



# ASX ANNOUNCEMENT

20 September 2022

## ANTERIS INVESTOR WEBINAR AT TCT 2022

**Brisbane, Australia and Boston Massachusetts, USA**, Anteris Technologies Ltd (**Anteris** or the **Company**) (ASX: AVR) is pleased to provide the attached investor presentation held at the annual Transcatheter Cardiovascular Therapeutics (TCT) medical conference in Boston, Massachusetts, the world's largest interventional cardiology conference.

The webinar can be viewed on the Company website or at the following address:  
<http://ow.ly/VUZv50KNtg4>

**END**

### About Anteris Technologies Ltd (ASX: AVR)

Anteris Technologies Ltd is a structural heart company that delivers clinically superior and durable solutions through better science and better design.

Its focus is developing next-generation technologies that help healthcare professionals deliver consistent life-changing outcomes for patients.

Anteris' DurAVR™ 3D single-piece aortic heart valve replacement addresses the needs of today's younger and more active aortic stenosis patients by delivering superior performance and durability through innovations designed to last the remainder of a patient's lifetime.

The proven benefits of its patented ADAPT® tissue technology, paired with the unique design of our DurAVR™ 3D single-piece aortic heart valve, have the potential to deliver a game-changing treatment to aortic stenosis patients worldwide and provide a much-needed solution to the challenges facing doctors today.

### Authorisation and Additional information

This announcement was authorised by Mr Stephen Denaro, Company Secretary.

### For more information:

Deanne Curry

GRACosway

E: [investors@anteristech.com](mailto:investors@anteristech.com)

M: +61 414 388 997

[www.anteristech.com](http://www.anteristech.com)

Twitter: @AnterisTech

Facebook: [www.facebook.com/AnterisTech](https://www.facebook.com/AnterisTech)

LinkedIn: <https://www.linkedin.com/company/anteristech>

### Anteris Technologies Ltd Registered Office:

Toowong Tower, Suite 302, Level 3, 9 Sherwood Rd, Toowong, Queensland, 4066

### Customer Service

T +61 1300 550 310 | F +61 1300 972 437 | E [info.au@anteristech.com](mailto:info.au@anteristech.com) | W [anteristech.com](http://anteristech.com)

Brisbane • Minneapolis • Geneva • Malaga





# Investor Webcast Presentation

## TCT 2022

September 19th 2022



[www.anteristech.com](http://www.anteristech.com) | Follow us @anteristech   

Copyright Anteris Technologies Ltd 2021

# Disclaimer

This presentation contains general information which is current as at 19<sup>th</sup> Sept 2022. It is information given in summary form and does not purport to be complete. Information in this presentation is not intended to be relied upon as advice to investors or potential investors and does not take into account the financial situation, investment objectives or needs of any particular investor. Before making any investment or other decision, investors should consider these factors, and consult with their own legal, tax, business and/or financial advisors. This presentation should be read in conjunction with all other information concerning Anteris Technologies Ltd filed with the Australian Securities Exchange (ASX). The information in this presentation is for general information only. Anteris advises that this presentation and any related materials and cross -referenced information, may contain forward looking statements that are based on information and assumptions known to date and are subject to various risks and uncertainties outside of Anteris' control. No representation is made as to the accuracy or reliability of forward looking statements or the assumptions on which they are based. Actual future events may vary from these forward looking statements and you are cautioned not to place reliance on any forward looking statement. Anteris undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date of this presentation (subject to ASX disclosure requirements).





*ADAPT<sup>®</sup> + DurAVR<sup>™</sup> + ComaSUR<sup>™</sup>*



Three distinct and novel technology families that are the future of AS treatment

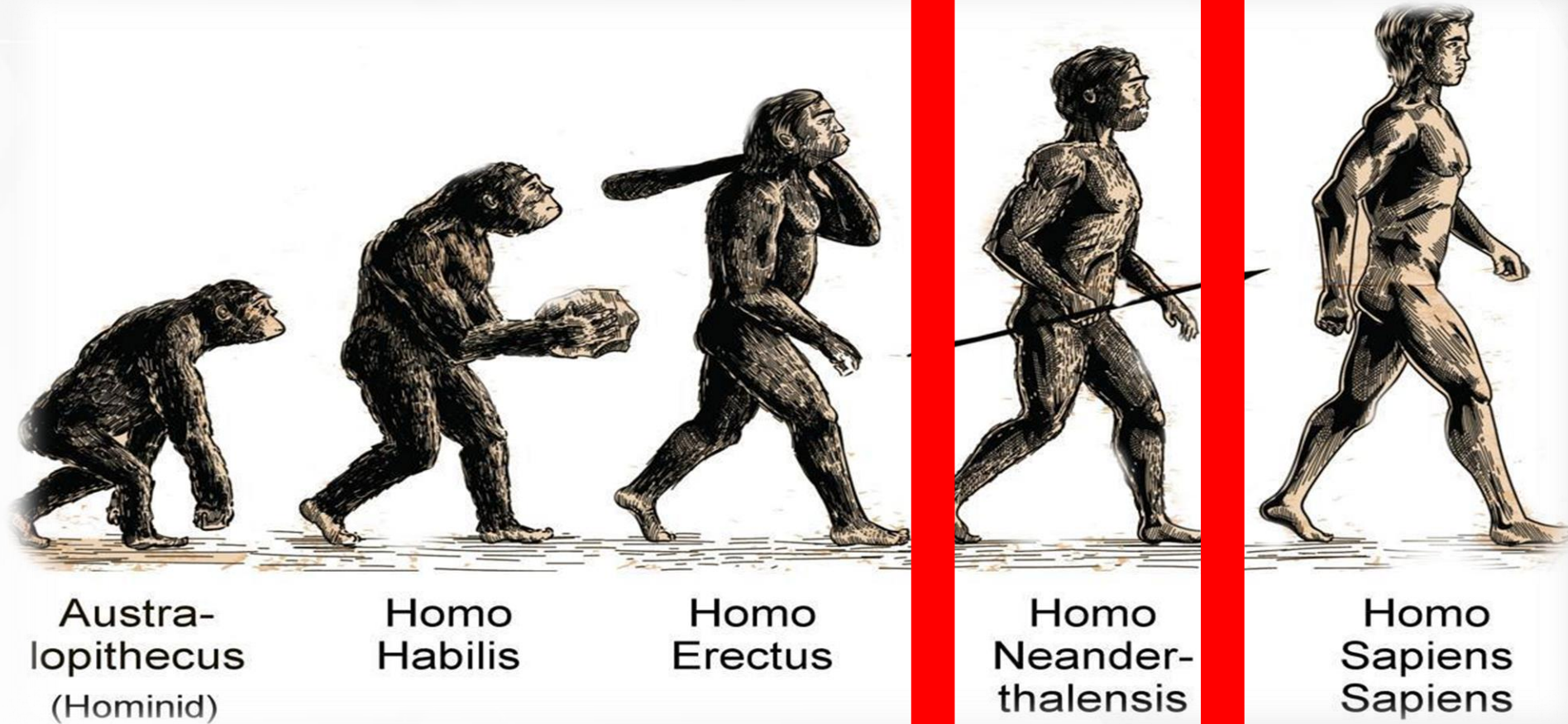


[www.anteristech.com](http://www.anteristech.com) | Follow us @anteristech



Copyright Anteris Technologies Ltd 2021

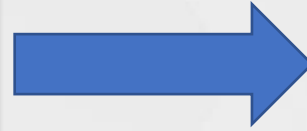
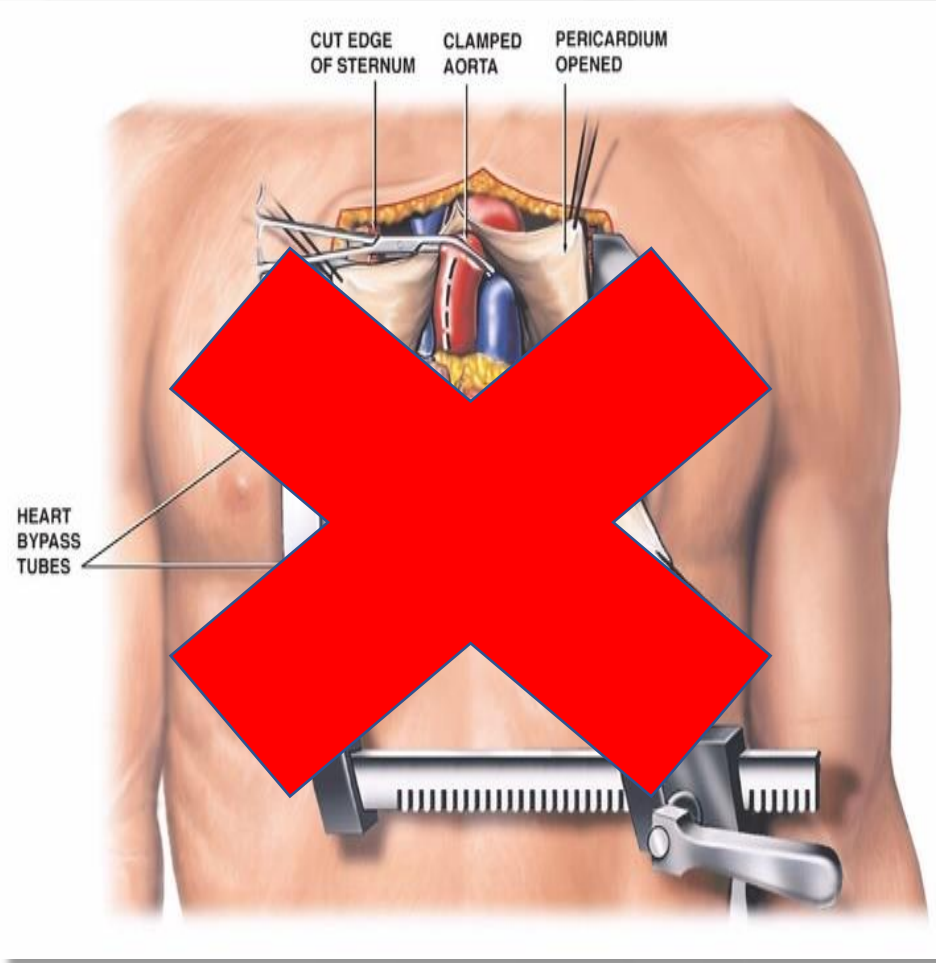
AVR has “evolved” over the past decades but the technology remains several decades old



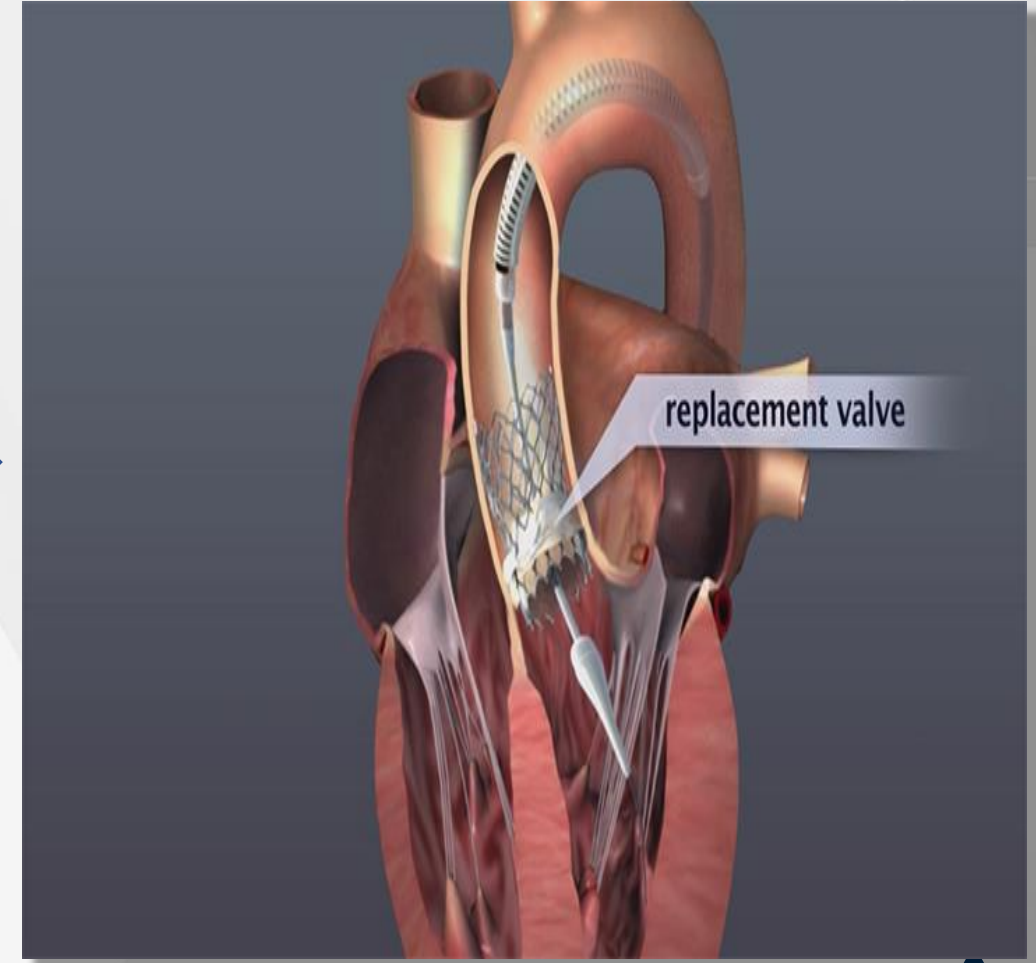


# Originally TAVR's were designed for "high risk" patients

**SAVR** (Surgical Aortic Valve Replacement)

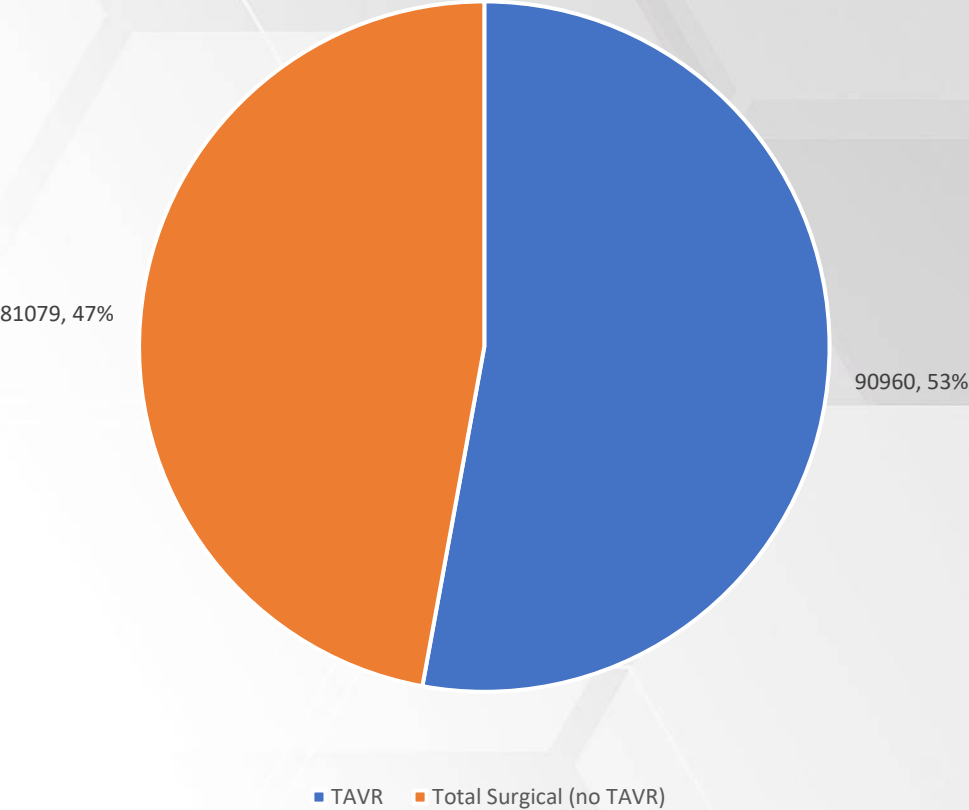


**TAVR** (Transcatheter Aortic Valve Replacement)

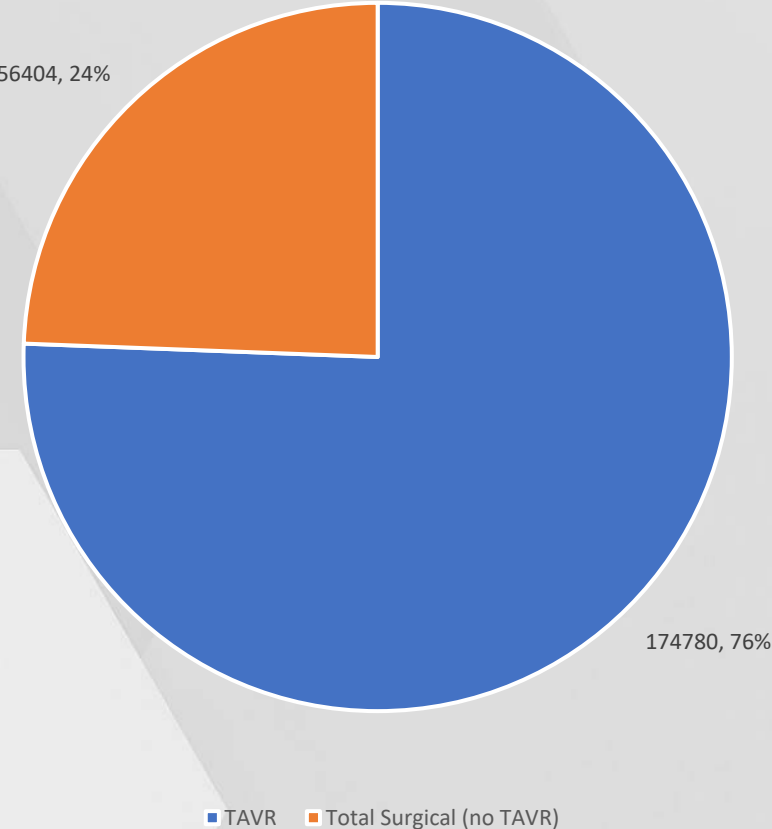


However.....TAVR will account for 75% of AVR's by 2028 many of whom will be younger lower risk patients

2021 US TAVR/Surgical Aortic Stenosis Procedures



2028 US TAVR/Surgical Aortic Stenosis Procedures



# Yesterdays TAVR's were not imagined for today's patients

1<sup>st</sup> -2<sup>nd</sup> Generation TAVR's designed to solve a different problem to today's patients needs

*Patient needs a safe alternative to open heart surgery"*

*"Patient needs a valve that restores an active lifestyle for the rest of their life"*

1<sup>st</sup> and 2<sup>nd</sup>  
GENERATION  
TAVR

>85yrs



2010 – 2019 Average patient age was 85



DurAVR™

3<sup>rd</sup> Generation

>65yrs

From 2019 the average pt age is 73 and declining

DurAVR™ was designed for more active patients



# Today's TAVR's need to address the needs of younger as well as older patients

Current products fall short in two critical areas

Predictable  
Procedure

"Normal pre disease  
hemodynamics"

Low Incidence of  
Complications

Long term durability  
(avoiding SVD HAM  
HALT Valve in  
Valve)

Procedure  
Predictable

hemodynamics,,  
normal pre disease

Complications  
Low incidence of

Valve)  
HALT Valve in  
(avoiding SVD HAM



A red rectangular sign with a white border is mounted on a brick wall. The sign is held in place by eight silver-colored screws, two at each corner. The text on the sign is in a white, bold, serif font, arranged in two lines: "WHY IT" on the top line and "MATTERS?" on the bottom line. The brick wall is made of reddish-brown bricks with visible mortar joints. The entire image is framed by a dark blue border.

**WHY IT  
MATTERS?**

## Valve science must progress beyond 3 piece designs

Younger pts now eligible



**Guidelines**  
TAVR as class(I) for ages 65-80



**Indications:**

- Moderate
- Asymptomatic



What Does this Mean?

Patient Age

85 years old



73 years old



Need to  
Avoid valve  
in valve

Key Considerations

Life  
Expectancy

Exercise  
Capacity

Need more  
“normal”  
hemodynamics



# DurAVR™ THV satisfies all 4 key areas

ComASUR™ delivery system is more predictable with commissural alignment

Better hemodynamics at rest and during increased cardiac output (exercise)

DurAVR's™ 3D shaped uni-body design has greater structural integrity + ADAPT® anti calcification treatment

**Predictable  
Procedure**

**Optimal  
Hemodynamic  
Performance**

**Low Incidence of  
Complications**

**Durability**

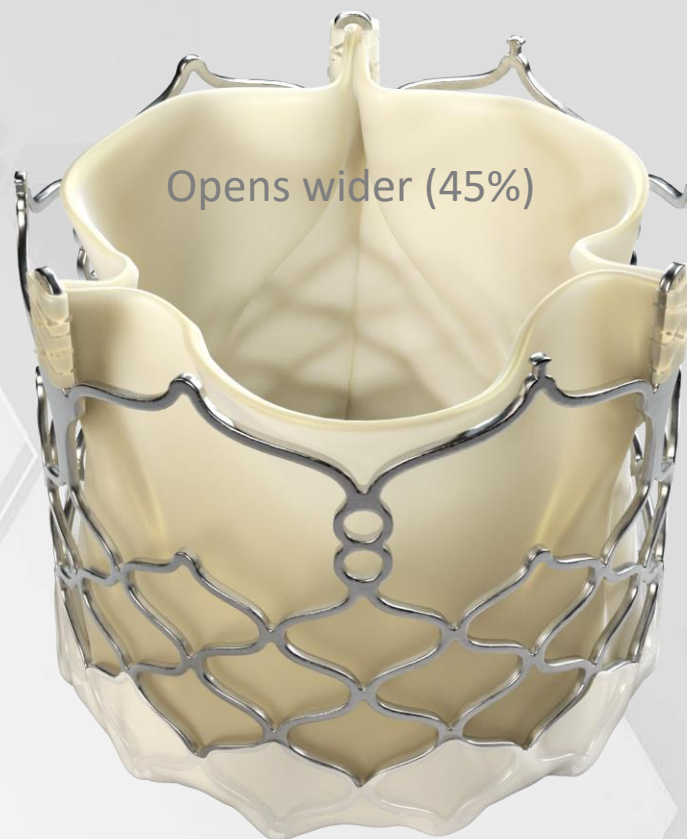


**DurAVR™**  
Transcatheter Heart Valve  
(an ADAPT® Product)



# DurAVR - A more “human like” valve

## Lasts Longer Works Better



Opens wider (45%)

Restores pre disease hemodynamics

Designed to be anatomically correct

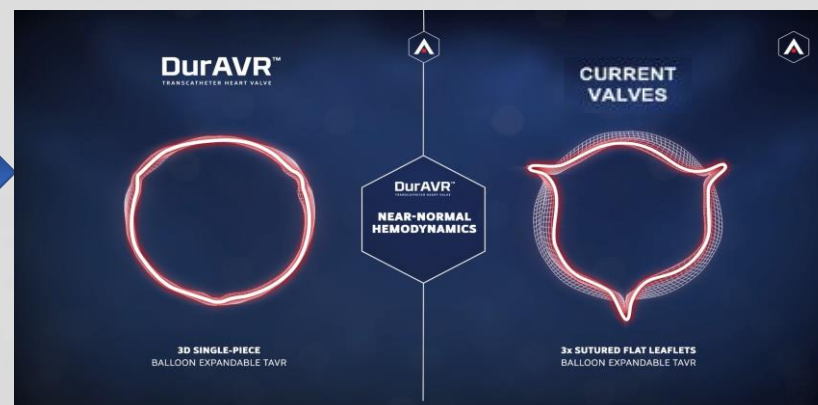
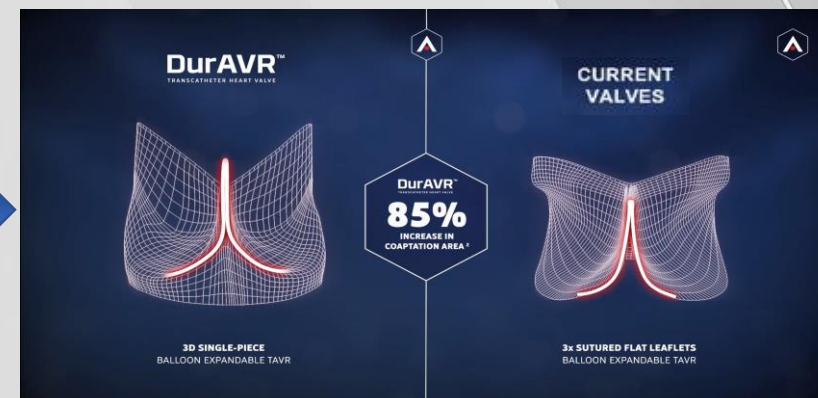
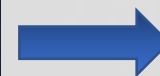
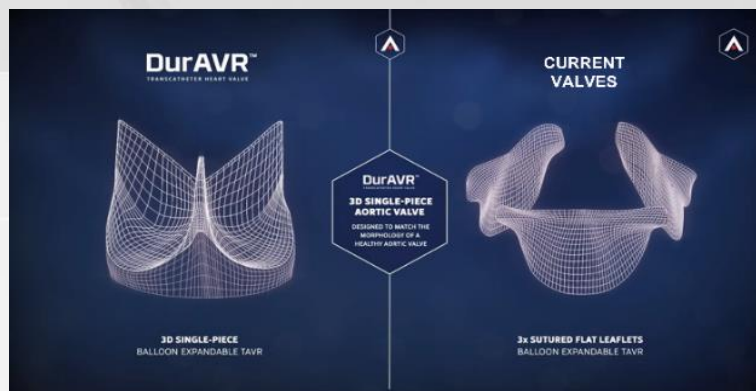
Single piece design as greater structural integrity



# DurAVR™ uniquely shaped single piece design

## *Unique Design of a Single Piece of Tissue 3D Molded to Mimic the Native Aortic Valve Anatomy*

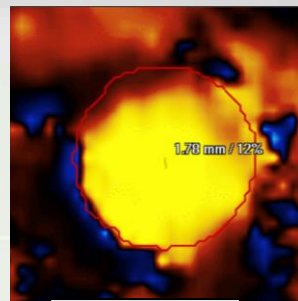
- Designed in diastole (closed position)
- Opens wider with less pressure
- Remains open longer with the purpose of improving hemodynamics



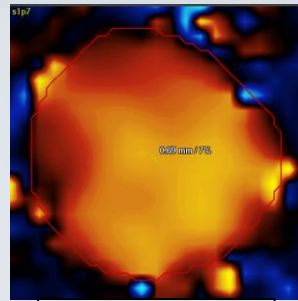
\* Data on file, Anteris

\*\* Lim KH et al., *Flat or Curved Pericardial Aortic Valve Cusps: A Finite Element Study*. J Heart Valve Dis. 2004;13:792-797.

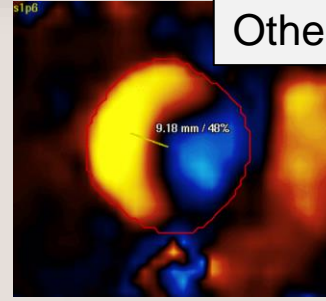
# DurAVR™ closely matches native valve performance



Control

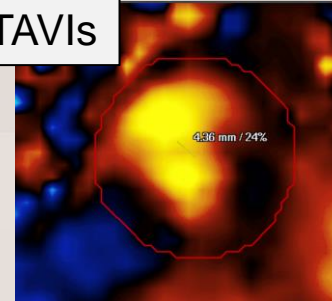


DurAVR™

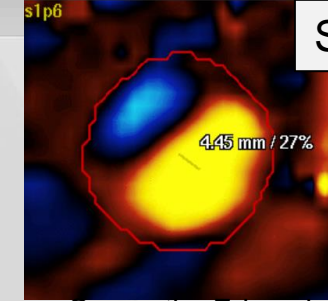


Sapien 3

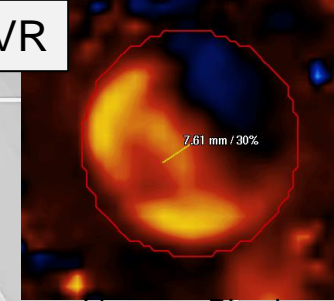
Other TAVIs



CoreValve Evolute R



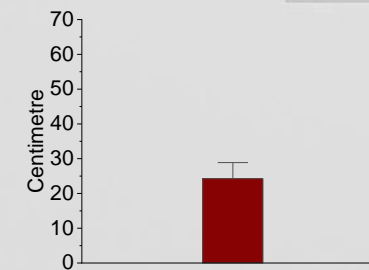
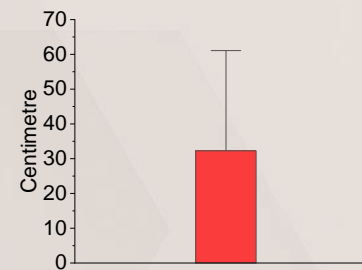
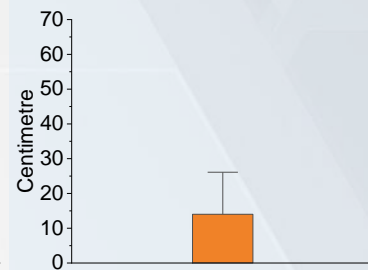
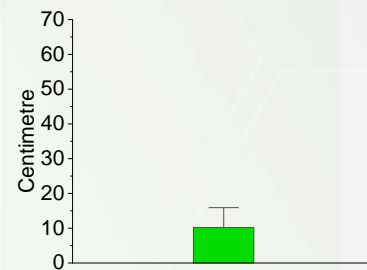
Carpentier Edwards  
Perimount Magna Ease



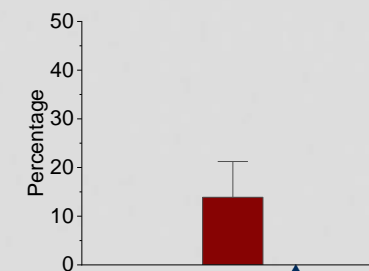
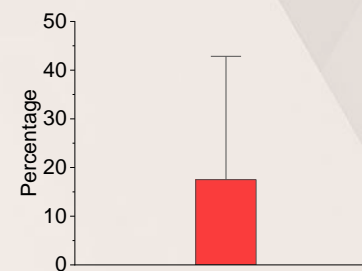
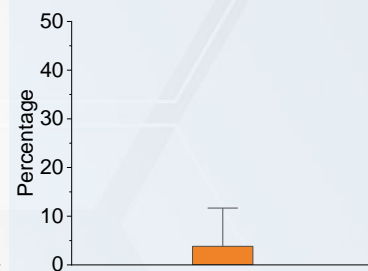
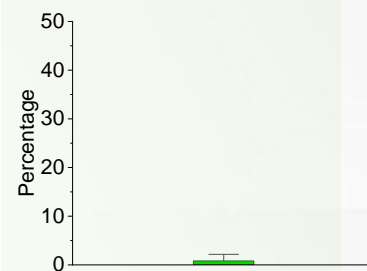
Livonova Bicarbone  
Bileaflet Slim Line

SAVR

Peak systolic  
aortic flow  
displacement

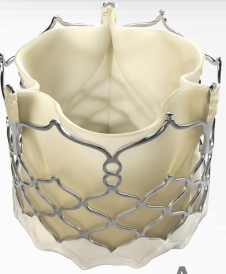


Peak systolic  
aortic flow  
reversal



\*P<0.05; \*\*P<0.01

# Anteris has created the next generation Aortic stenosis treatment

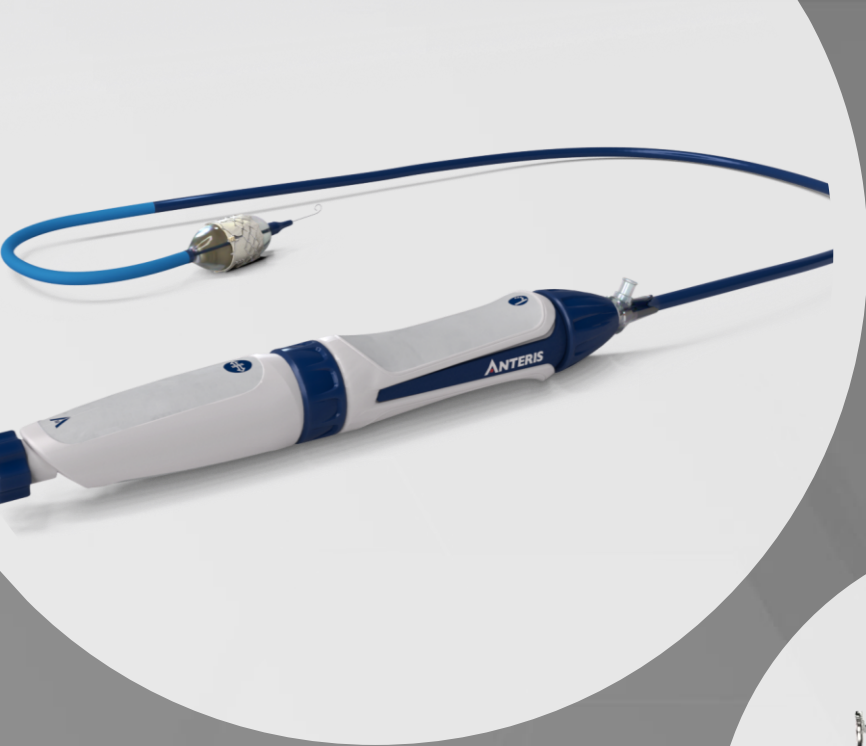


Anteris has developed and combined 3 unique medical technologies that address current unmet medical needs

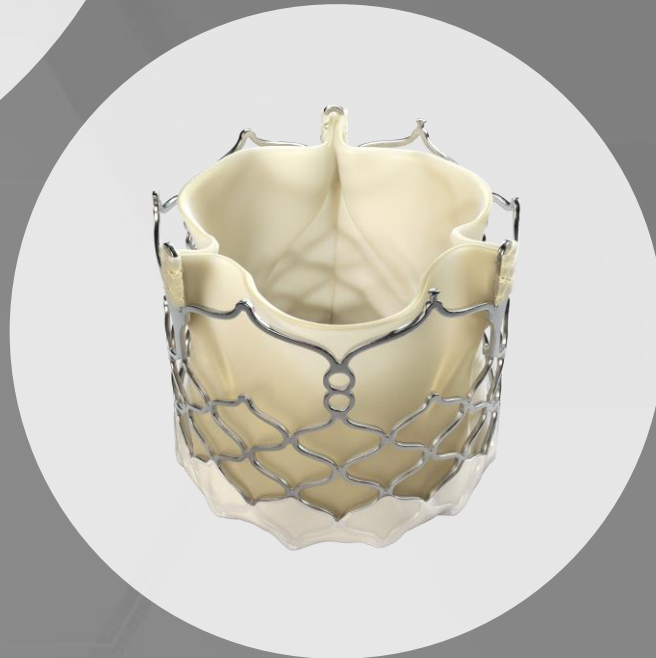
- Anteris™ is competing in a **US\$10bn market**.
- **ADAPT®** is the unique anti-calcification treatment platform technology on which our structural heart products are built.
- **ADAPT®** is the only anti calcification treatment to demonstrate zero calcification in humans over 10 years.
- **ADAPT®** has unique properties that are critical to longer lasting aortic valves and has been used in over **35,000** patients globally and is FDA approved.
- **DurAVR™**, built with ADAPT® technology, is a novel and highly durable 3D shaped single-piece aortic valve for the treatment of aortic stenosis.
- **ComaSUR™** is a unique delivery system/catheter that will be used to place DurAVR™ in upcoming studies.







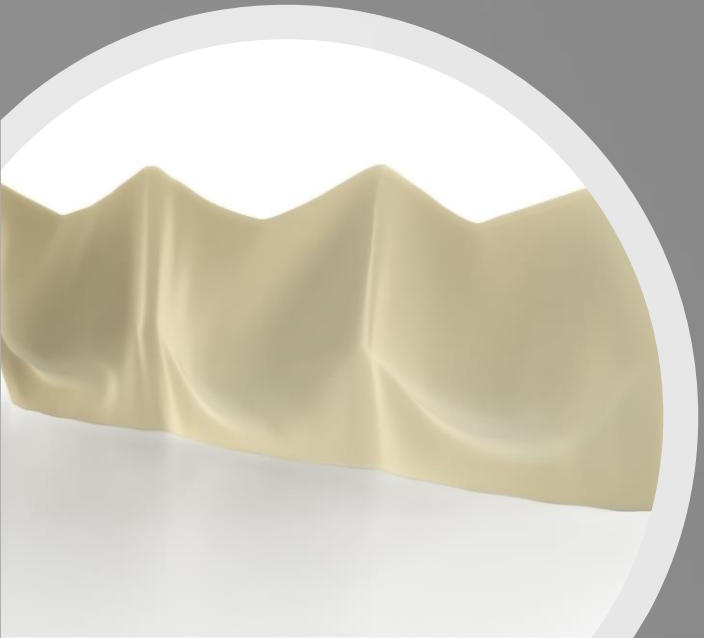
Anteris has addressed Tissue science, Valve design and Delivery



By combining

- Tissue Science,(Adapt<sup>®</sup>)
- Valve design (DurAVR<sup>™</sup>)
- Physician developed delivery system (ComASUR<sup>™</sup>)

Anteris has created a more “human like” aortic valve replacement with results that reflect pre disease states



Lasts Longer,  
Works Better

**ANTERIS**  
TECHNOLOGIES  
A Structural Heart Company

**DurAVR™**  
TRANSCATHETER HEART VALVE SYSTEM



A Valve Designed  
**for Life.**







# DurAVR Programatic Update

**Christopher U. Meduri, MD MPH**  
Karolinska University Hospital

**Vinnie Bapat, MD**  
Abbott Northwestern, MN

**Susheel Kodali, MD**  
Columbia University



**TCT**

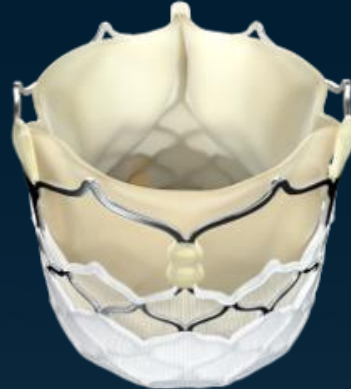
SEPTEMBER 16-19, 2022  
BOSTON CONVENTION AND EXHIBITION CENTER  
BOSTON, MA

# TAVR as an Evolving Field Consists of Compromises

*Current TAVR platforms impair optimal lifetime management strategies*

## *Balloon Expandable Advantages*

- Low frame height
- Ease of use



## *Self Expandable Advantages*

- Optimal Hemodynamics
- Commissure Alignment

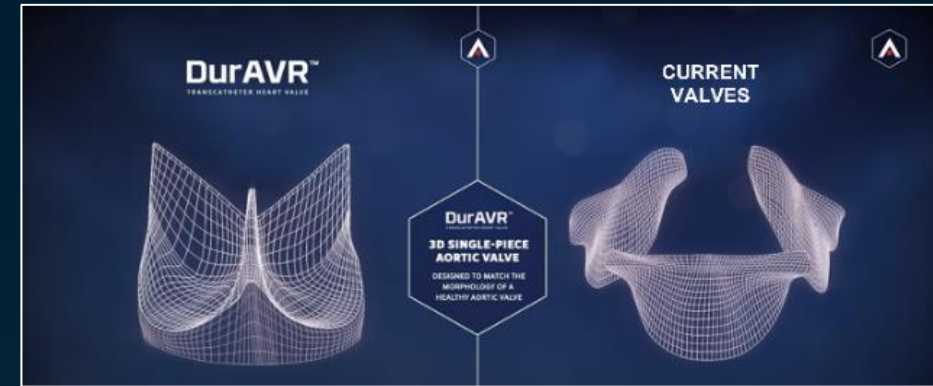
***DurAVR™ THV***

## Potential Future

- *Native-like flow dynamics*
- *Native leaflet Design*
- *Advanced Acellular Tissue  
(lowers immunogenicity)*

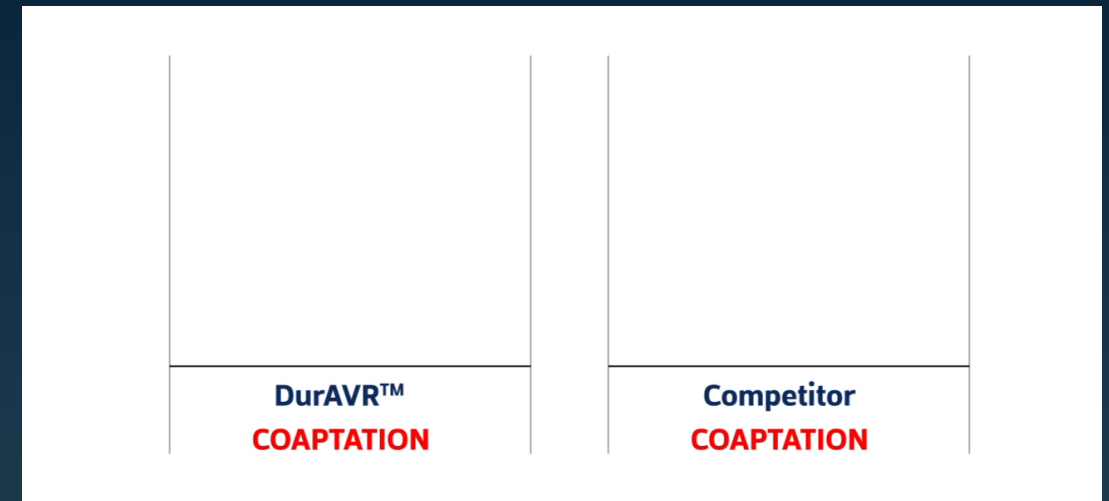
# DurAVR™ Shaped to Perform like Native Aortic Valve

- *Restore optimal hemodynamic performance*
  - *Optimizes flow dynamics*



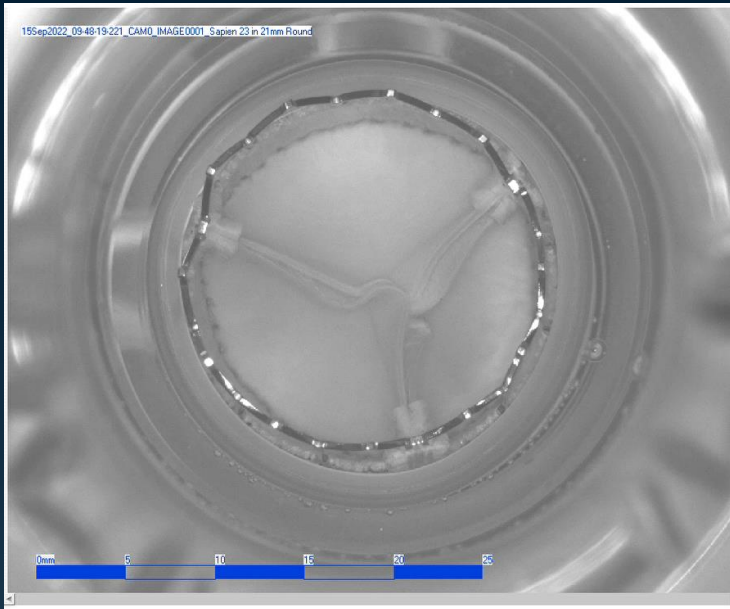
Single Piece

Three Piece

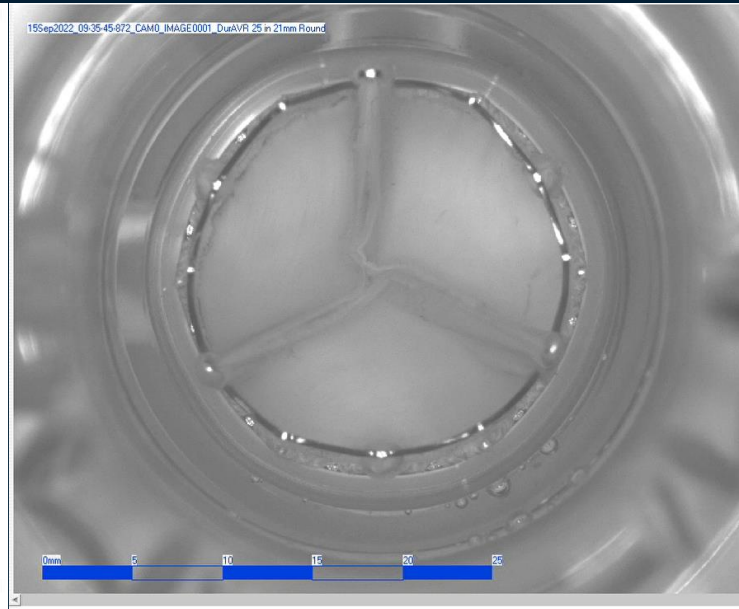


# DurAVR vs. Sapien vs. Evolut

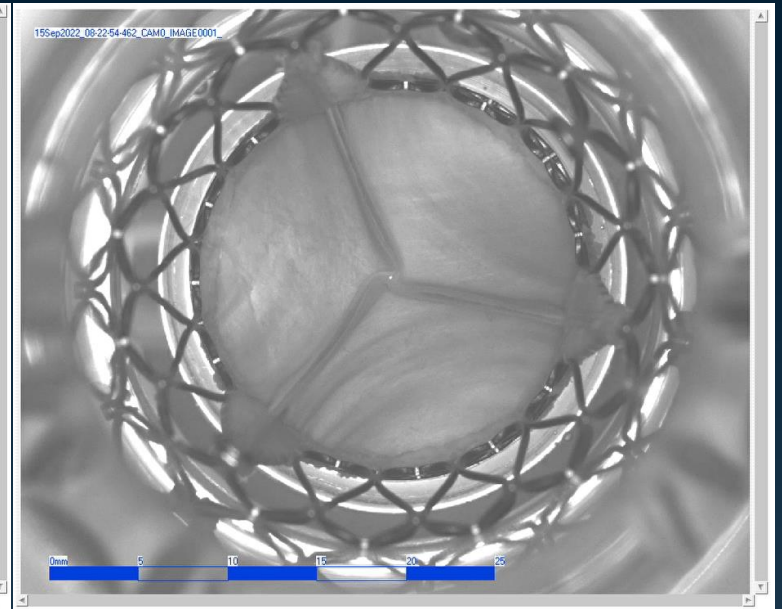
- 21mm round fixture



**Sapien Hydrodynamics**  
EOA: 2.30 mm<sup>2</sup>  
Gradient: 8.8 mmHg



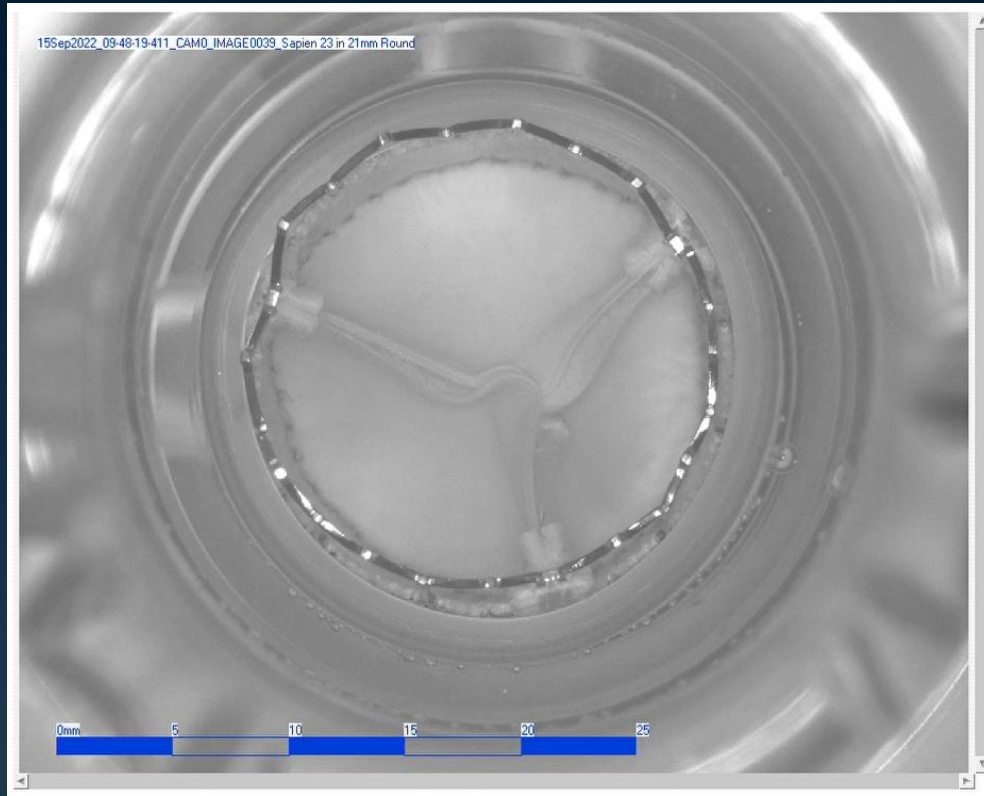
**DurAVR Hydrodynamics**  
EOA: 2.83 mm<sup>2</sup>  
Gradient: 5.9 mmHg



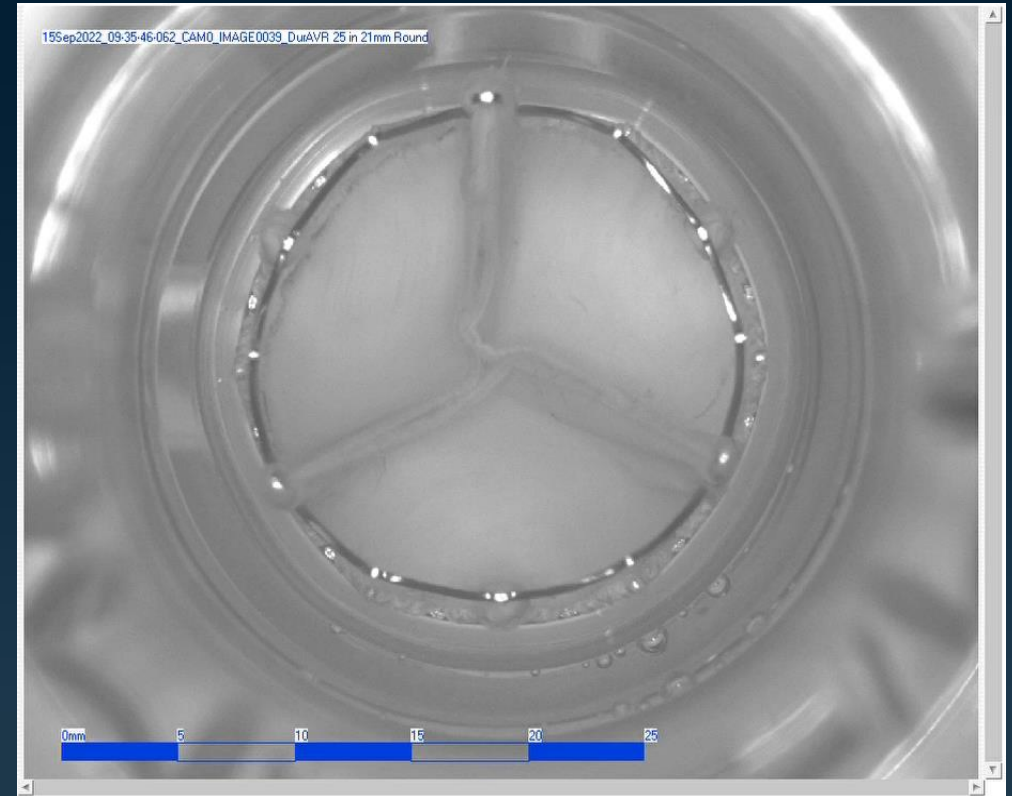
**Evolut Hydrodynamics**  
EOA: 2.41 mm<sup>2</sup>  
Gradient: 8.3 mmHg



- **Slow Motion Videos**
- Sapien 3 and DurAVR valve opening



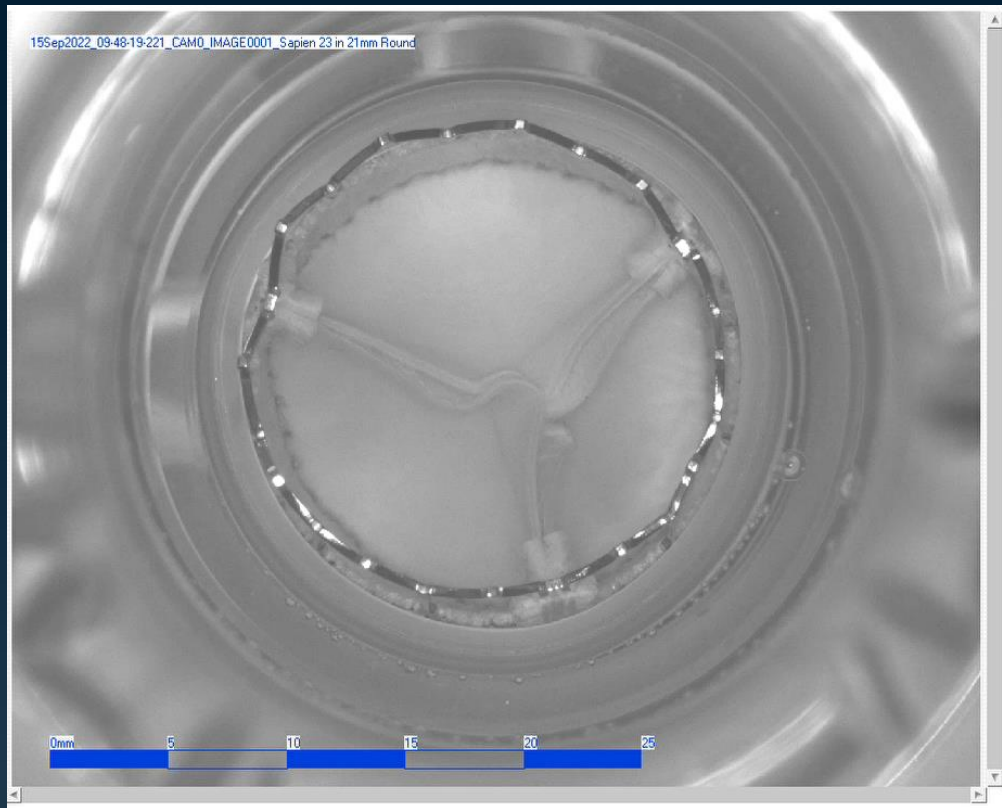
*Sapien 3*



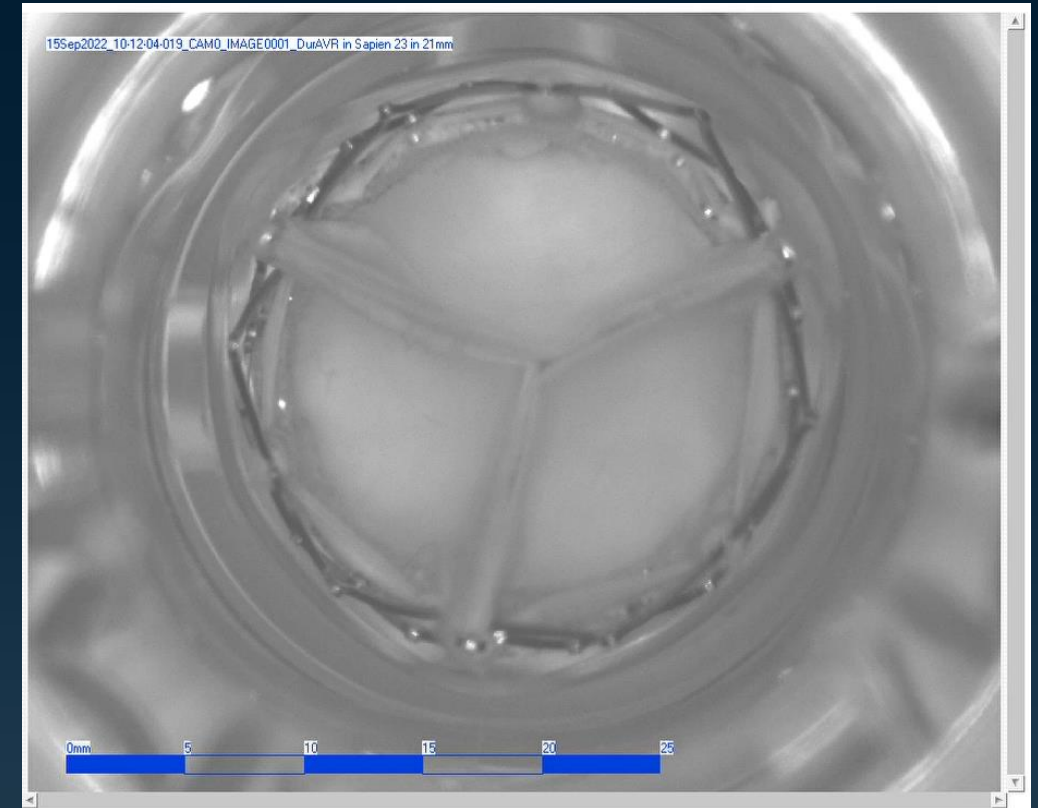
*DurAVR*



- **VinV: DurAVR performance in a Sapien valve**
- 23mm Sapien in a 21mm round fixture



**Sapien 3 Hydrodynamics**  
**EOA: 2.01 mm<sup>2</sup>**  
**Gradient: 11.3 mmHg**



**DurAVR in Sapien 3 Hydrodynamics**  
**EOA: 2.29 mm<sup>2</sup>**  
**Gradient: 9.3 mmHg**

# DurAVR™ 3D Single-piece THV System

*Designed for Lifetime Management of AS Patients*  
*Designed to Last Longer & Work Better*

## NEAR-NORMAL HEMODYNAMICS

Unique 3D single-piece valve design with large EOA, 85% greater coaptation and 35% less stress\*\*

## PROVEN TISSUE DURABILITY

Superior anti-calcification tissue process (ADAPT®)\*

- DNA and glutaraldehyde free
- 10 years in clinical use



## PARAVALULAR LEAK SOLUTION

Proven benefits of PET outer skirt

## IMPROVED CORONARY ACCESS

Large, open cell geometry

## ComASUR™ TF Delivery System

Ability to uniquely rotate valve at the annular level for predictable commissural alignment



# DurAVR™ THV First-in-Human Study Design



## Design

Prospective, non-randomized, single-arm, single-center (Tbilisi Heart Center, Georgia)



## Purpose

Evaluate the safety and feasibility of the DurAVR™ THV System



## Population

13 subjects with symptomatic severe aortic stenosis treated to date



## Assessments & Duration

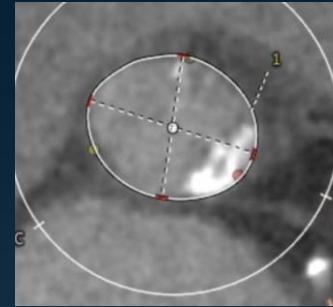
Clinical, echo, MDCT, and cardiac MRI assessments. Follow-up to 1 year.

# Baseline Characteristics

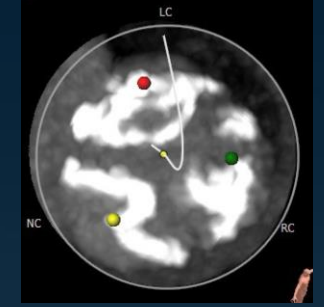
## Challenging Anatomies Treated (Baseline CT)

<b>Baseline characteristics</b>	<b>n = 13</b>
Age (years)	73.92 ± 6.4
Gender (female)	77%
STS Prom (%)	2.34 ± 1.07
Area-derived annulus diameter (mm)	22.95 ± 1.09
NYHA Class	
II	85%
III	15%

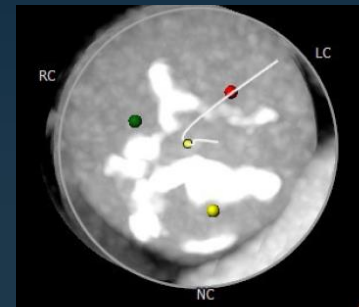
Severe Annular  
Calcium



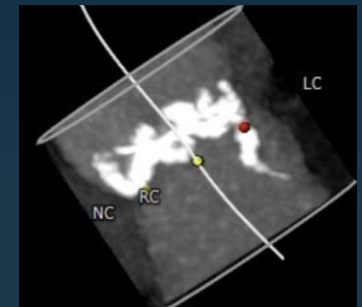
Extreme Leaflet  
Calcium



Type 1 Bicuspid



Extreme LVOT  
Calcium

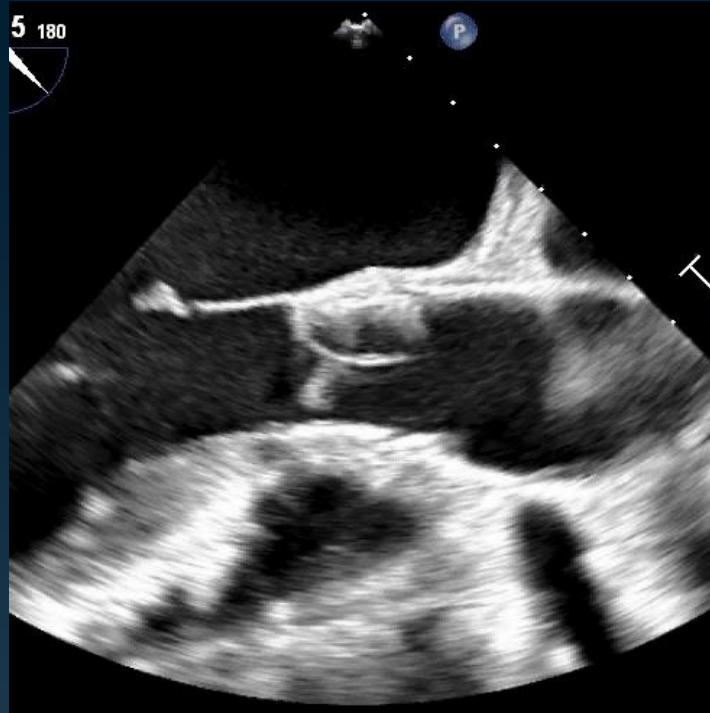


# Procedural Results

**100% Procedural Success**

## Clinical Outcomes

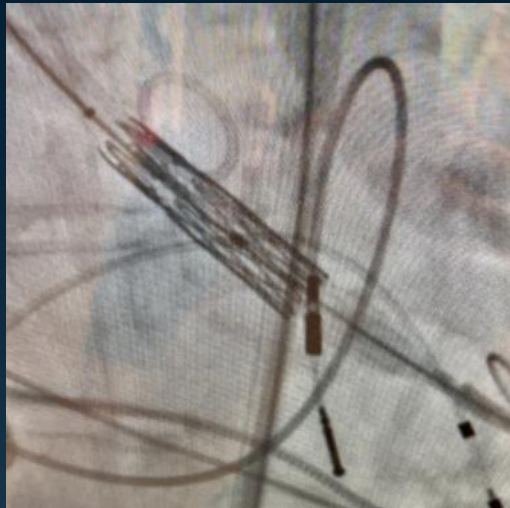
- ✓ No death
- ✓ No stroke
- ✓ No bleeding
- ✓ No reoperation or reintervention
- ✓ No myocardial infarction
- ✓ No device deficiency



Mean coaptation length  
**8.3 mm**



Rotation for Alignment



Deployment



# Post-procedural Outcomes

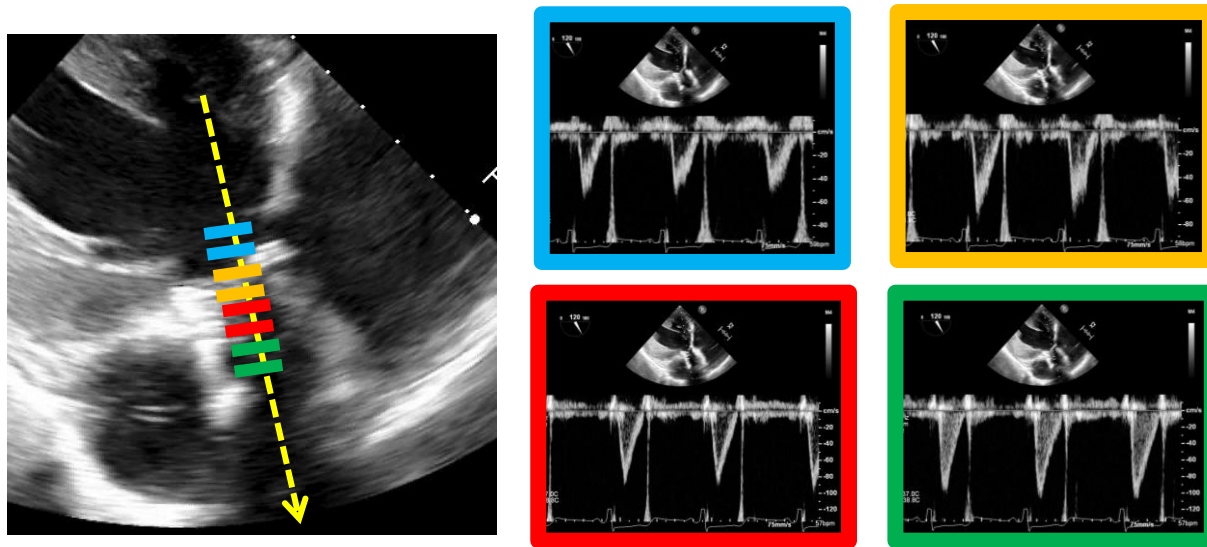
- ✓ No device-related complications
- ✓ No moderate or severe paravalvular leak
- ✓ One mild/moderate central AR (early case before valve sizing optimization)
- ✓ One access site complication (resolved on POD 1)
- ✓ One new pacemaker in a patient with baseline RBBB and LAFB (POD 6)

# Unique Native Like Leaflets Result in Native Like Function

## *Restores Normal Aortic Flow Dynamics*

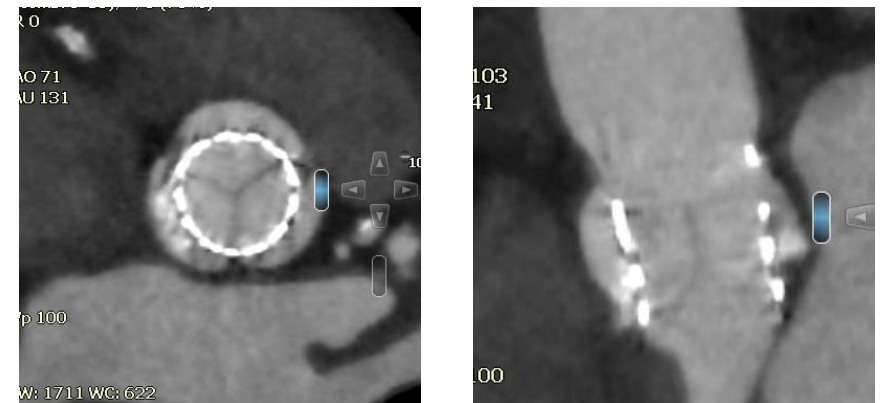
### 30 Days Echo

Consistent laminar flow throughout valve



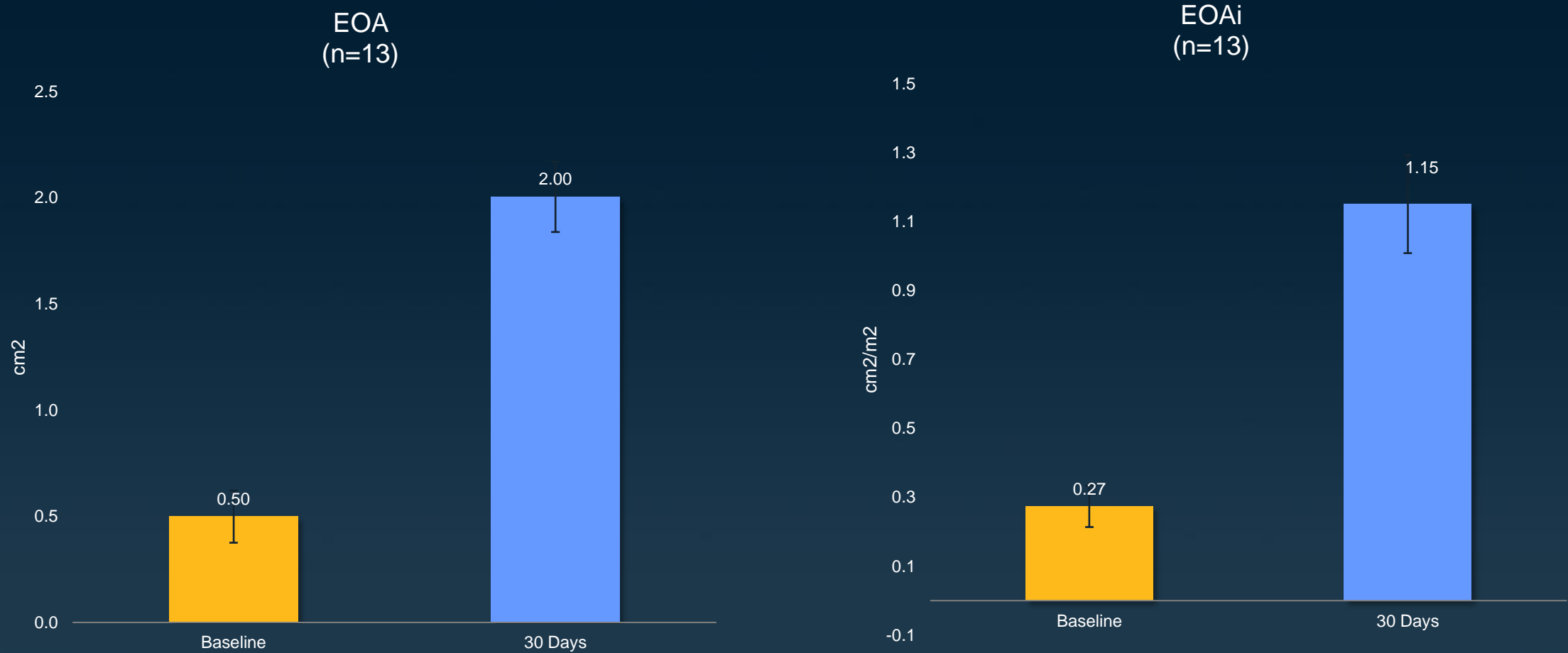
### 30 Days MDCT

Native valve-like leaflet function



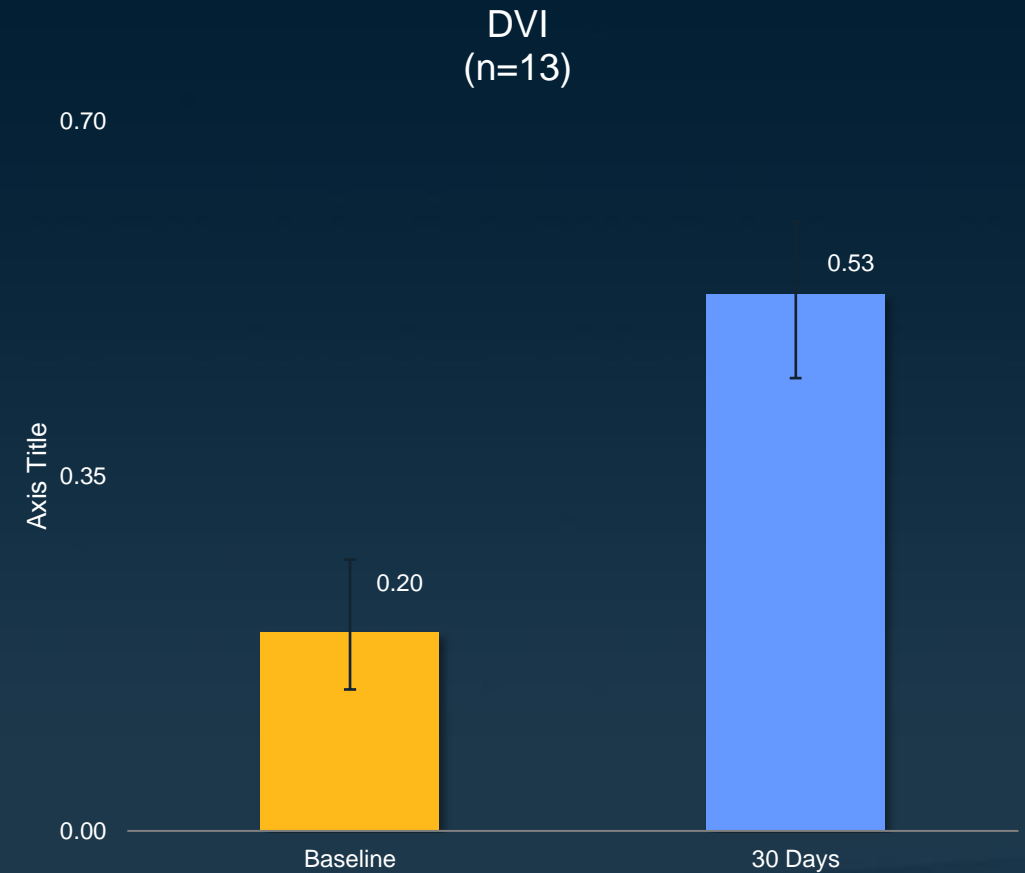
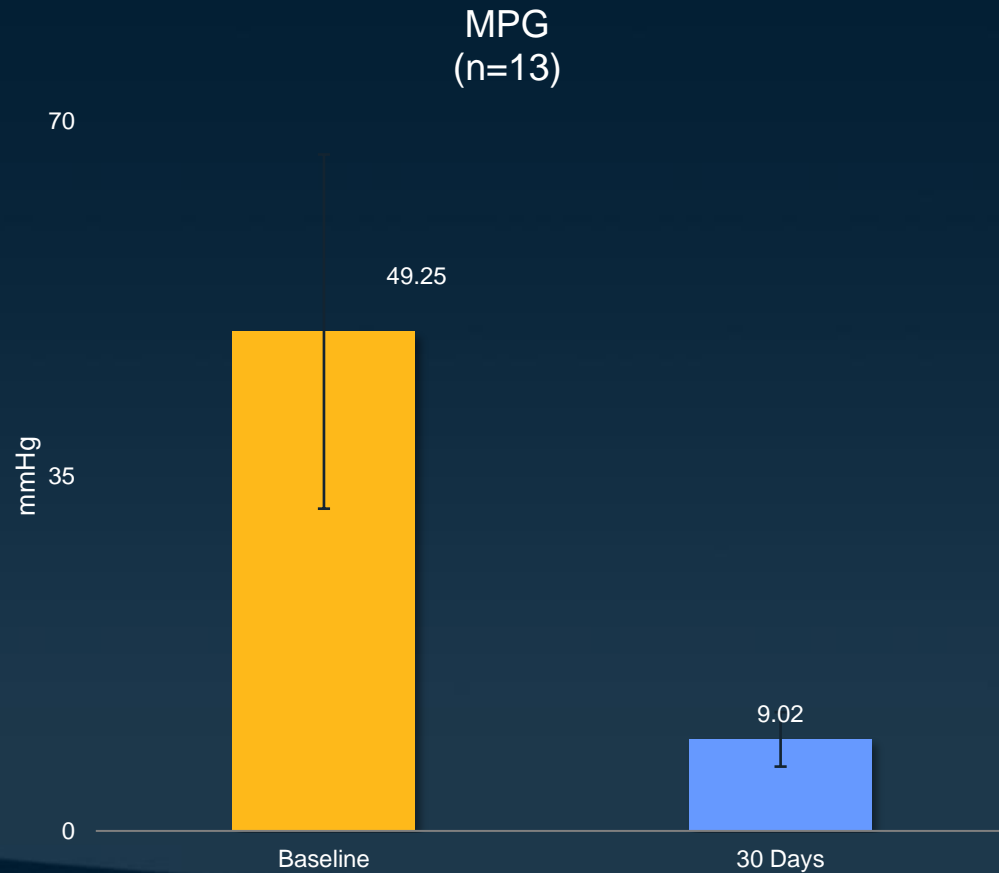
# Exceptional Hemodynamic Results at 30 Days in Balloon Expandable Platform

*Mean annulus size: 22.95 mm*



# Exceptional Hemodynamic Results at 30 Days in Balloon Expandable Platform

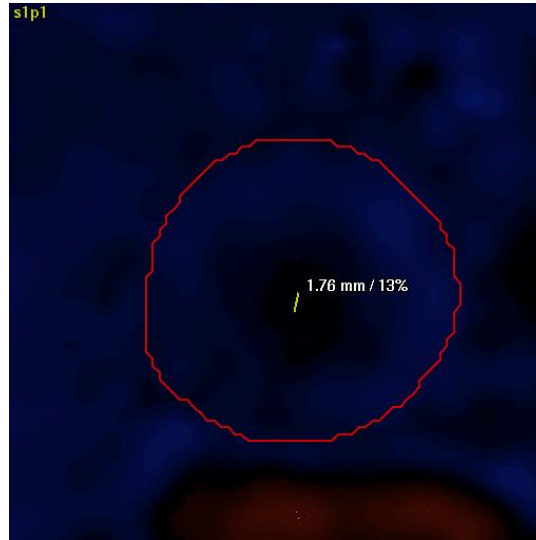
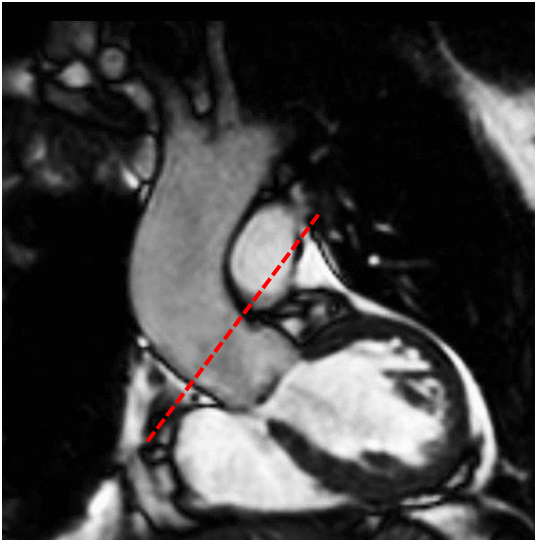
*Mean annulus size: 22.95 mm*





# DurAVR™ Restores Normal Aortic Flow Dynamics

## Severe AS

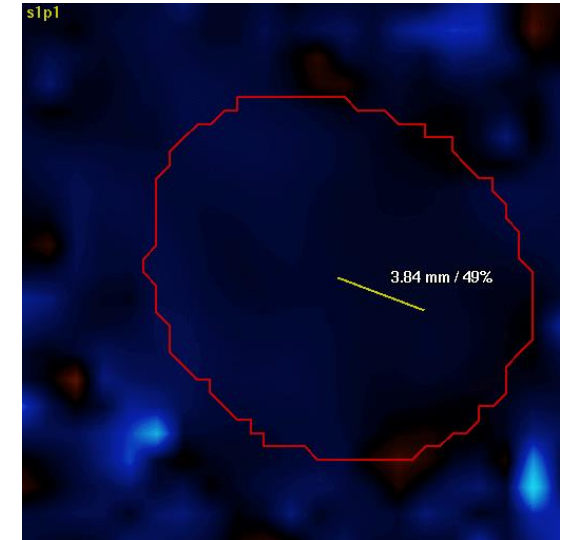
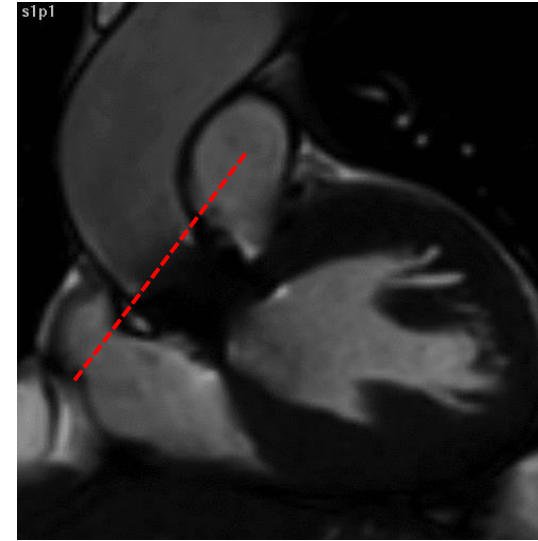


*Flow Displacement = 46%*  
*Flow Reversal Ratio = 23%*

***Eccentric & turbulent aortic flow***

## Post DurAVR THV

(6-month 2D Cardiac MRI)

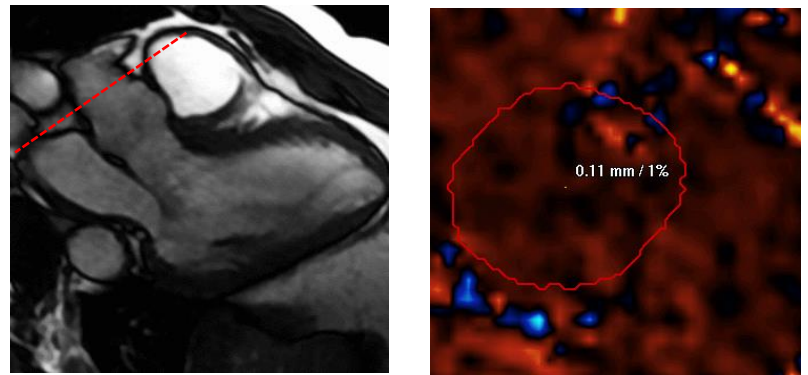


*Flow Displacement = 7%*  
*Flow Reversal Ratio = 0%*

***Normalized laminar aortic flow!!***

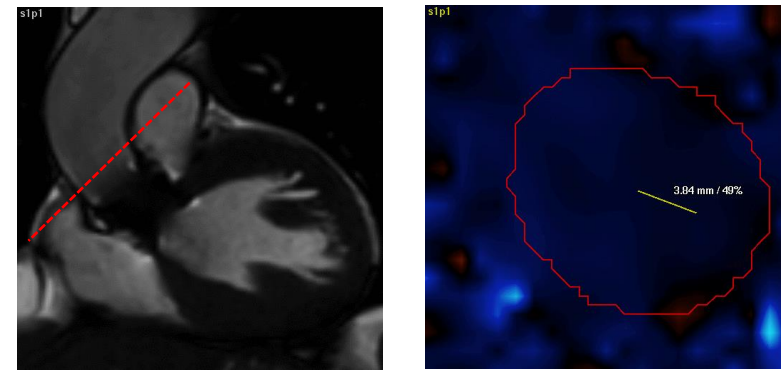
# DurAVR™ : First AVR Shown to Restore Normal Aortic Flow

## Healthy Aortic Valve



**FD = 12%**  
**FRR = 0%**

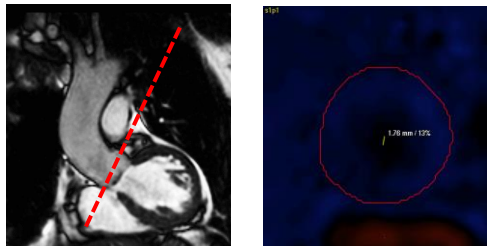
## Post DurAVR THV



**FD = 7%**  
**FRR = 0%**

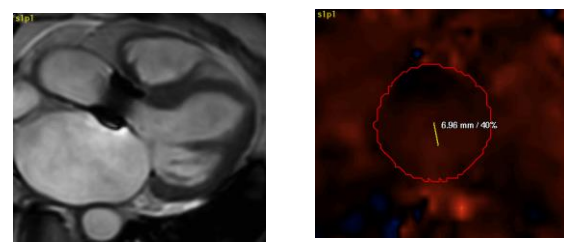
## Impaired Aortic Flow

### Severe AS



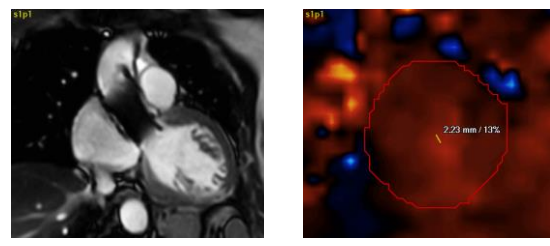
**FD = 46%**    **FRR = 23%**

### Sapien 3



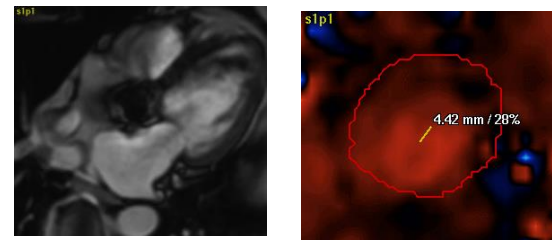
**FD = 48%**    **FRR = 35%**

### Evolut R



**FD = 25%**    **FRR = 4%**

### CEP Magna Ease



**FD = 27%**    **FRR = 30%**

# DurAVR™ : Challenging the AS Treatment Paradigm

- Provides the benefits of balloon expanding and self-expanding valve in one platform
- Restores normal function through unique 3D single piece native shaped valve
- FIH study shows remarkable safety and hemodynamic performance (EOA=2.0 with mean annulus of 22.9 mm and area 411)
- *The first AVR (TAVR or SAVR) to demonstrate restoration of normal flow dynamics*
- Further studies needed to understand restoration of normal flow dynamics impact on:
  - Durability, Myocardial recovery, Myocardial remodeling, Aortopathies, Thrombosis



19 September 2022

# Investor Q&A



[www.anteristech.com](http://www.anteristech.com) | Follow us @anteristech   

Confidential ANTERIS – No reproduction may be made without written consent