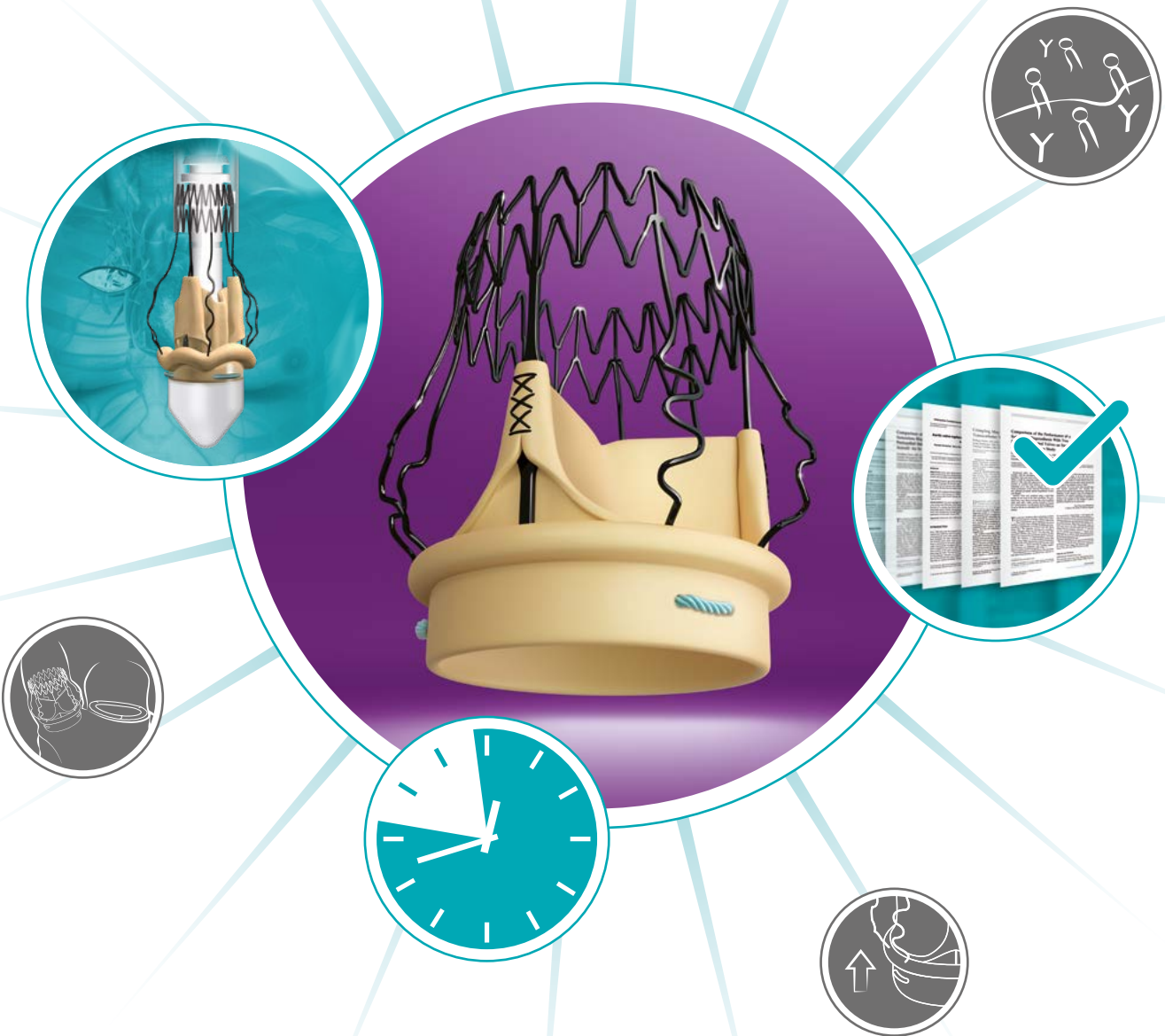


PERCEVAL[®] PLUS THE OPTIMAL MIX



PERCEVAL PLUS: DESIGNED TO PERFORM.

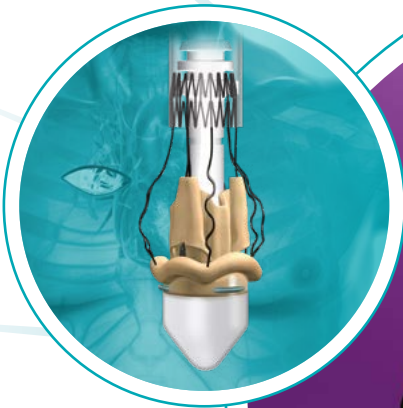
PERCEVAL[®] PLATFORM

- **First-in-human**
performed in **2007**
- More than **10 years**
of successful clinical use
- Solid clinical evidence
- Truly global reach

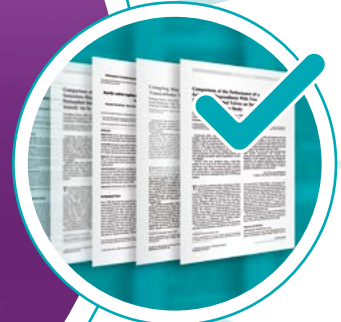
Designed to perform

Unique Valve Design

Facilitates Minimally Invasive Surgery



Innovative Tissue Treatment



Clinically Proven Technology



Viable for Multiple Valve Procedures



Simplifies Complex Procedures

Design to Improve Patient Outcomes

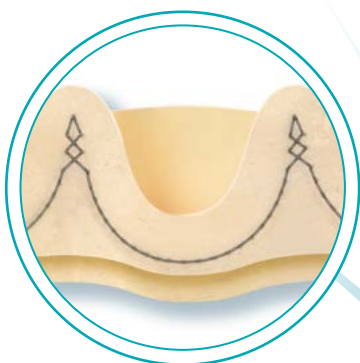


Unique Valve Design

LivaNova's tissue platform has a long clinical heritage, its proven double-sheet design principle has been used to manufacture biological prostheses since 1985.

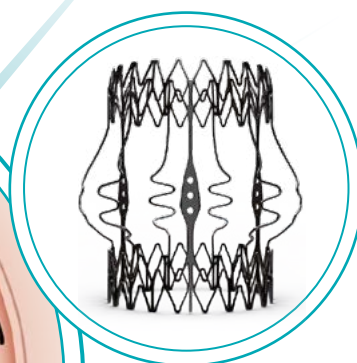
DOUBLE SHEET DESIGN

An outer sheet acts as a cushion to minimize the stress transferred to the leaflets



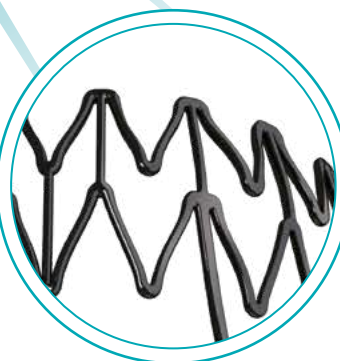
SUPERELASTIC STENT

Reduces the stress transferred to the leaflets



UNIQUE ATRAUMATIC COLLAPSING

The collapsing procedure increases visibility and facilitates more complex procedures^{1,2}



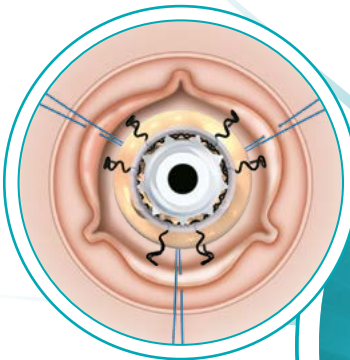
CARBOFILM® COATING

Reduces inflammatory reaction favoring a gentle endothelialization^{2,3}

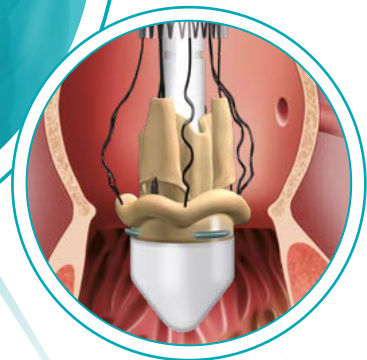
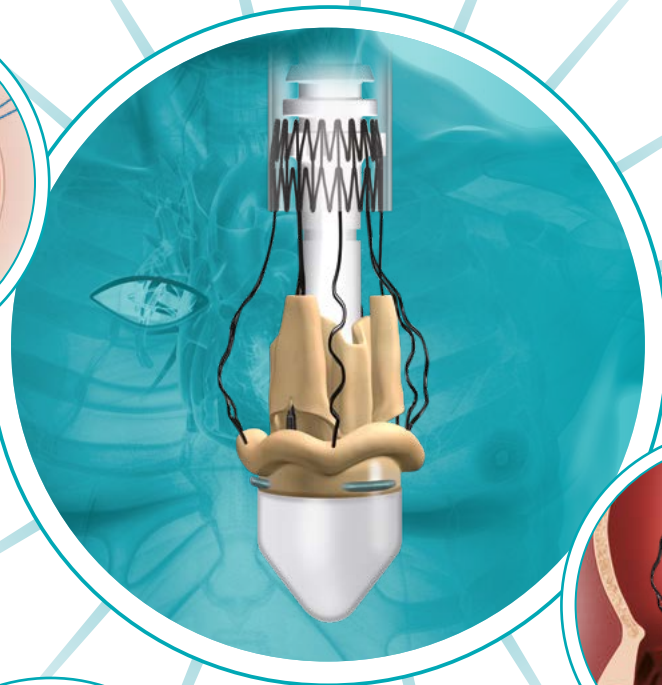
Facilitates Minimally Invasive Surgery

The atraumatic collapsing does not impair leaflet functionality⁴, preventing possible damage to the tissue. The reduced profile allows the surgeon better visibility of the annulus and the anatomical structures during implantation and deployment for greater confidence and faster, more precise positioning at the implantation site.⁵

COLLAPSED PRIOR TO IMPLANTATION

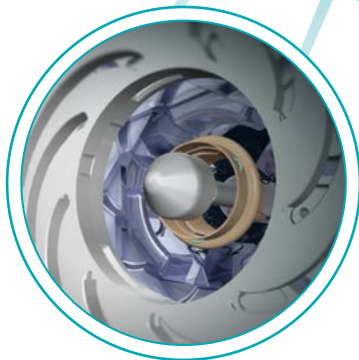


Collapsible design allows for visibility of critical structures during implantation⁶



MAXIMIZED VISIBILITY DURING IMPLANTATION

Faster, more precise positioning⁵

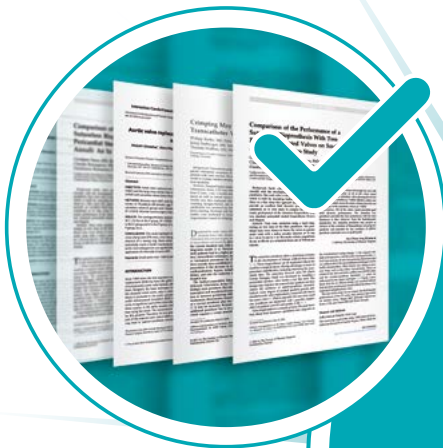


FULLY ATRAUMATIC VALVE COLLAPSING

Does not impair leaflet functionality⁷

Clinically Proven Technology

PERCEVAL PLUS is based on the trusted PERCEVAL platform supported by more than 10 years of clinical experience that evidence excellent results in terms of durability.⁸

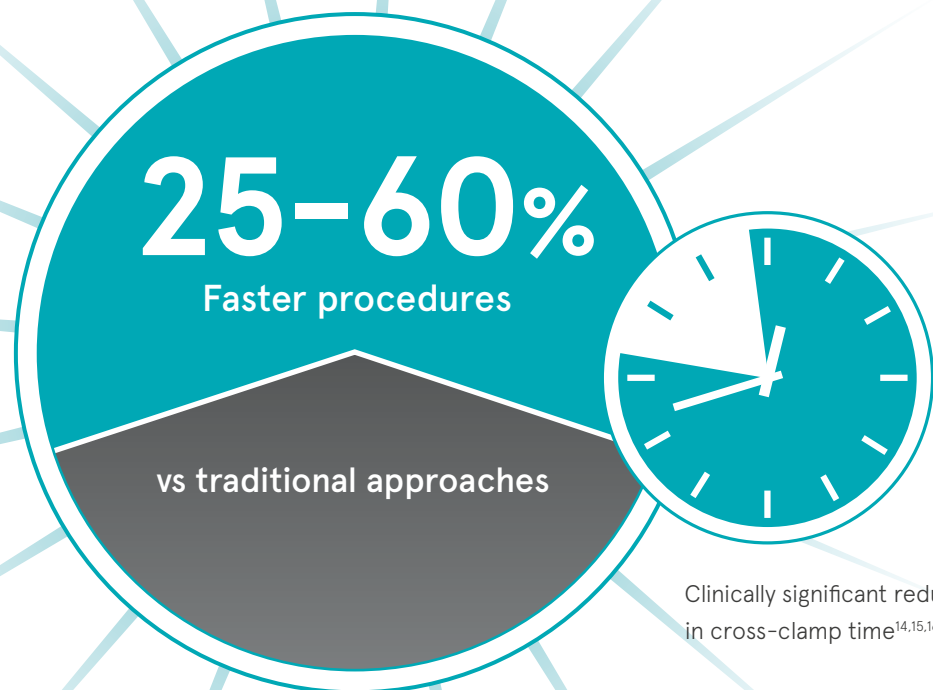


SOLID CLINICAL
EVIDENCE

0.29%
SVD
10 years⁸

Simplifies Complex Procedures

Whether using a full sternotomy or a MICS approach, PERCEVAL PLUS enables a faster procedure^{9,10} and reduced cross-clamp¹¹ time compared to traditional valve prostheses.



PERCEVAL PLUS helps reduce complexity even in challenging and time consuming procedures,^{12,15} while maintaining good hemodynamic outcomes.^{11,13}

PERCEVAL PLUS is safe and effective, even in cases of concomitant cardiac procedures.¹⁰

Innovative Tissue Treatment

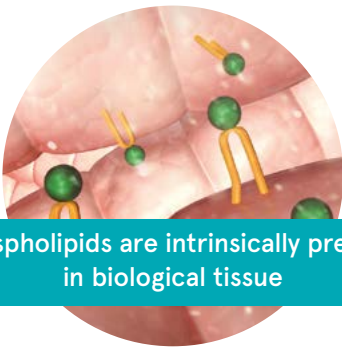
Designed to Reduce Calcification

LivaNova's commitment to achieve the ideal tissue platform has led to constant improvements in tissue treatments, from the initial fixation process to the aldehyde neutralization treatment and now to the FREE tissue treatment that addresses both phospholipids and aldehydes.

The major causes of calcification

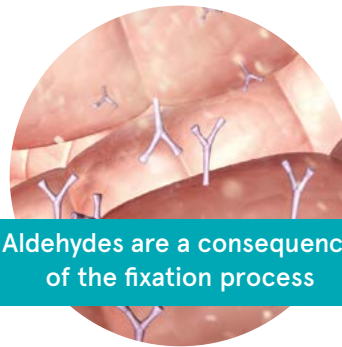
Phospholipids and aldehydes contribute to calcification as they are calcium binding sites.¹⁷⁻²¹

Phospholipids



Phospholipids are intrinsically present in biological tissue

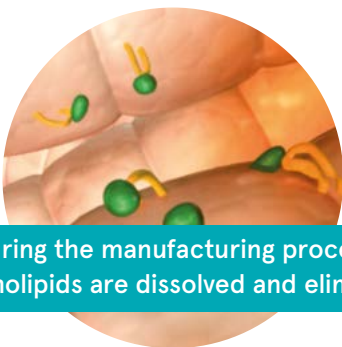
Aldehydes



Aldehydes are a consequence of the fixation process

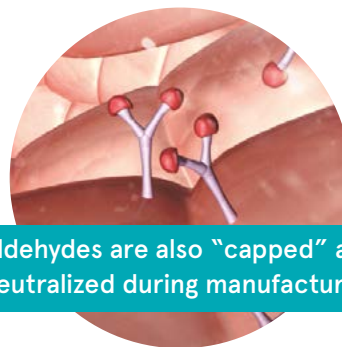
FREE addresses calcium binding sites

Phospholipids



During the manufacturing process Phospholipids are dissolved and eliminated

Aldehydes



Aldehydes are also "capped" and neutralized during manufacturing

Supporting evidence of the FREE tissue treatment

-96%
phospholipid content*

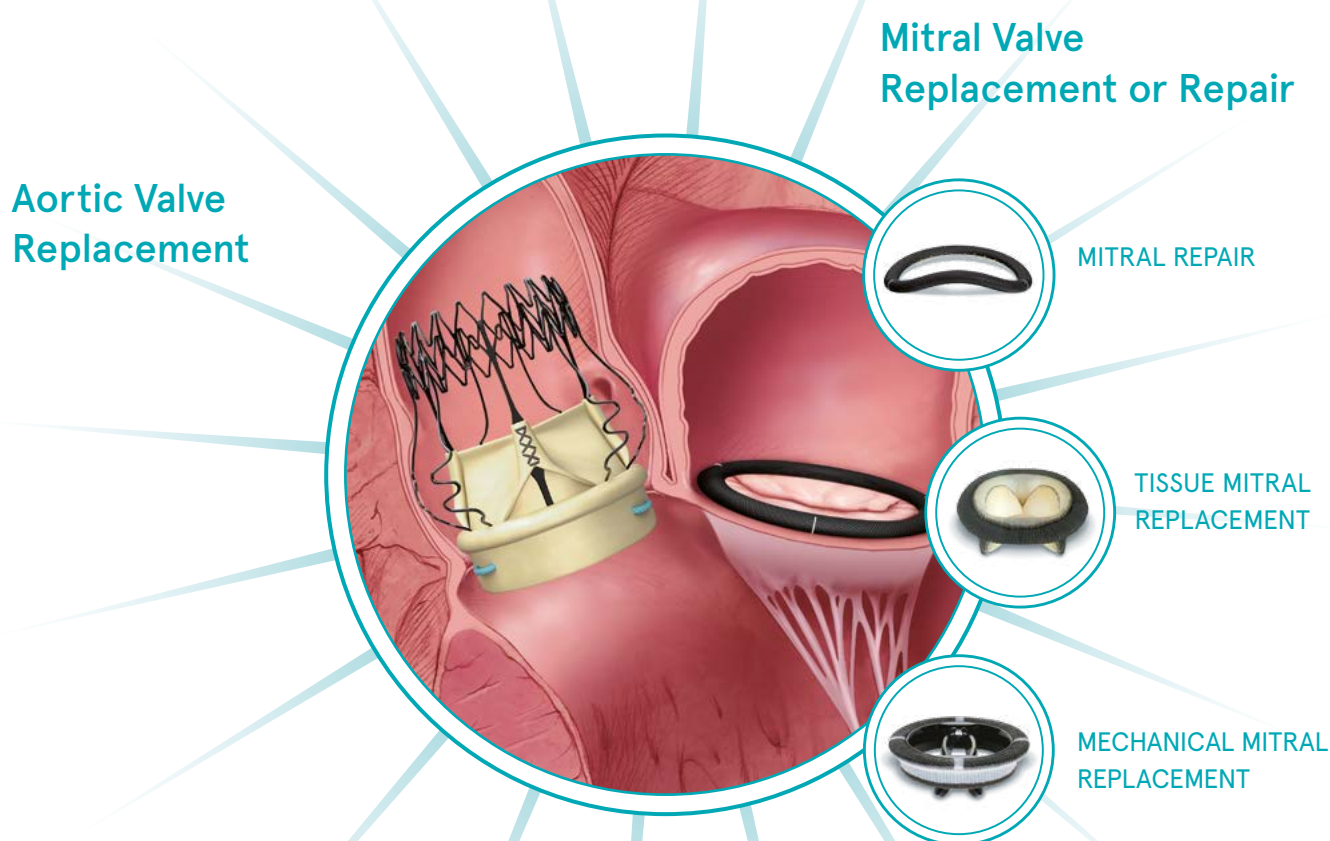
ZERO
aldehyde toxicity

* vs control group²²

Viable for Multiple Valve Procedures

When time really matters

The unique characteristics of PERCEVAL PLUS make it an ideal choice in complex implantations while extending the benefits to a wider patient population.*



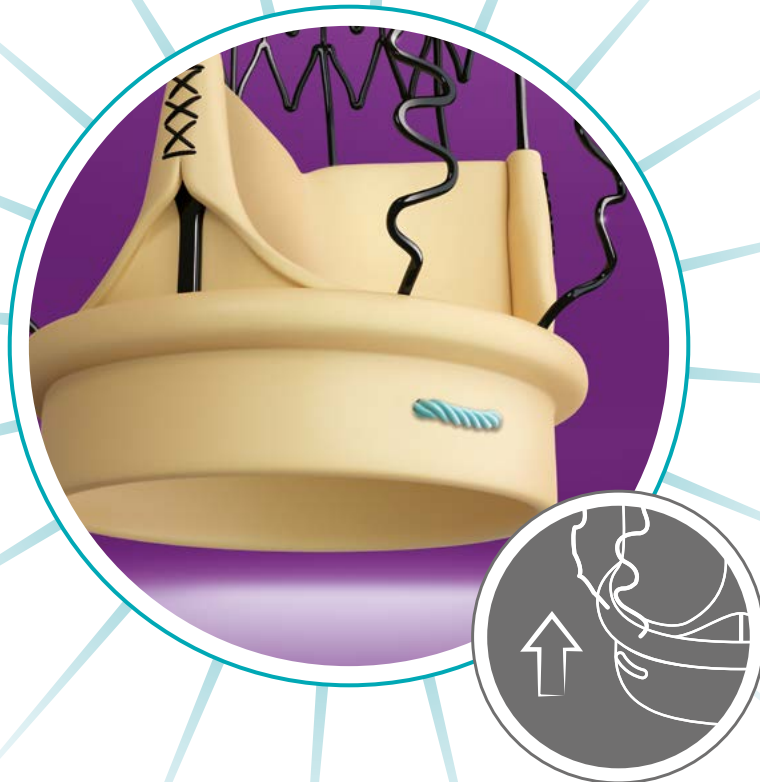
- Different clinical evidences already published to support the benefit of PERCEVAL PLUS in concomitant procedures.²³⁻³⁰
- Concomitant PERCEVAL PLUS implantation and mitral valve repair/replacement is a feasible, safe and reproducible procedure.^{24,25,27,28,30}
- Minimally invasive surgery in combined procedures is a feasible approach that could be simplified with the use of PERCEVAL PLUS.²⁹

* The decision of using PERCEVAL PLUS in the patients should be based on a careful individual assessment and limited to cases in which the benefits of using PERCEVAL PLUS justify the risks.

The available clinical data indicate that using PERCEVAL PLUS in patients with other prostheses may result in intraoperative valve misplacement or insufficient leaflet coaptation leading to valve replacement, due to possible interference with the other prostheses.

Designed to Improve Patient Outcomes

Implantation depth and therefore the stent prosthesis protrusion into the LVOT is a measure strongly associated with post-operative conduction disturbances.³¹ Therefore the reduction of the protrusion of the valve below the aortic annulus is expected to decrease the risk of impairment of the AV conduction system.



ENHANCED VALVE
PERFORMANCE

PERCEVAL[®] PLUS

A circular inset image shows a middle-aged couple smiling. The man is in the foreground, holding the handlebars of a bicycle. The woman is standing behind him, also smiling. They are outdoors against a clear blue sky. The entire image is framed by a circular border with light blue sunburst rays extending outwards.

BECAUSE PATIENTS WISH TO RETURN
TO A FULL AND ACTIVE LIFE

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INDICATIONS: The PERCEVAL PLUS prosthesis is indicated for the replacement of diseased native or a malfunctioning prosthetic aortic valve via open heart surgery. The prosthesis is indicated for use in adult patients who are diagnosed to have aortic valve stenosis or steno-insufficiency.

TOP POTENTIAL SIDE EFFECTS: The risks or potential adverse events associated with cardiac valve replacement with a bioprosthesis include, but may not be limited to: cardiac arrhythmias, death, endocarditis, heart failure, hemorrhage, intravalvular and/or paravalvular leak, stroke or any related neurologic disorders, structural valve deterioration, reoperation and explant. Beyond the previously mentioned adverse events, specific events related to the implant of the PERCEVAL PLUS prosthesis may include, but not be limited to dislodgment and/or migration of the prosthesis.

MRI conditional.

LivaNova

Health innovation that matters

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