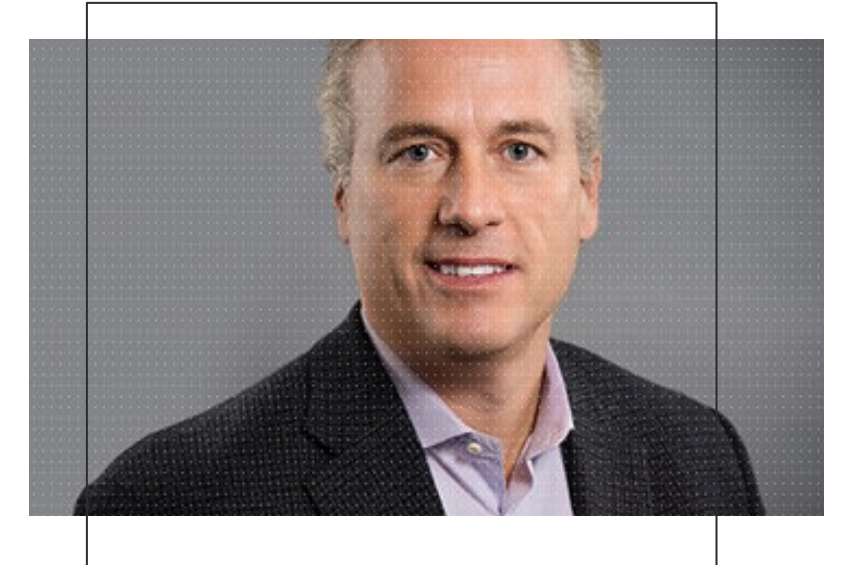
Chief Medical Officer
Gerard Abate MD

Dr. Abate has a background as a clinical cardiologist and is well experienced in the healthcare industry. Over the past 30 years Dr. Abate has held numerous Pharma/Diagnostics leadership roles including Amarin Pharmaceuticals, Daiichi Sankyo, Atherotech, and as the Executive Director of Medical Affairs at Quest Diagnostics.



Chief Business Officer
Eric Sandberg

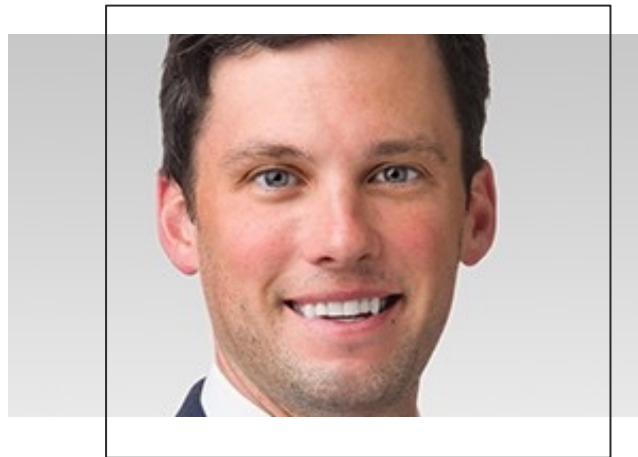
Eric has 30+ years of medical technology leadership experience at Guidant, Boston Scientific, Axogen and several start-up ventures, in roles that have included CEO, CBO, and CCO, and brings significant commercial experience in the cardiovascular space including cardiac rhythm management.



Chief Financial Officer
Scott Jordan

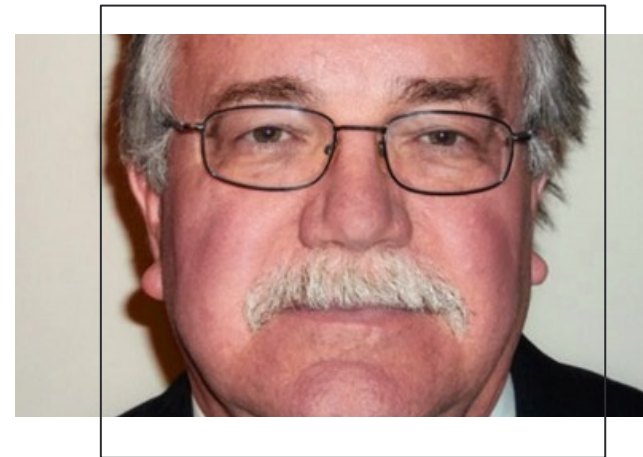
Scott is a FINRA licensed representative with 30+ years of experience as a life sciences business development executive, and investment banker. Previously, Scott was CFO of two early-stage companies, Iterion Therapeutics and Salarius Pharmaceuticals. As a result of the company achieving pivotal financing and scientific milestones, Salarius listed on NASDAQ via a reverse merger with Flex Pharma in July of 2019.

MEET THE TEAM



Chief Operations Officer
Paul Connors MD, MBA

Dr. Connors is a board-certified Anesthesiologist and has extensive experience advising healthcare and life-science startups on how to effectively navigate large healthcare organizations and create successful strategic plans. He also has experience as a medical director at Northwestern University and holds an MBA from the University of Chicago.



SVP Gene Therapy R&D
Robert Moen MD, PhD

Dr. Moen is a seasoned veteran of the gene therapy space with over 30+ years industry experience primarily in cellular and gene therapy with Baxter, Geneic Sciences, and Genetic Therapy Inc. He has extensive experience designing IND-enabling experimental protocols and is well versed in clinical, regulatory, and quality systems development and management.



Lead Engineer
David Johnson

David is a highly skilled biomedical research engineer with extensive time in both industry and academia. He time includes 17 years at GE Healthcare, and experience as a compliance CTO in the nuclear pharmaceutical industry. In addition to his role at Inomagen, David works with Dr. Arora in his lab as a gene therapy research engineer.



Manager, Business Dev
Toby Barrack MD, MBA

Toby is a Physician, Investor, and Entrepreneur who works closely with early-stage teams leveraging broad networks and experience to minimize risk and maximize value. He currently sits on the physician advisory boards of several Venture funds in the Chicago area in addition to being a founding partner at Syndicate Health Healthcare Operations Consulting. Toby holds an MBA from Northwestern University's Kellogg school of management.



Manager, Clinical Science
Jim Hausserman MD, MS

Jim has a microbiology and bacterial genetics background with extensive experience advancing early-stage life science startups. Having a medical degree has enabled him to excel in translational research, pushing cutting-edge science towards the clinic through regulatory assistance, clinician outreach, and study design.

BOARD OF DIRECTORS AND ADVISORY BOARD



Board of Directors
Peter McNerney

Pete is Adjunct Professor in Healthcare at Kellogg at Northwestern University, and Founder and Senior Advisor to Thomas McNerney and Partners.

He has 30+ years healthcare operations and venture capital including Baxter, Memtec N.A., The Kensington Group, and Coral Ventures. He has served as President of the Minnesota Venture Capital Association and the Board of Trustees of Blue Cross and Blue Shield of Minnesota. Pete received a B.A. from Yale and MBA from Stanford University.



Board of Directors
Mark Penn MD, PhD

Dr. Penn is a renowned Cardiologist who has helped pioneer and commercialize several important innovations in his field, while establishing two parallel careers as an inventor and healthcare investor. Currently, Dr. Penn is a practicing cardiologist and director of research at the Summa Health Heart and Vascular Institute (Akron, Ohio), as well as director of the Institute's Cardiovascular Medicine Fellowship. He is also professor at Northeast Ohio Medical University where he leads the Skirball Laboratory for Cardiovascular Cellular Therapeutics.



Board of Directors
Jim Vogler JD

Jim is senior partner in Barack Ferrazzamo LLP's Litigation and Intellectual Property Groups. He has served on several business boards, including U.S. Laboratories Inc. and Pharos Innovations LLC. He is admitted to practice in the State of Illinois, the U.S. Supreme Court, the Fifth and Seventh U.S. Courts of Appeal, and numerous U.S. District Courts. Additionally, he has served on the non-profit boards of Rise International, which builds schools in rural Africa (over 190 to date); Children's Heart Foundation; Williams Heart Foundation; and The Chicago Foundation.



Advisory Board Member
Ken Ellenbogen MD

Dr. Ellenbogen is director of cardiac electrophysiology and pacing at VCU Health. He is 2023-2024 President-Elect of the Heart Rhythm Society, and has served as a Chair of the Education Committee and member of the Board of Trustees. He has published more than 350 original scientific reports and over 200 book chapters, editorials and review articles. He is the editor or co-editor of five textbooks of cardiac electrophysiology and pacing, and has presented over 300 abstracts at major scientific meetings. He has served on the editorial boards of multiple journals, including *Heart Rhythm*.



Advisory Board Member
Alan Kadish MD

Dr. Kadish is President of The Tuoro College and University System. He has served as Director of Clinical Trials, Distinguished Professor of Cardiology, and Associate Chief of Cardiology at Northwestern. He distinguished himself as a prominent cardiologist, dedicated teacher and researcher, and experienced administrator. An accomplished and prolific research scientist, he has published over 250 peer-reviewed papers, received numerous grants, including from the NIH and the National Science Foundation, and contributed to several textbooks.




Advisory Board Member
Gregg Sutton

Gregg has >30 years of engineering experience in the medical device industry including several highly successful early-stage device development companies, including Surmodics, NorMedix, Atritech, Angioguard, and Vascular Solutions,, leading teams in development and launch of high-profile, first-of-their-kind devices, including the Watchman device. With a degree in mechanical engineering and >40 patents granted or pending, Gregg has substantial experience in all aspects of medical device development, including IP, design, product development, and mfg.

CONTACT INFORMATION

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Get Social



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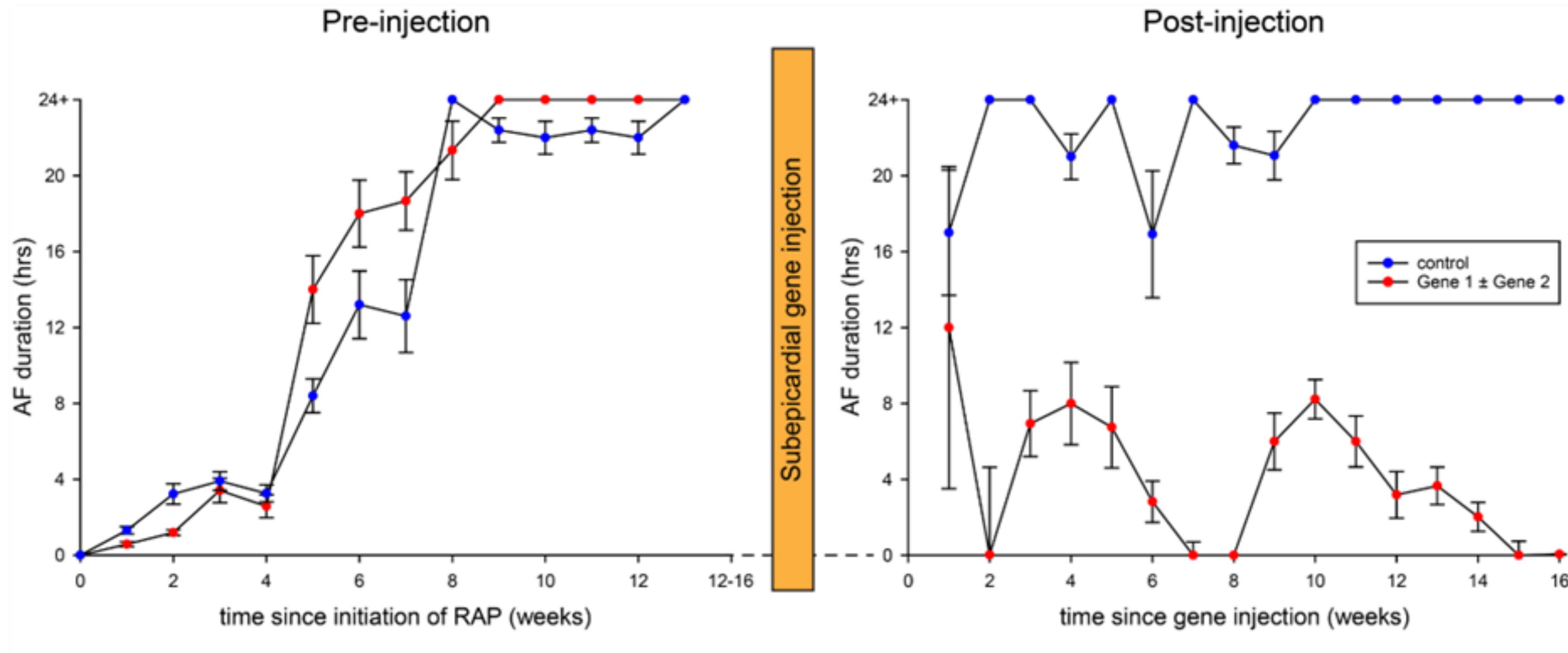
RISHI ARORA MD, FOUNDER & CEO
ERIC SANDBERG, CBO
SCOTT JORDAN, CFO

APPENDIX:

Additional Pre-Clinical Evidence

- Reversing AF
- Endocardial Gene Transfection

THE SCIENCE: REVERSING AF

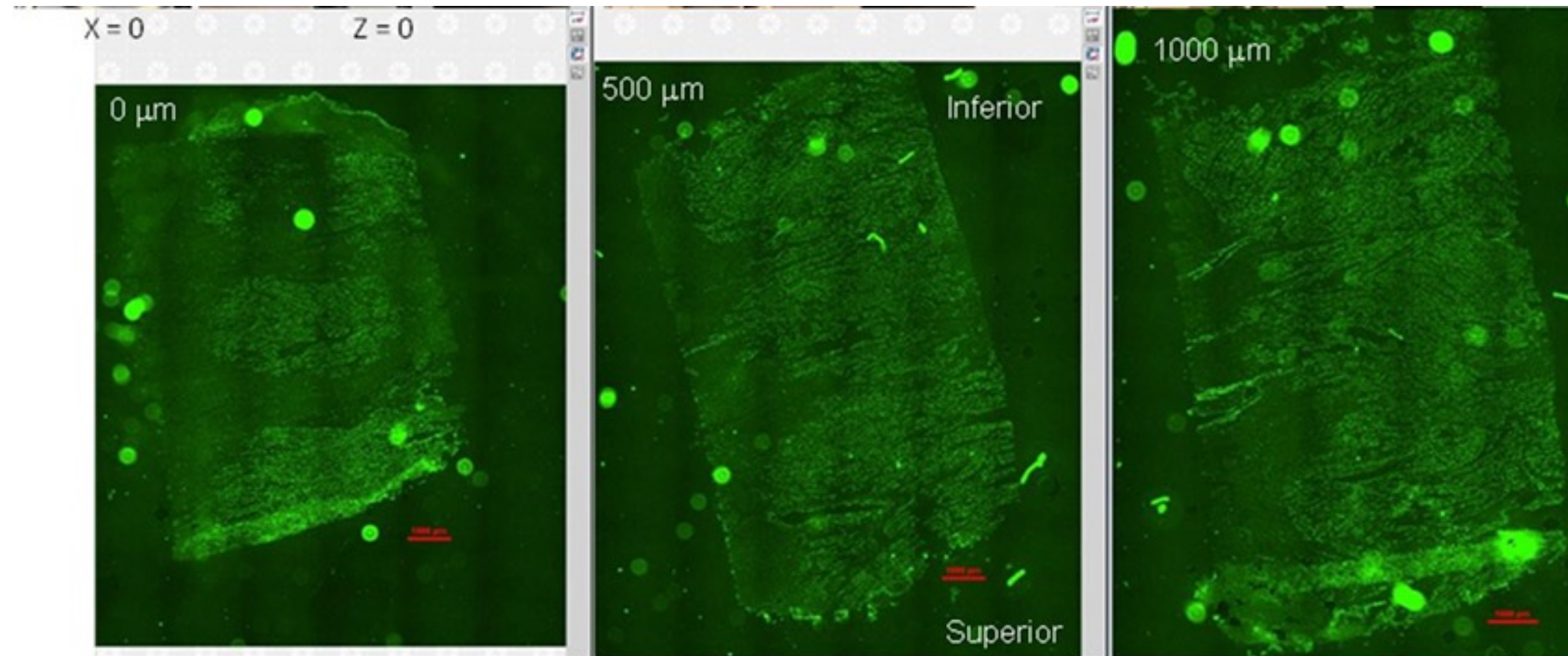


Gene 1 ± Gene 2 = 3, Controls =

4

**Inomagen Gene Therapy (NOX2 shRNA) reverses AF
in a large animal rapid atrial pacing (RAP) model**

THE SCIENCE: ENDOCARDIAL GENE TRANSFECTION



Inomagen has proof of concept endocardial gene transfection data using low-energy electroporation; this data was supported by our SBIR Phase I Segment Study in 2022

CITATIONS

Slide 5

“Atrial Fibrillation.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 14 Oct. 2022, https://www.cdc.gov/heartdisease/atrial_fibrillation.htm.

Kornej, Jelena, et al. “Epidemiology of Atrial Fibrillation in the 21st Century.” *Circulation Research*, vol. 127, no. 1, 2020, pp. 4–20., <https://doi.org/10.1161/circresaha.120.316340>.

Wang TJ, Larson MG, Levy D, Vasan RS, Leip EP, Wolf PA, D’Agostino RB, Murabito JM, Kannel WB, Benjamin EJ. Temporal relations of atrial fibrillation and congestive heart failure and their joint influence on mortality: the Framingham Heart Study. *Circulation*. 2003; 107:2920–2925. doi: 10.1161/01.CIR.0000072767.89944.6E

Slide 6

Amuthan, Ram, and Anne B. Curtis. “What Clinical Trials of Ablation for Atrial Fibrillation Tell Us – and What They Do Not.” *Heart Rhythm O2*, vol. 2, no. 2, 2021, pp. 174–186., <https://doi.org/10.1016/j.hroo.2021.02.001>.

Slide 15

“High-Dose AAV Gene Therapy Deaths.” *Nature Biotechnology*, vol. 38, no. 8, 2020, pp. 910–910., <https://doi.org/10.1038/s41587-020-0642-9>.