

UNCOMPROMISED HEMODYNAMICS. BY DESIGN.

The ALLEGRA™ Transcatheter Heart Valve (THV) has been designed for **uncompromised hemodynamic performance** with single digit mean pressure gradients and high effective orifice areas.¹⁻³

The ALLEGRA™ THV is indicated for the treatment of severe calcified aortic valve stenosis in high risk patients with elevated surgical risk or in patients with a symptomatic degeneration of an aortic valve bioprosthesis.



HEMODYNAMIC PERFORMANCE



UNIQUE STENT FRAME

The ALLEGRA™ maximizes the effective orifice area.

The **self-expanding unique stent** frame of ALLEGRA™ has convex and concave area for high effective orifice area.

ANCHORING AND SEALING

The ALLEGRA™ stent frame has tailored radial force for **effective anchoring and sealing** in the annulus.

The stent frame design provides high radial force in the sealing area and less radial force at the outflow.

WIDER VALVE OPENING

The ALLEGRA™ is a supra-annular valve with a flexible stent outflow for **wider valve opening**.

The flexible stent outflow allows for wider valve opening for large EOA and low mean pressure gradient.¹⁻³

SMALL ANNULI AND VALVE-IN-VALVE

ALLEGRA™ maximizes the hemodynamic performance **in small native annuli and in Valve-in-Valve procedures**.⁴⁻⁵

With a wide valve opening and supra-annular valve position, the patient can benefit from high EOA and low mean pressure gradients.¹⁻³ Minimum treatable annulus diameter is 16.5 mm.



LIFETIME MANAGEMENT

DURABILITY

The ALLEGRA™ stent frame allows for **flexing at the commissural fixation points**. Flexible commissural fixation points reduce stress to the leaflets in every cardiac cycle and are associated with increased durability.^{20,21}

TISSUE PROTECTION

The ALLEGRA™ is protected by **TissGUARD™** for long-term valve function.

TissGUARD™ technology combines the bovine pericardial tissue anti-calcification treatment with leaflet stress-reduction effects of flexible commissural fixation points resulting in long-term valve function.

CORONARY ACCESS

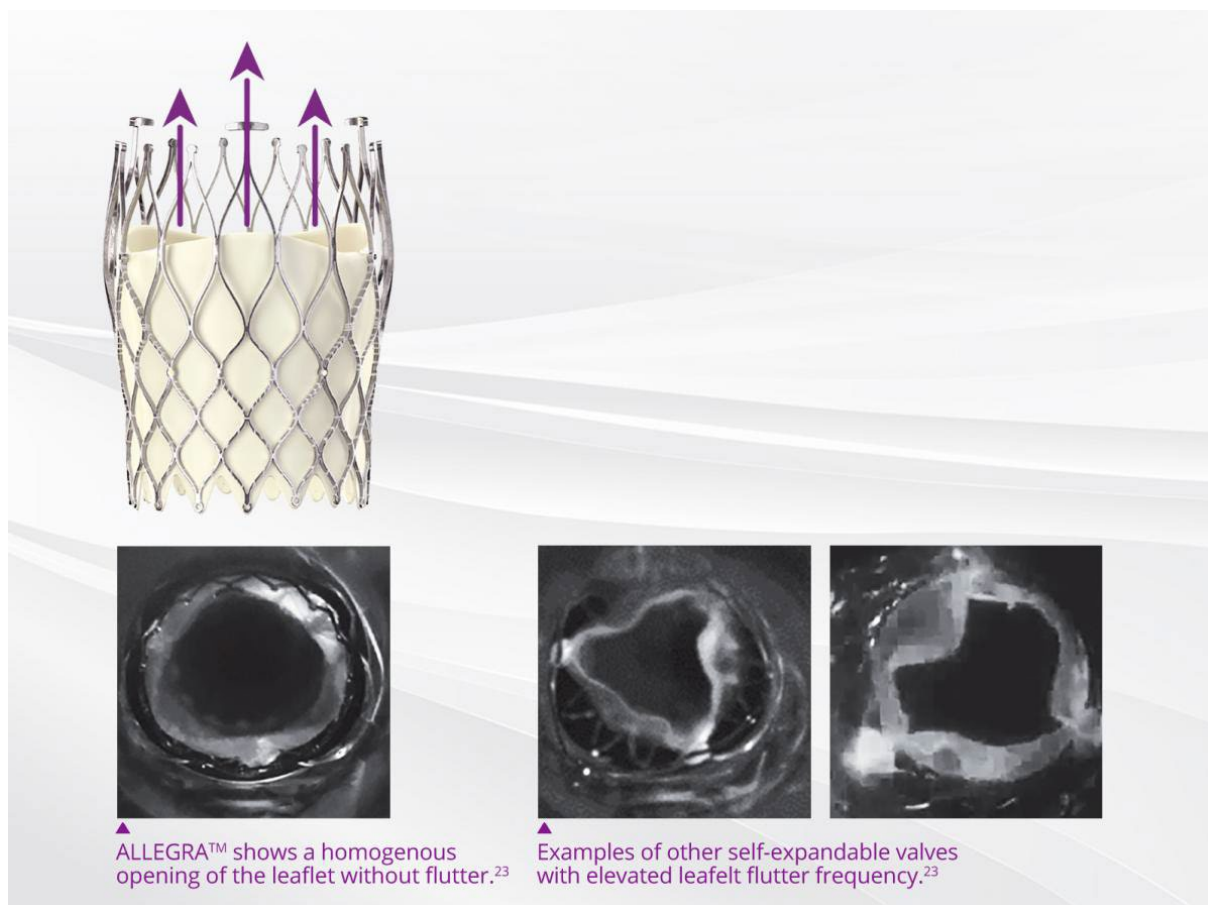
ALLEGRA™ maintains **access to the coronary ostia** for future interventions.

The **6 radiopaque gold markers** highlight where the top of the sealing skirt is and ensures precise implantation for future coronary access.

FLOW DYNAMICS

ALLEGRA™ shows in-vitro a **more physiological flow pattern** than other valves.

Achieving a physiologic flow pattern results in lower gradients, less platelet activation, hemolysis and minimal paravalvular leak resulting in a longer lasting valve.²³



ALLEGRA™ THV SPECIFICATIONS

ALLEGRA™ in conjunction with IMPERIA™ Delivery System

ALLEGRA™ THV	ALLEGRA™ 23	ALLEGRA™ 27	ALLEGRA™ 31
Aortic annulus diameter (mm)	16.5-21	21-24	24-27
Aortic annulus perimeter (mm)	51.8-66.0	66.0-75.4	75.4-84.8
Aortic annulus area (mm ²)	214-346	346-452	452-573
Inner diameter aortic valve bioprosthesis (mm)	16.5-21	21-24	24-27
Compatible with IMPERIA™ DS	IMPERIA™-S	IMPERIA™-M	IMPERIA™-M

ALLEGRA™ in conjunction with Permaflow Delivery System

ALLEGRA™ THV	ALLEGRA™ 23	ALLEGRA™ 27	ALLEGRA™ 31
Aortic annulus diameter (mm)	19-22	22-25	25-28
Aortic annulus perimeter (mm)	59.7-69.1	69.1-78.5	78.5-88.0
Aortic annulus area (mm ²)	280-380	380-490	490-620
Inner diameter aortic valve bioprosthesis (mm)	16.5-21.5	22-24.5	25-28
Compatible with Permaflow DS	ALLEGRA™ Delivery System TF with Permaflow		

