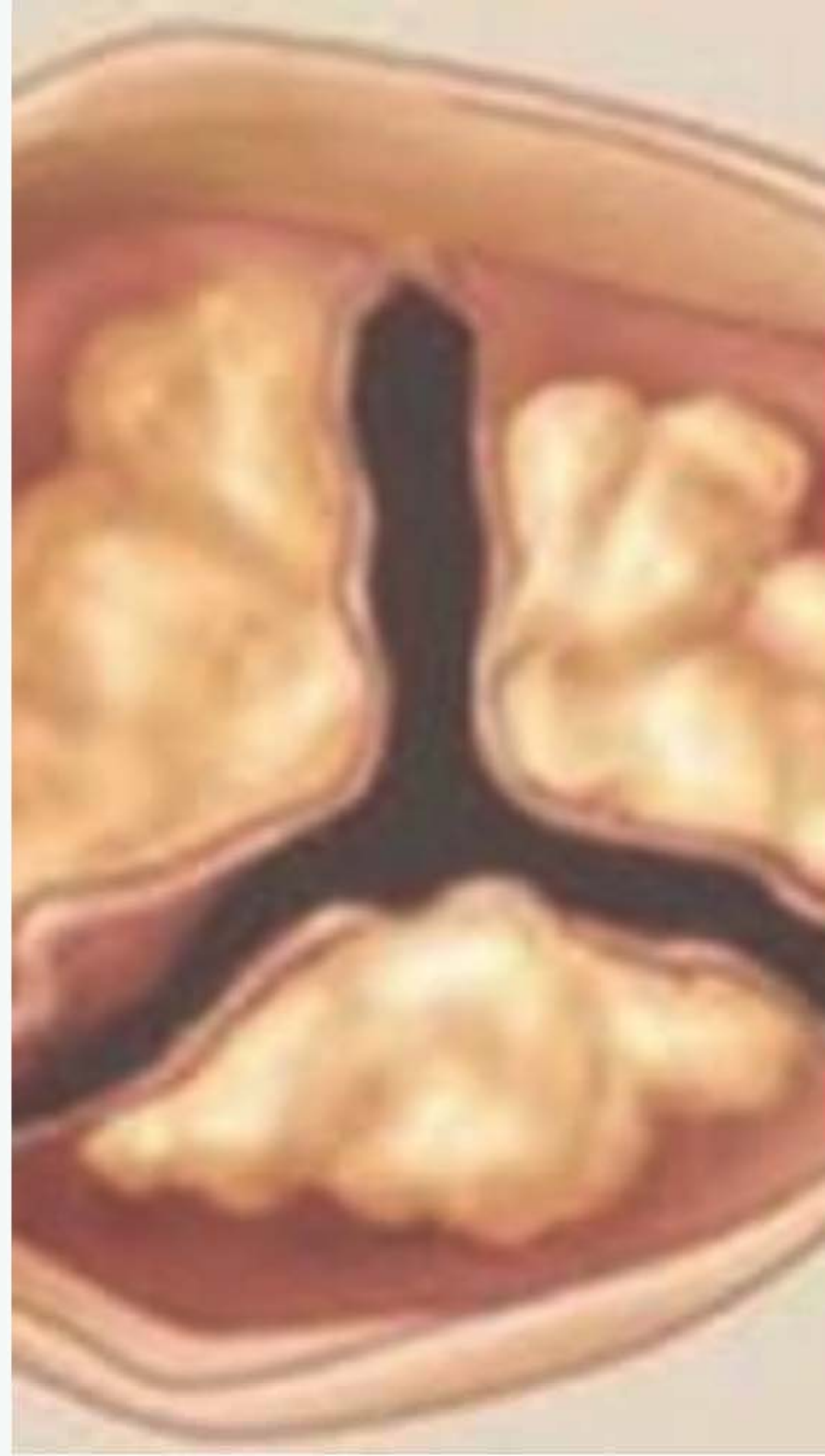
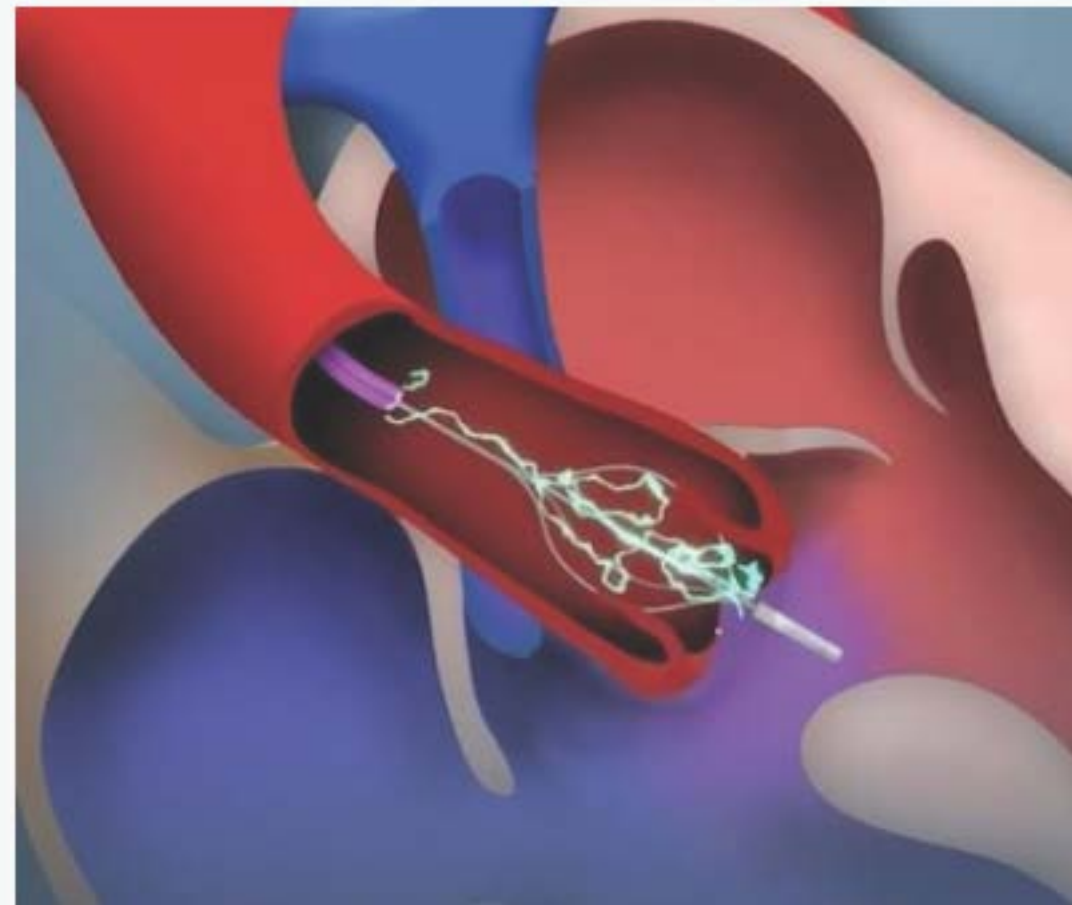


Valvublator

Regenerate your own heart valve early so you do not need a cow, pig, steel or plastic artificial implant later.

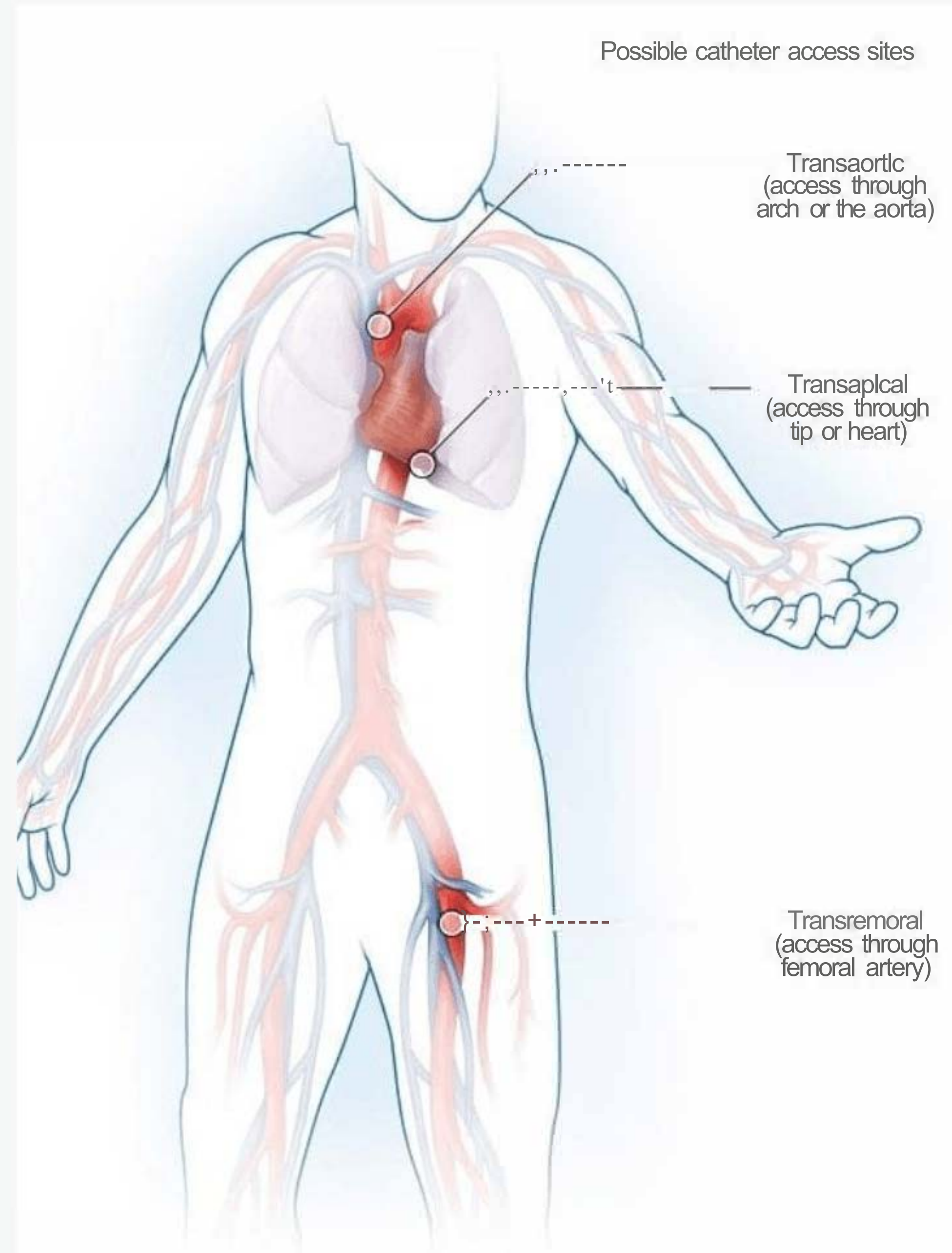
Howard J. Leonhardt,
Executive Chairman & CEO
www.valvublator.com



Valvublator

HEART VALVE REGENERATION

**Helping people
keep their own
heart valves
instead of getting a
copper, pig, steel or
plastic artificial
implant.**



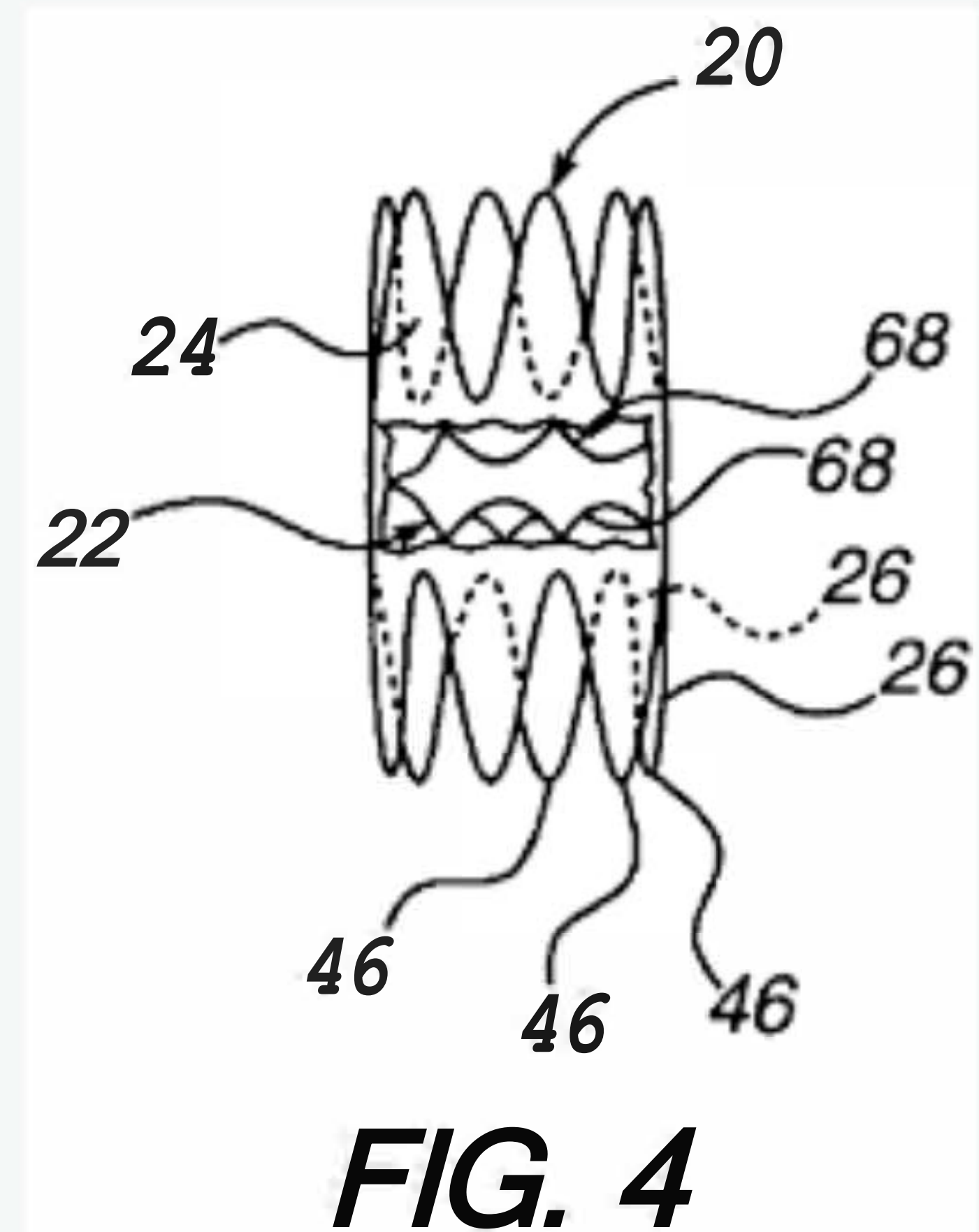
From the Team that Patented and Developed the First Percutaneous Heart Valve

United States Patent 5,957,949 Leonhardt, et al. filed May 1, 1997 based on 1988 notebook recorded invention

Percutaneous placement valve stent

Abstract

An artificial valve stent for maintaining patent one way flow within a biological passage is disclosed. The artificial valve includes a tubular graft having radially compressible annular spring portions for biasing proximal and distal ends of the graft into conforming fixed engagement with the interior surface of a generally tubular passage. A method of implanting the artificial valve is also disclosed.



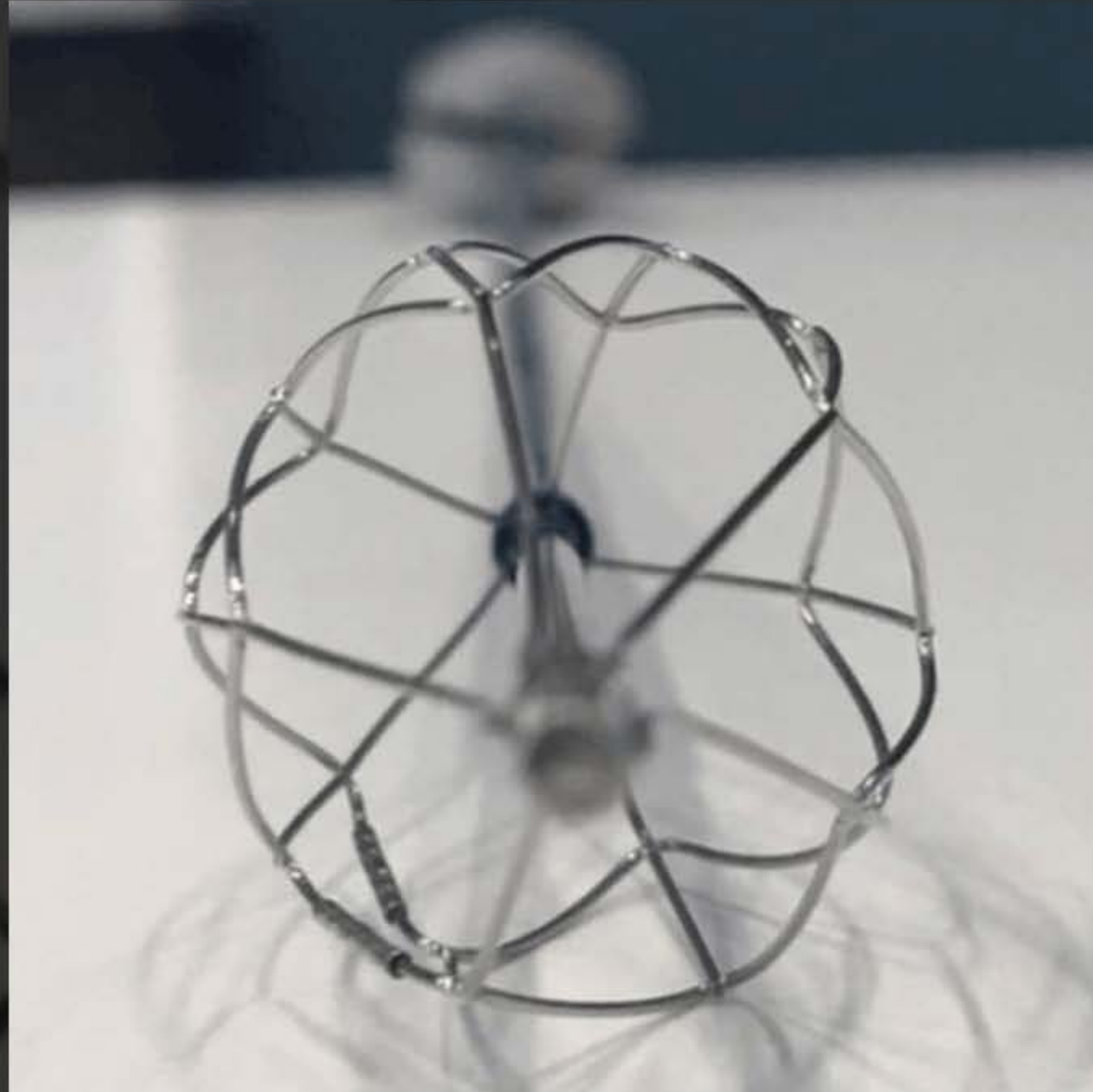
Inventors: Leonhardt; Howard J , Greenan; Trevor

AND... The world's leading
endovascular stent graft system



Introducing Valvublator II

Simplified Design

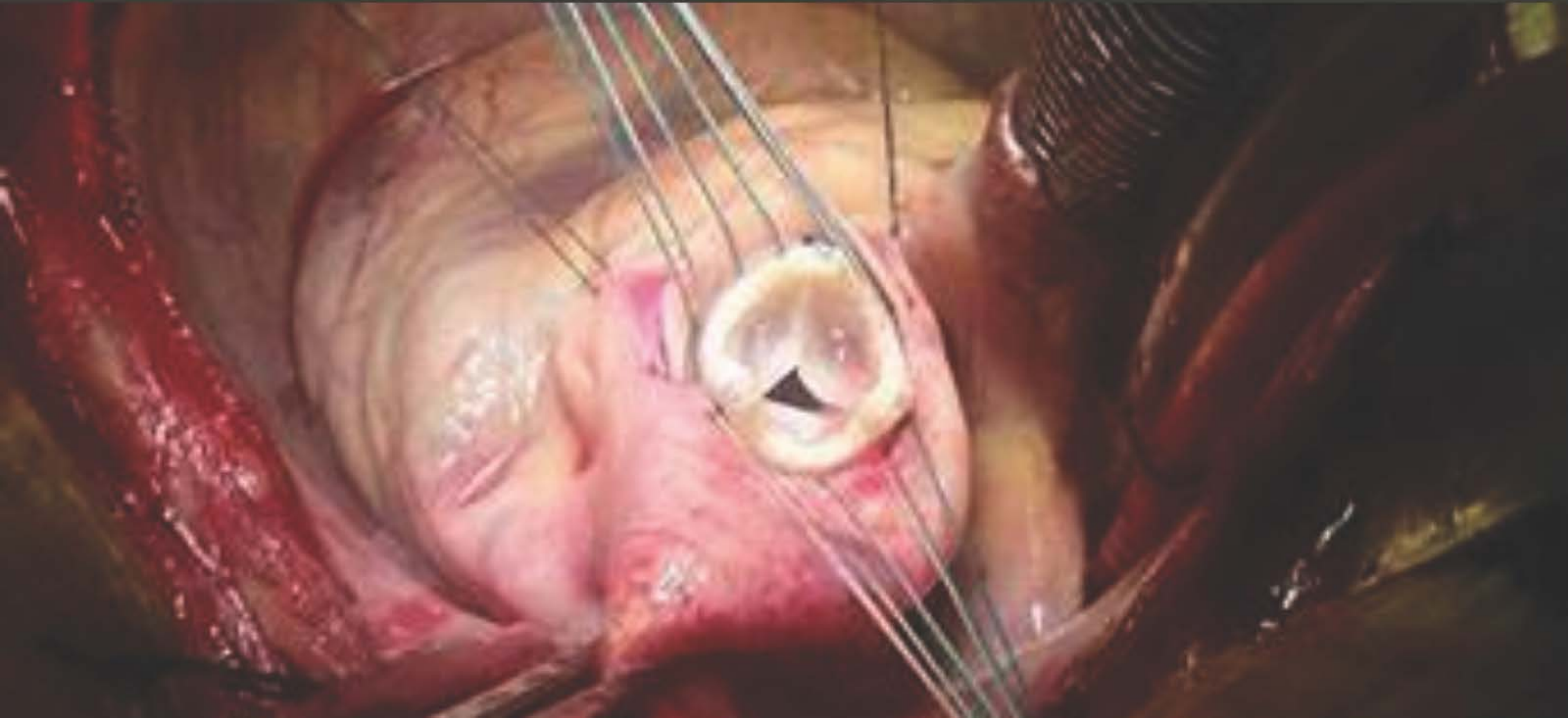


Valvulator 11

Simplified design

Placed in minutes. Open cage push button > decalcify. Push 2nd button > initiate regeneration.

Over 300,000 heart valve replacements are completed each year. Over 12 million people worldwide have calcified heart valves.



Progressive Risk Factors to Disease

Metabolic Syndrome
Obesity
Hypertension
Smoking
Renal Failure
Hyperlipidemia
Male Gender
Oxidative Stress
Age



**Normal
Aortic Valve**

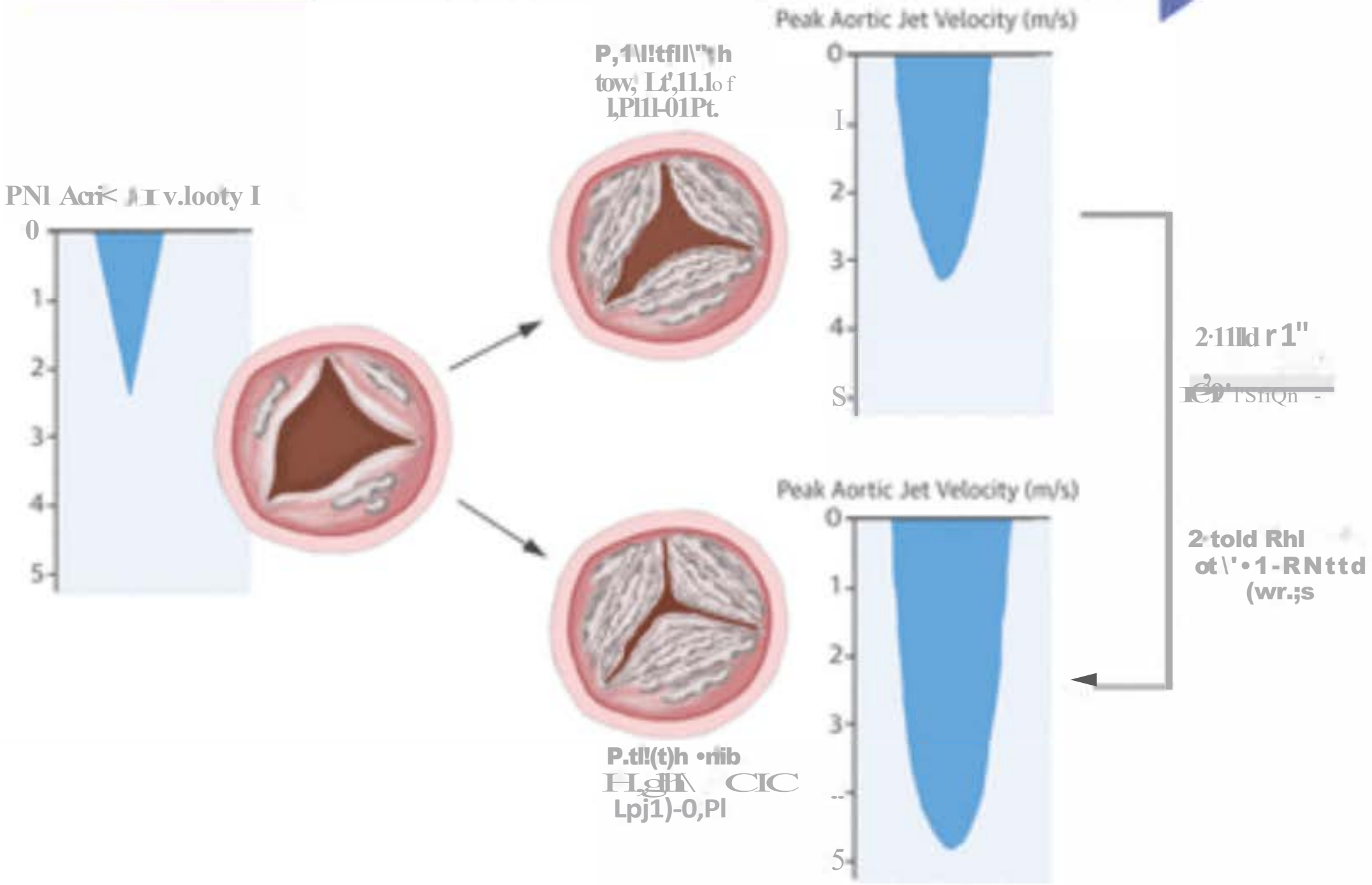


**Aortic Valve
Sclerosis**



**Calcific Aortic
Valve Disease**

Progression of Aortic Stenosis



Valvublator

**The New Paradigm
in Heart Valve Care**



***You don't wait until your teeth
are falling out and you need an
implant to go to the dentist. Why
wait until you need an implant to
get your heart valves
rejuvenated?***

"It is better to keep your own heart valve then to get an implant" Dr. Domingos Moraes Cardiac Surgeon

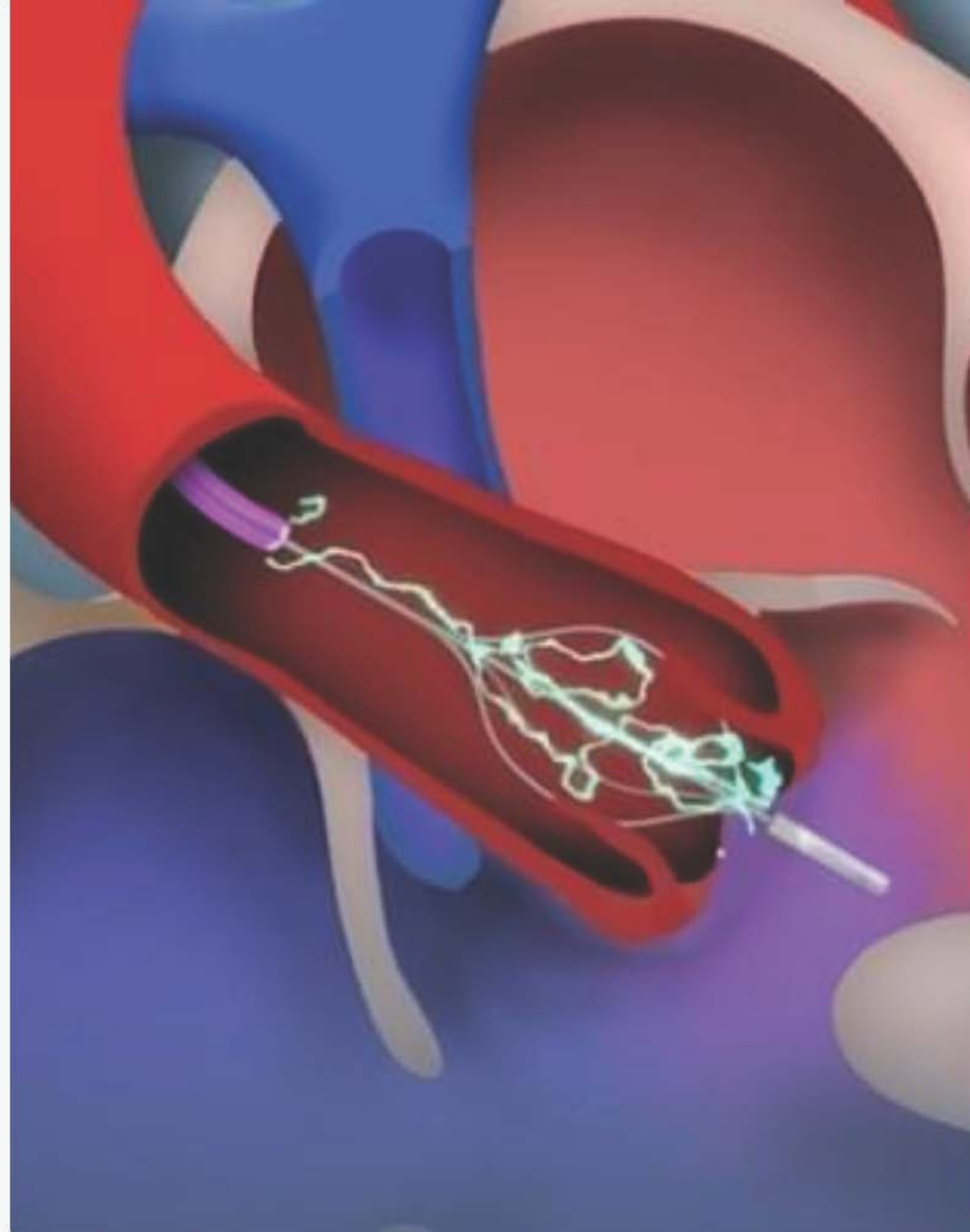
Heart Valves Should Be Regenerated NOT Replaced!

30%

of All Heart Valve Surgeries
and Implants are Avoidable

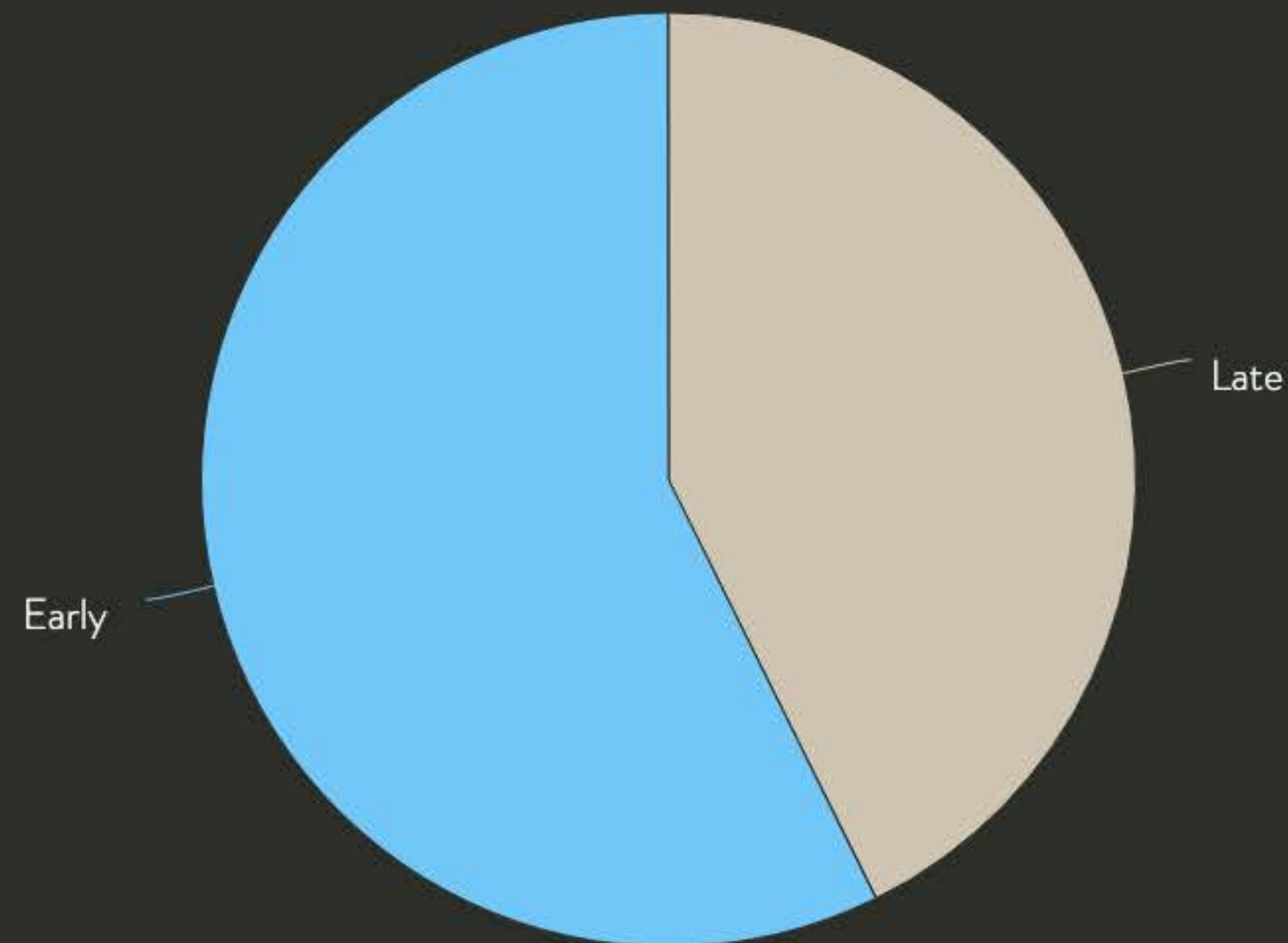
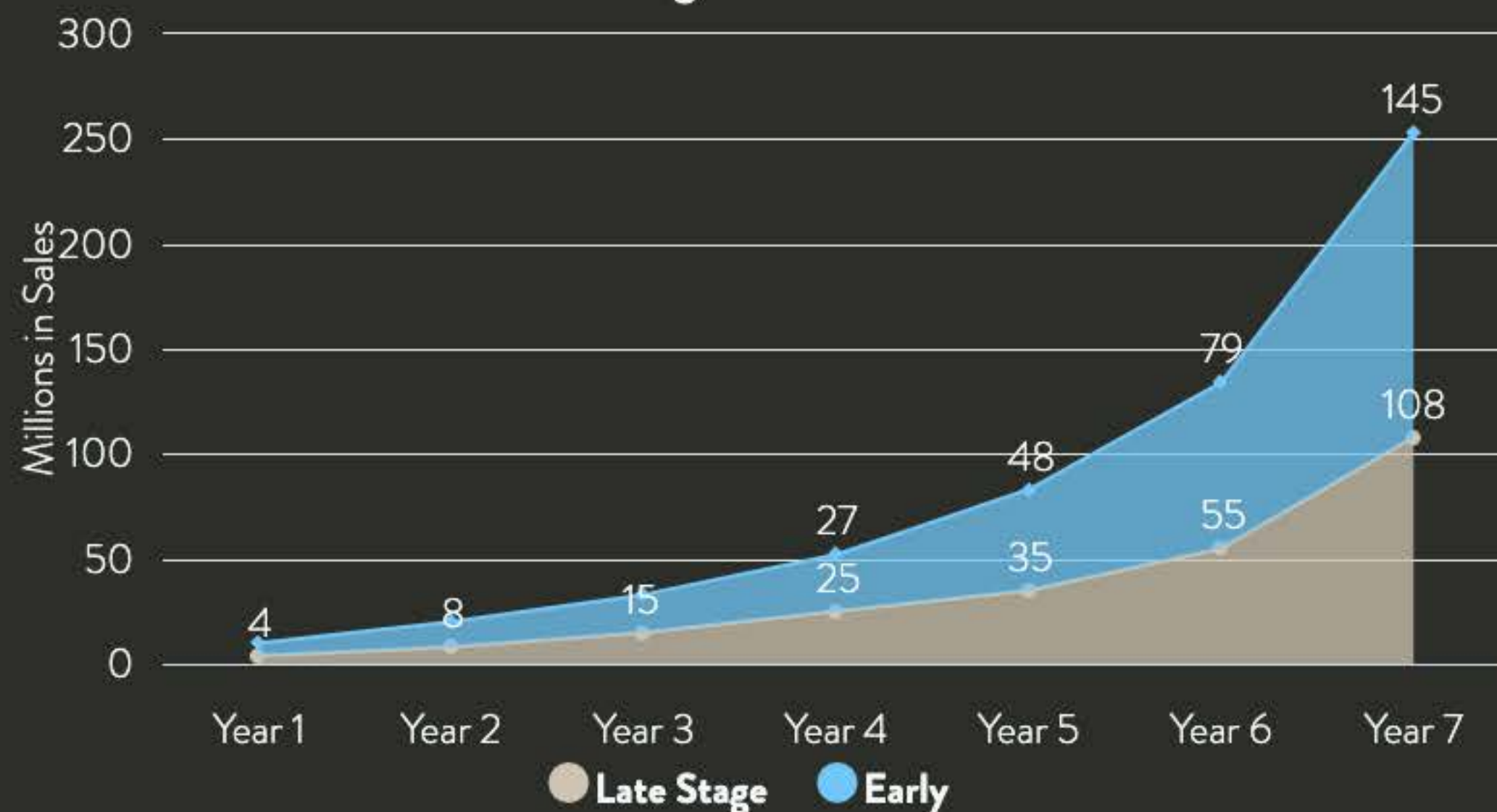
„ You are always better off keeping your own heart valve

Dr. Domingos Moraes, Heart Surgeon



Revenue Growth First 7 Years Post Market Approval

Projections





“

USD \$9.83 billion is the projected heart valve market for 2023 not even considering the totally unmet market of early rejuvenation.

Source:
[ResearchandMarkets.com](https://www.researchandmarkets.com)

Problem

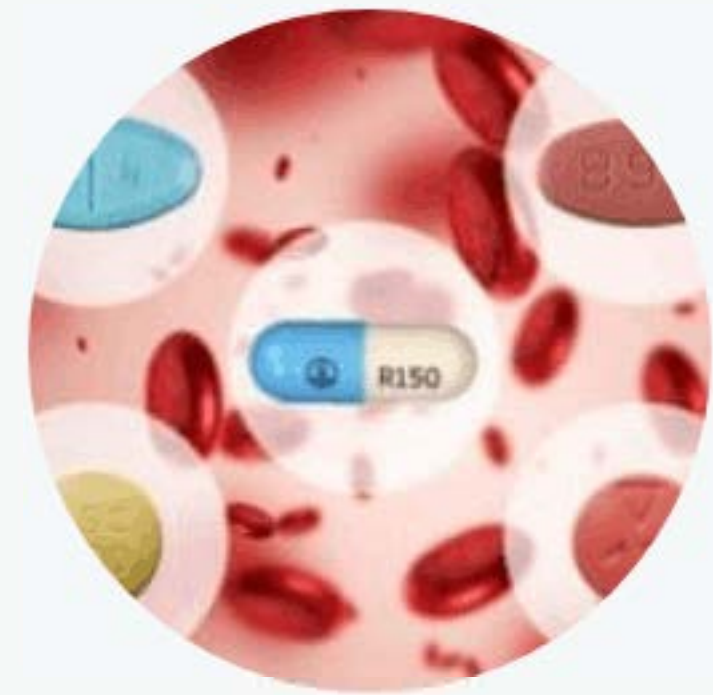
Artificial heart valves re-calcify or require blood thinners.
Placement has other associated risks (see below).

Percutaneous heart valve complications include major/minor stroke, life-threatening and major bleeding, vascular injury, Stage 3 kidney disease, new pacemaker implantation, and perivalvular leak



Problem 1

Biological heart valves
re-calcify in 3 to 10 years



Problem 2:

Steel heart valves
require blood thinners

Features of Valvublator

Via small puncture in groin valves are decalcified and regenerated within minutes. Simply followp periodic infusions and non-invasive electric stimulation controlled relase of klotho (patent pending) prevents re-calcification.

Note- Designed p..erformance claims intended not y.et p..roven in studies.

1. Easy to use.
2. Decalcifles heart valves quickly.
3. Regenerates heart valves.
4. Prevents re-calciflcation.

Valvublator

HEART VALVE REGENERATION

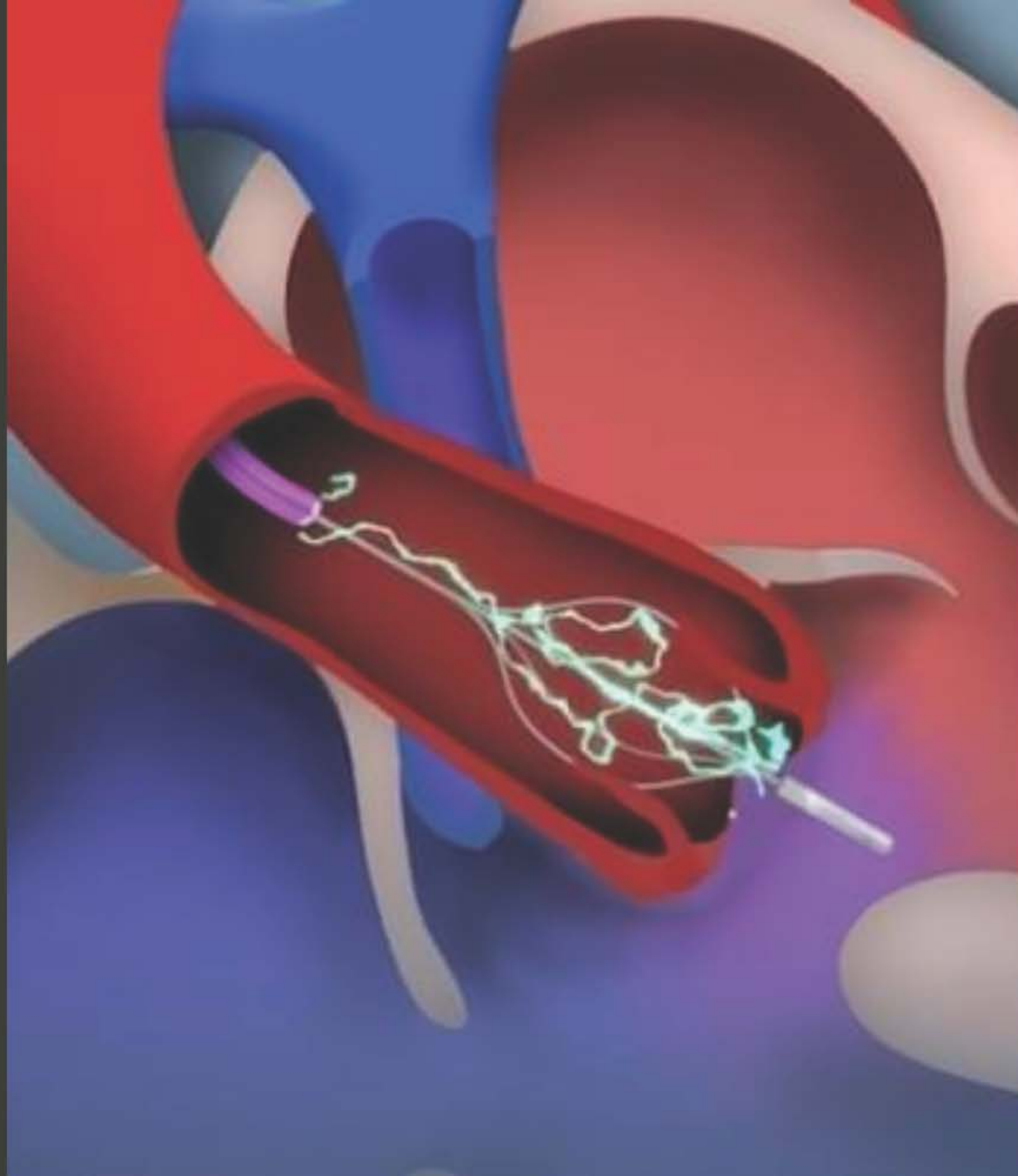
A red line graph resembling a heart rate monitor (ECG) is positioned above the word 'Valvublator'. The line starts with a small peak, followed by several smaller, regular peaks, and ends with a large, stylized heart shape.

Valvublator

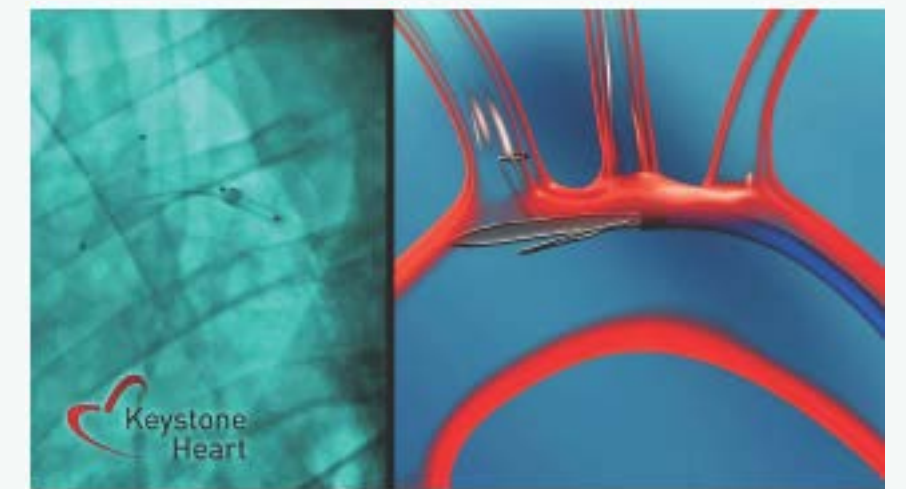
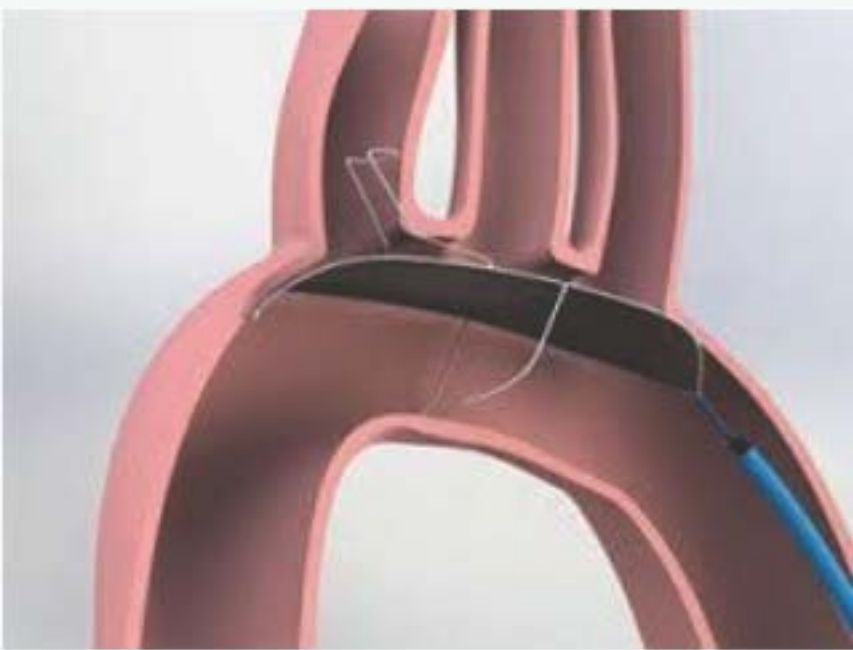
Simple to Use



In place within minutes.

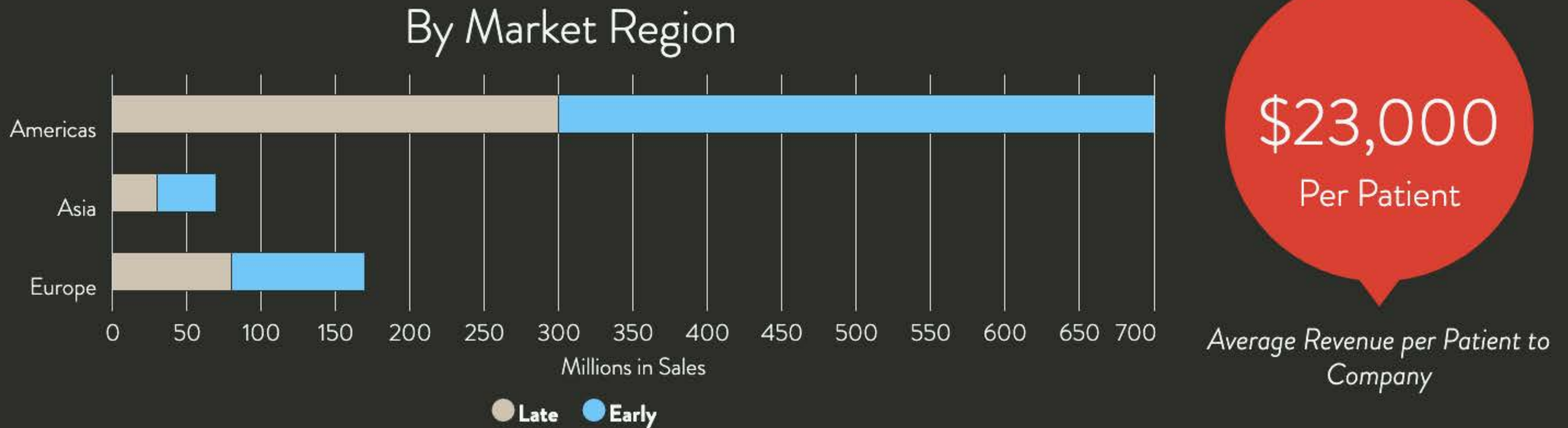


FDA Cleared Embolitic Protection Device Use is Mandatory in Every
Valvublator Case.



Business Model

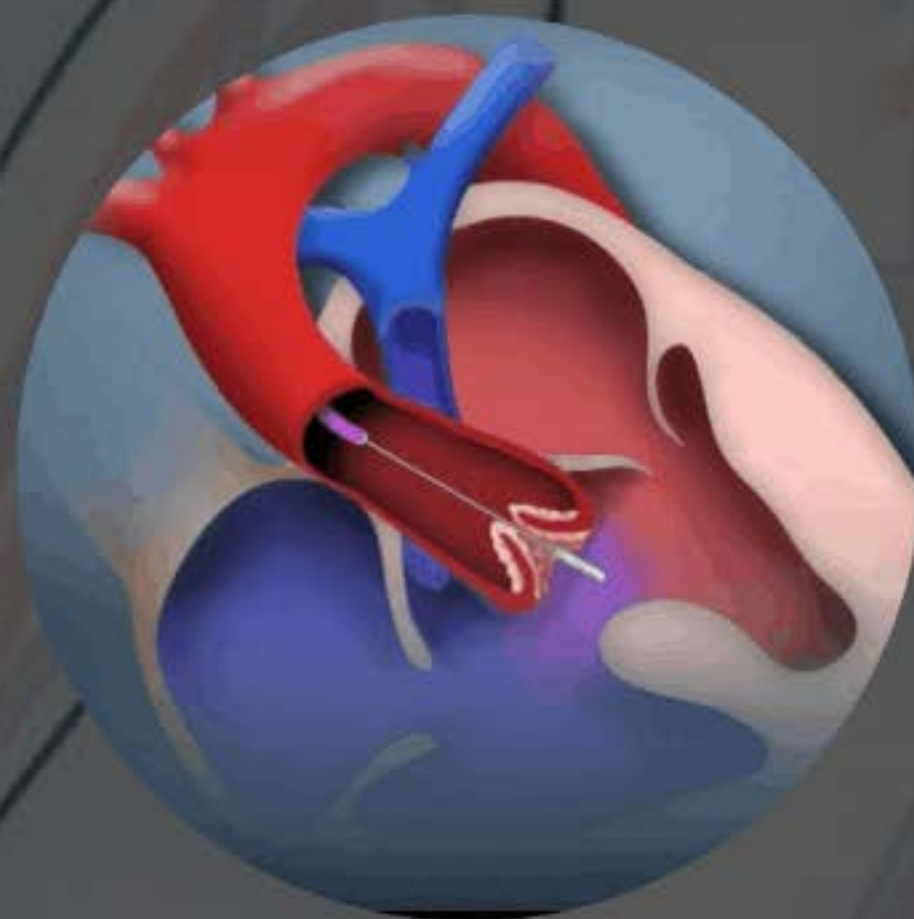
- Early Stage Intervention
- Late Stage Intervention



The Americas will be the lions share of the market for this product due to high pricing strategy \$23K.

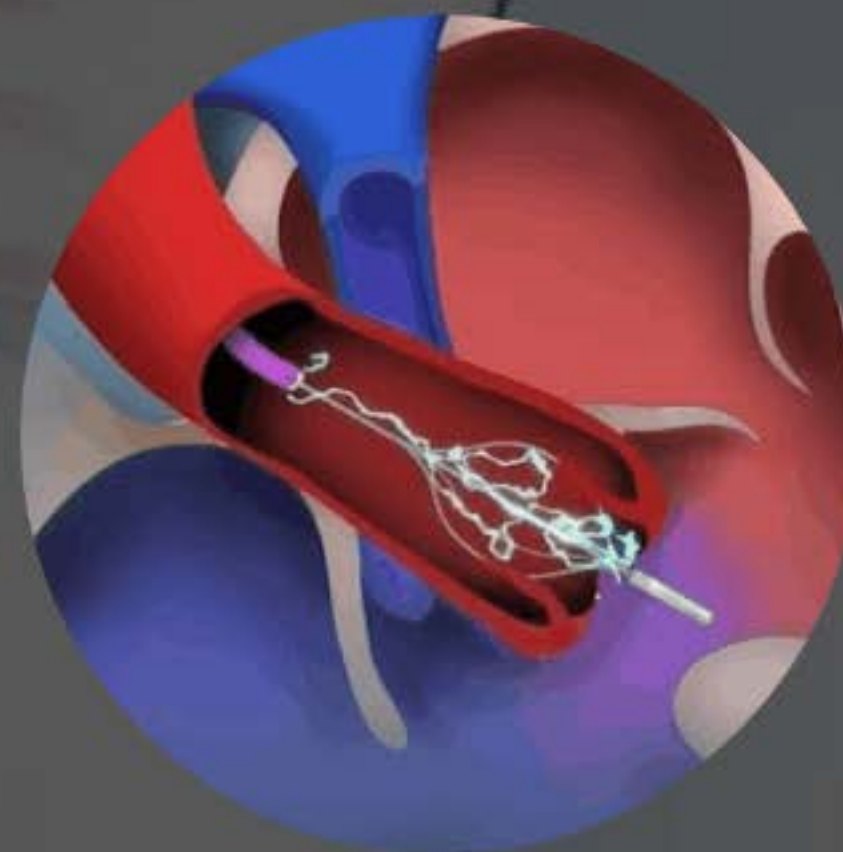
Highlights

Simple Method to
Regenerate Heart
Valves



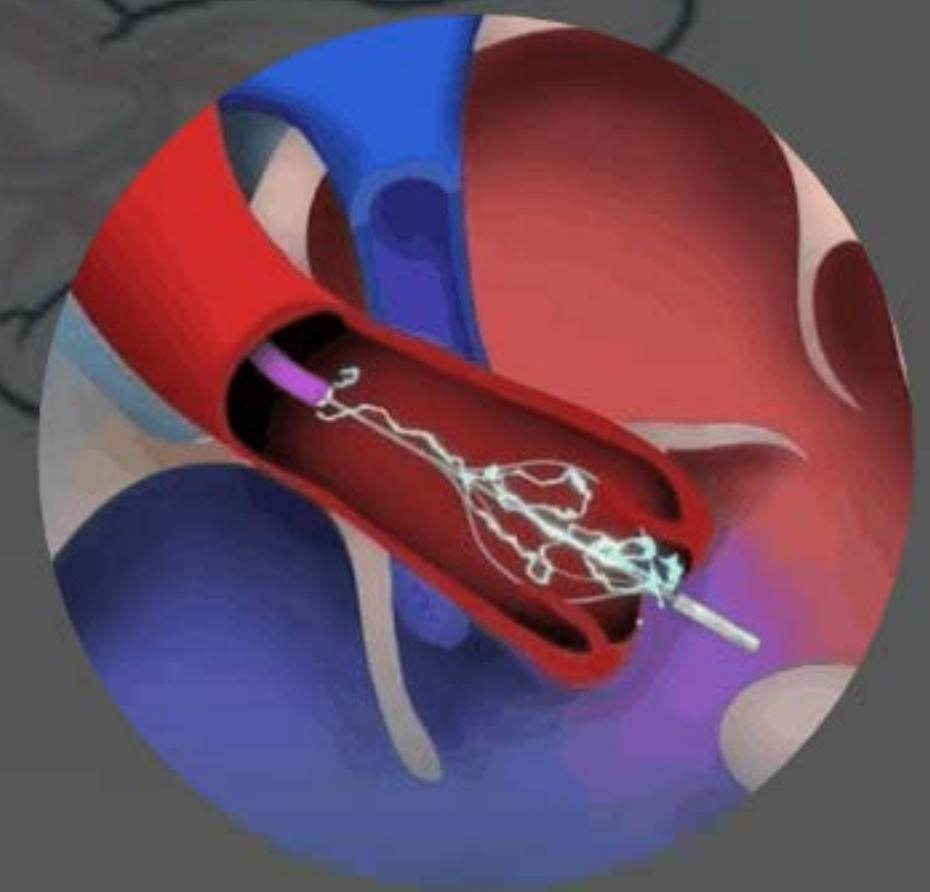
EASY PLACEMENT QUICK

Easy to place via small puncture
in groin.



DE-CALCIFICATION SIMPLIFIED

De-calcifies heart valve in
minutes.



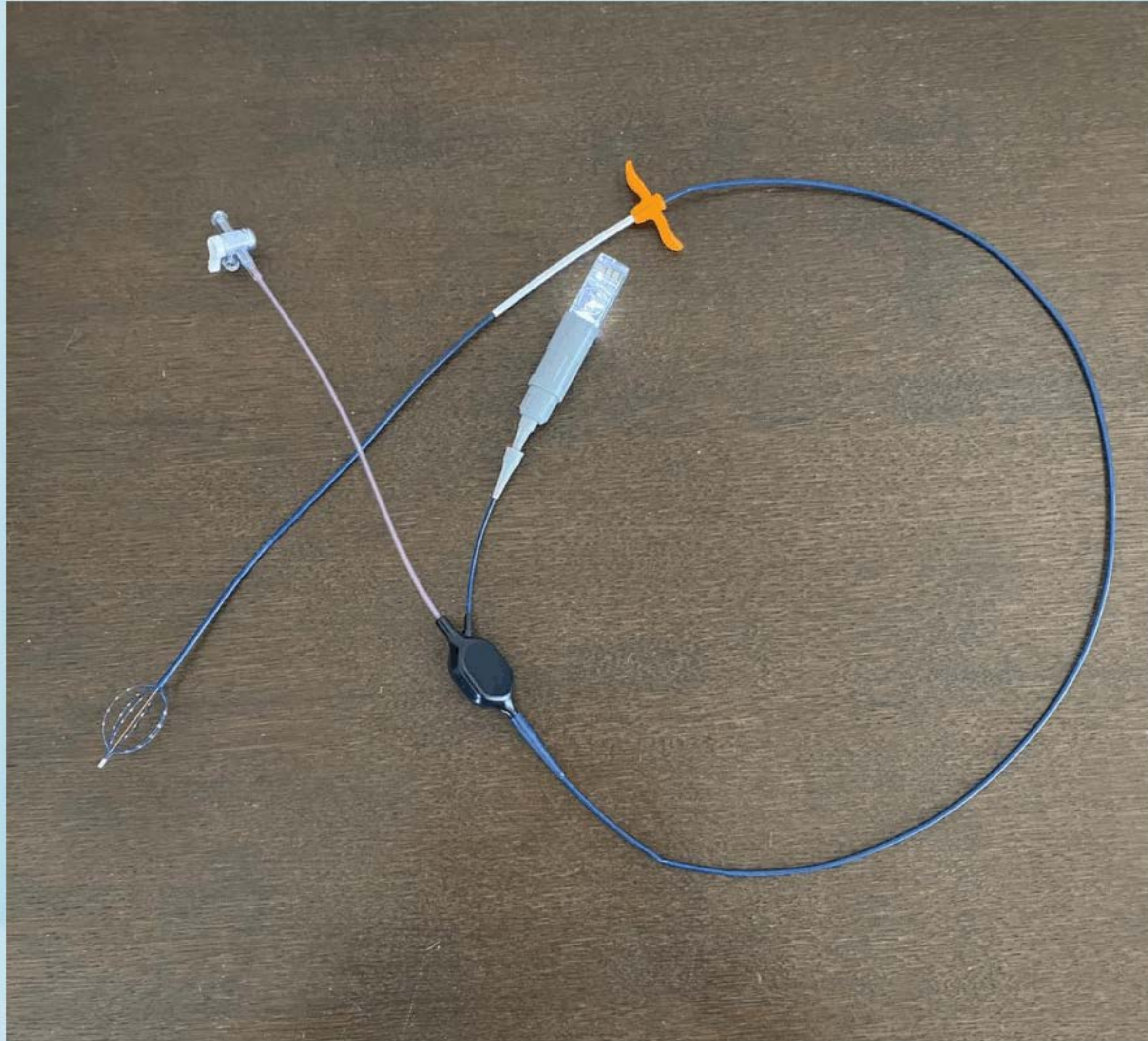
REGENERATION STARTS WITH ONE CLICK

Simple one button click to
initiate regeneration

Valvublator the first and only heart valve regeneration system.

Transapical
(access through
tip of heart)

Transfemoral
(access through
femoral artery)



Valvublator 11 Catheter Adapted from Oscor Medical EP Basket Catheter



Conductive electrodes deliver patented and patent pending bioelectric signaling sequences designed to promote heart valve regeneration and prevention of re-calcification.

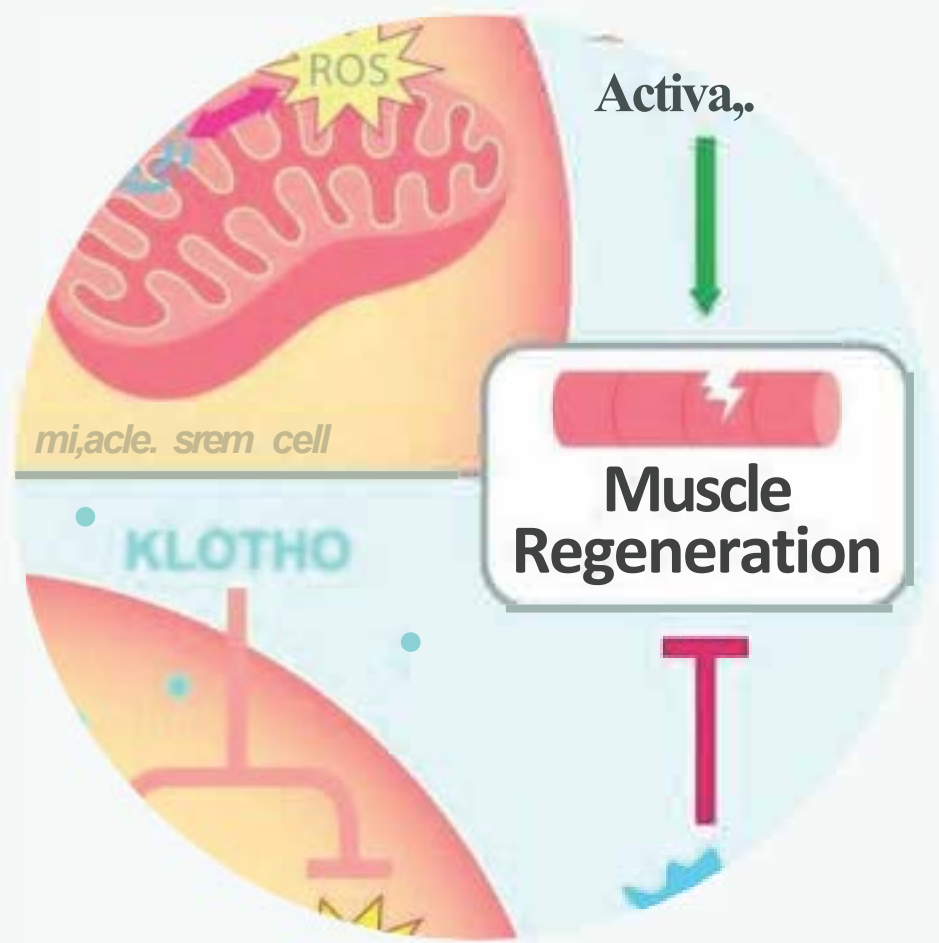
Prevention of Re- Calcification

Two proprietary
technologies



Periodic infusions of Elastrin Therapeutics
Nano-particles

Elastrin Therapeutics nanoparticles and klotho have both been demonstrated in animal studies to reduce calcification. The Valvublator team has an exclusive option or license to pioneering IP related to both.



Non-Invasive Bioelectric Stimulation Controlled
Klotho Release

Site-specific chelation therapy with nanoparticles reverses calcification

Abstract - In this study, we tested a targeted nanoparticle-based EDTA chelation therapy to reverse CKD-associated MAC.

Intravenous delivery of DiR dye-loaded nanoparticles confirmed targeting to vascular degraded elastin and calcification sites within 24 hours. Next, EDTA-loaded albumin nanoparticles conjugated with an anti-elastin antibody were intravenously injected twice a week for two weeks. The targeted nanoparticles delivered EDTA at the site of vascular calcification and reversed mineral deposits without any untoward effects.

Systemic EDTA injections or blank nanoparticles were ineffective in reversing MAC.

Reversal of calcification seems to be stable as it did not return after the treatment was stopped for an additional four weeks. Targeted EDTA chelation therapy successfully reversed calcification in this adenine rat model of CKD. *Sci Rep* 9, 2629 (2019)

doi: 10.1038/s41598-019-39639-8

Founding Team

Proven veteran leadership



Howard J. Leonhardt

Executive Chairman, CEO

Inventor 22 issued U.S. patents, patented and developed first percutaneous heart valve and leading stent graft system. Led team that completed first non-surgical heart regeneration.



Dr. Leslie Miller

Chief Medical Officer

241 publications, 80+ clinical trials, Cardiologist, Co- Editor leading text book on cardiovascular and heart regeneration.



Dr. Brett Burton

Vice President R&D

PhD Bioengineering, 8 years experience

Founding Team

Proven veteran
leadership



Dr. Mark Cunningham,
**Board Director, Chief
Technology Officer**

CardioThoracic Surgeon U.S.C.
Keck Medical Center, Director
Heart Valve Program, Degreed
Engineer, 25 years experience



Dr. Tim Henry

**Chief Interventional Cardiology
Advisor**

Former Director Cardiology
Minneapolis Heart Institute and
Cedars Sinai Hospital Los
Angeles, Current Chair and
Medical Director Christ Hospital
Cincinnati, Leading heart
regeneration investigator, 30
years experience



Kapil Sharma

Director Bioengineering

M.S. Bioengineering, 5 years
experience, multiple startup
launches

Valvublator is being Developed in Collaboration with Oscor Medical



Deflecting tip catheter



Bleeding prevention
introducers



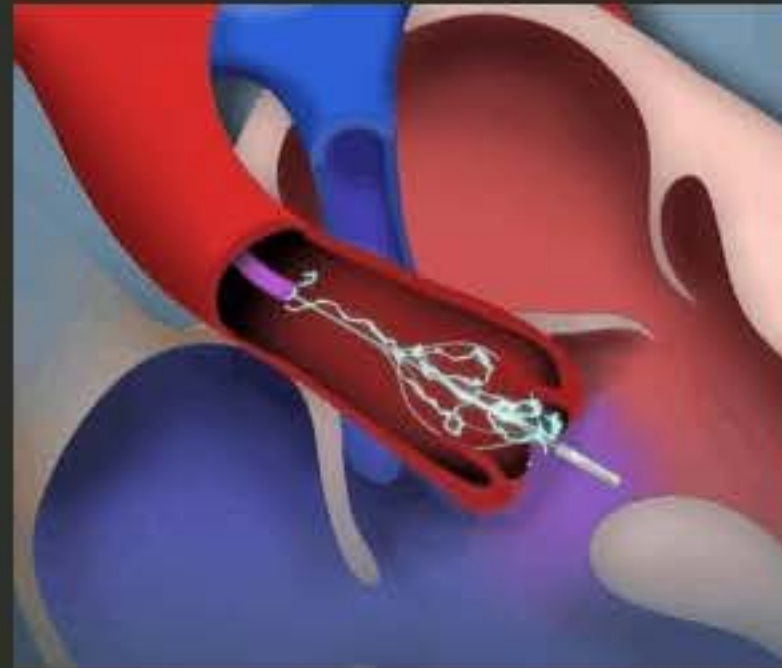
40 Years Bioelectric Stimulation
Experience

Highlights

Simple Method

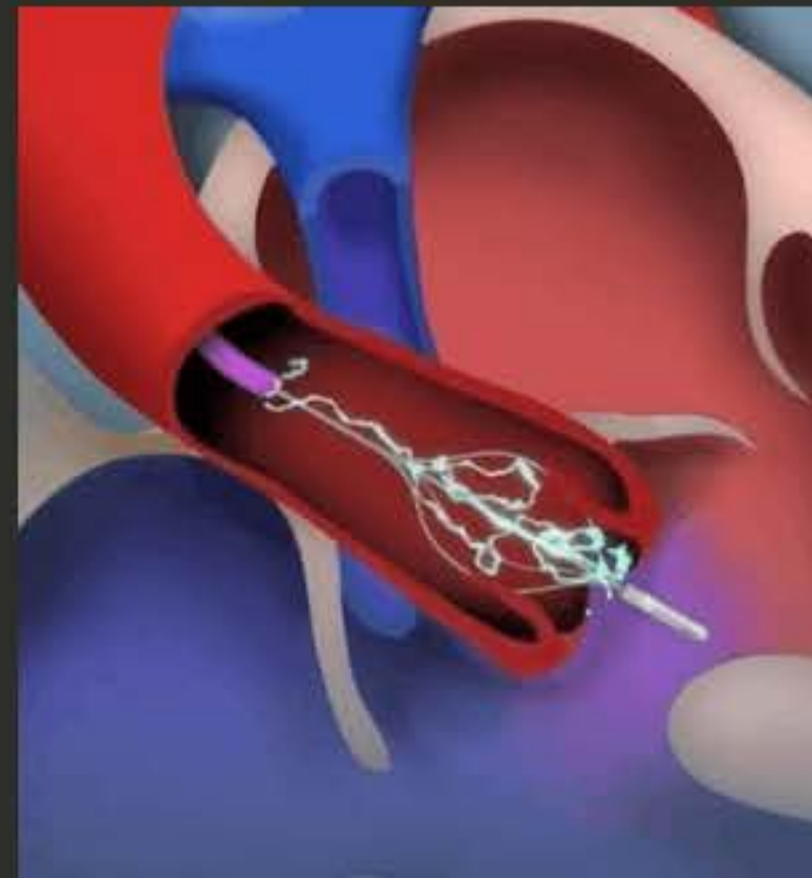
to

De-Calcify and
Regenerate
Heart Valves



Simple Ultrasonic Vibrational Energy
Decalcification

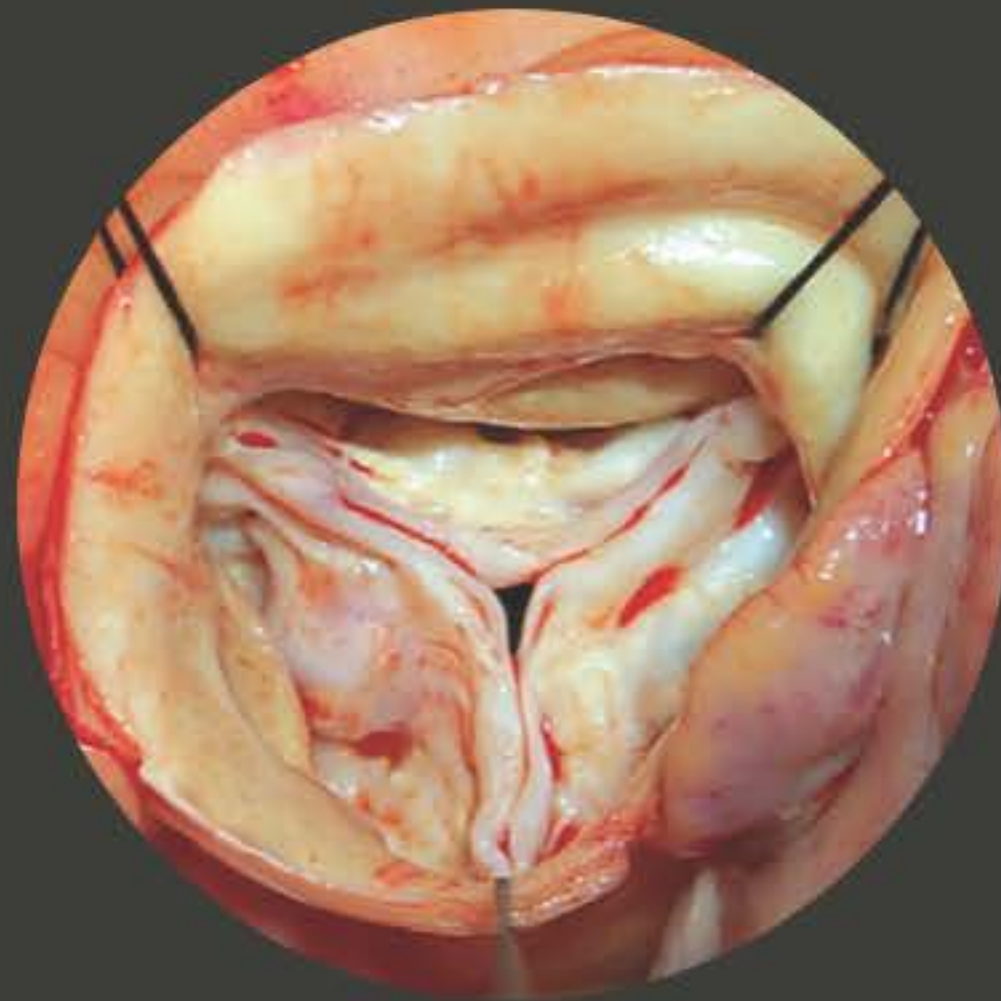
Heart valve ultrasonically cleaned in minutes.



Simple **Bioelectric Energy** Driven Release of
Regeneration Promoting Proteins including
Stem Cell Homing Factors, Klotho,
Tropoelastin and Follistatin

Target Market

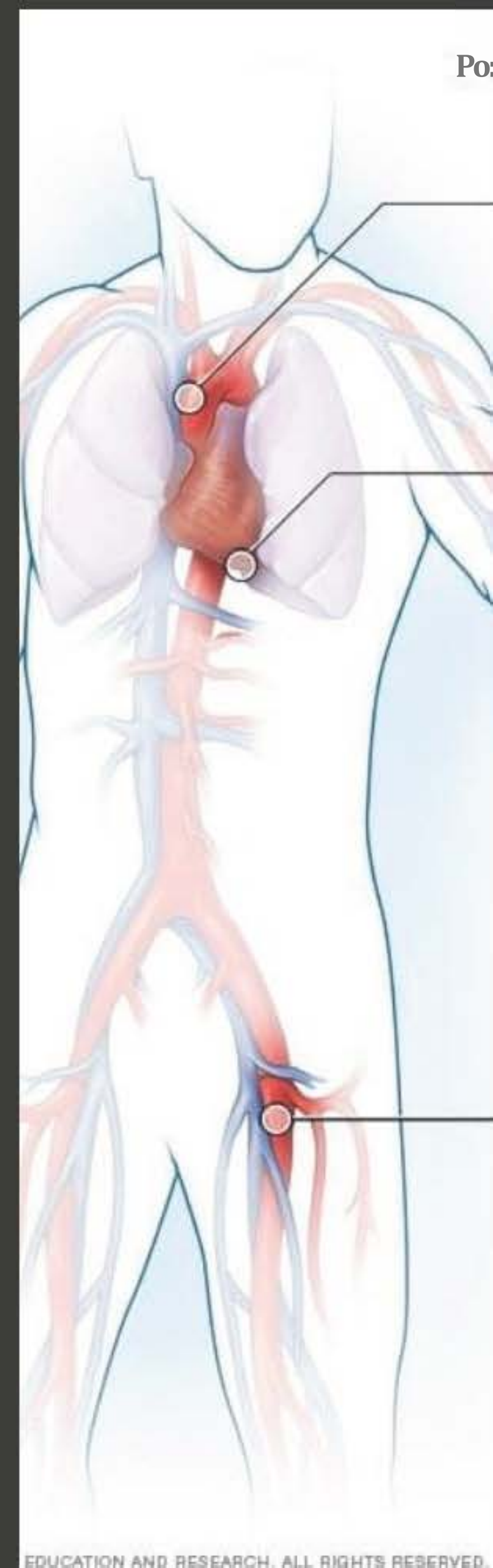
Interventional
Cardiologists



**Early Decalcifying and Regeneration to
Avoid Future Need for Implants**



**Late Decalcification and
Regeneration to Avoid Immediate
Imminent Surgery or Implant**





Market exceeds \$10 billion

\$10
Billion

Total Addressable Market

\$1
Million

Min. Capital Needed to Get to
First in Human Studies

15%

Expected Annual Growth Rate of
Market

Roadmap

4 Year

A large, red, 3D-style number '1' with a black outline and a slight shadow underneath, set against a white square background.

2020

Build and test prototypes in lab. File patents.

A large, red, 3D-style number '2' with a white outline and a slight shadow underneath, set against a white square background.

2021

Complete large animal studies and surgical feasibility study.

A large, red, 3D-style number '3' with a white outline and a slight shadow underneath, set against a white square background.

2022

Complete first in human studies

A large, red, 3D-style number '4' with a white outline and a slight shadow underneath, set against a white square background.

2023

Secure strategic partnership.

Rough Budgets

4 Year



2020

**Build and test prototypes in
lab. File patents.**

BUDGET = \$500,000



2021

**Complete large animal studies
and surgical feasibility study.**

BUDGET = \$500,000



2022

Complete first in human studies

BUDGET = \$2,500,000



2023

Secure strategic partnership.

BUDGET = \$750,000

Valvublator

2019-2023



Team focused on completing large animal studies followed by first in human studies.

63X
ROI

Target goal is very difficult to achieve 63X ROI for Seed Round Investors

The Valvublator core team has brought other technologies from concept to market leadership in the cardiovascular space and believes they have a reasonable chance to do it again.

The goal of seeking 63X ROI will be very difficult to achieve but if the technology works as intended the market size is there to justify a high valuation. There will be many obstacles to overcome to reach this high goal.



Financial Details

- **3,000,000 total shares authorized.**
- **Current share price = \$1 per share. Valuation \$3 million.**
- Raising \$1 million in four \$250K tranches.
- Legal structure **Licensable Technology Platform (LTP) within the Leonhardt's Launchpads accelerator** until startup is ready to be self reliant financially. At which time will it be converted to a C corporation. Capital may only be raised via the accelerator at this time.
- The accelerator has filed a Form D part c permitting public advertising of offering limited to verified accredited investors.
- **Price per share will rise as milestones are reached.**
- Successful prototype lab tests = \$2 per share
- Successful large animal studies = \$25 per share
- Regulatory clearance to begin clinical studies = \$35 per share
- Successful first in human studies = \$63 per share
- Successful prevention re-calcification = \$140 per share.
- Minimal estimated budget to get up to regulatory filings for first in human studies= \$1 million (highly subject to change)

Patents & Patents Pending

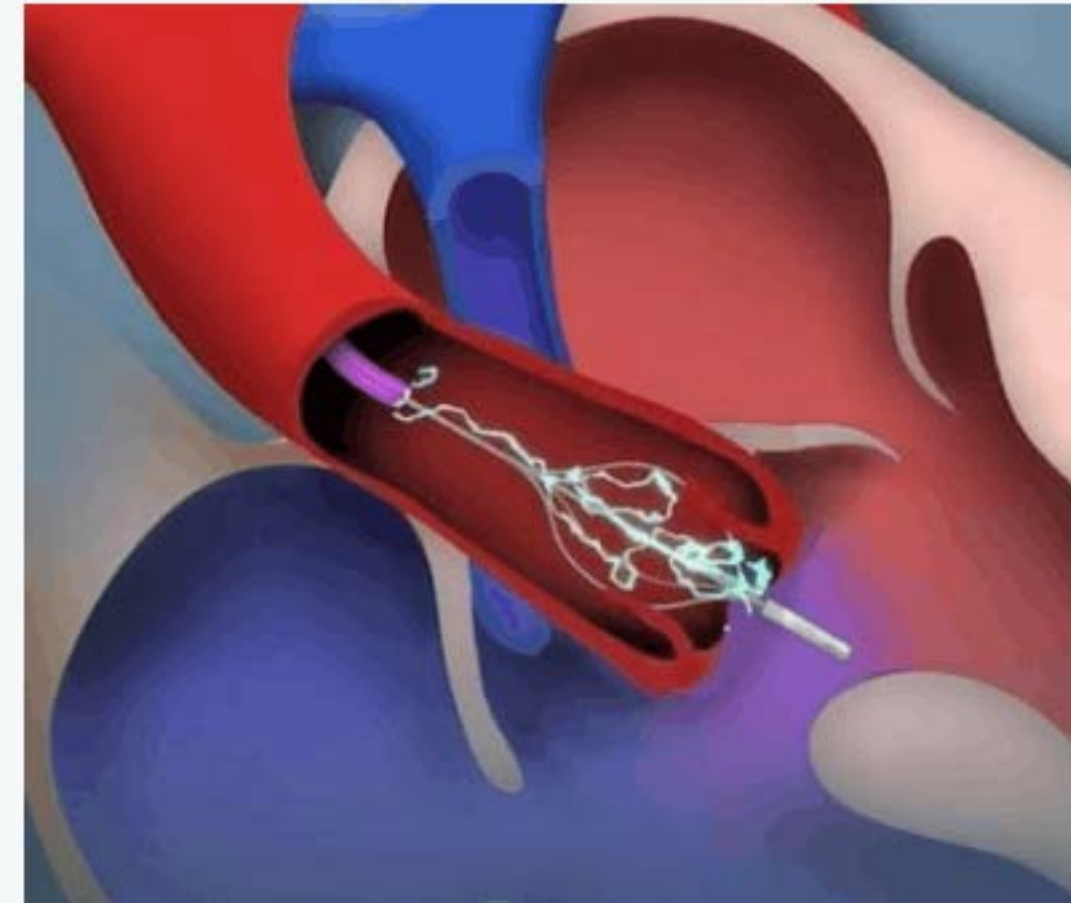


- Bioelectric signaling stem cell homing via SDF1 & PDGF
- Combination ultrasonic cleaning and bioelectric regeneration catheter.
- Chelation nanoparticles for preventing re-calcification + combination therapies.
- Citric acid sprayer for dissolving calcification.
- Bioelectric klotho expression for regeneration AND prevention of calcification > non-invasive.
- 30 bioelectric signaling sequences for regeneration promoting protein expressions.



Valvublator

www.valvublator.com



- Simple heart valve decalcification.

- Simple heart valve regeneration.

- Simple re-calcification prevention.

Valvublator

HEART VALVE REGENERATION

email:

howard@leonhardtventures.com

Business model = secure strategic partnership after first in human studies.

Risk Warnings & Disclaimers

Product is very early stage in development.

- **Product is not yet proven either safe or effective.**

- **Patents pending may not be issued.**

- *Product may be found to infringe other patents.*

- *Patents licensed or optioned may not be maintained.*

- **Company lacks sufficient resources in all forms to bring product to clinical trial.**

- *Founding team has many other obligations which reduce focus on this project.*

- *No other company has succeeded in de-calcifying or regenerating heart valves.*

- *All forward looking statements are subject to change without notice. **Timeline***

longer by many years.

- **As an investment this is in the highest risk category for total loss. Chances of blockbuster success statistically are very, very low.**

- *Investment is only possible through Cal-X Stars Business Accelerator, Inc. OBA Leonhardt's Launchpads.*

- **Other firms have substantially higher budgets than those we have forecasted.**