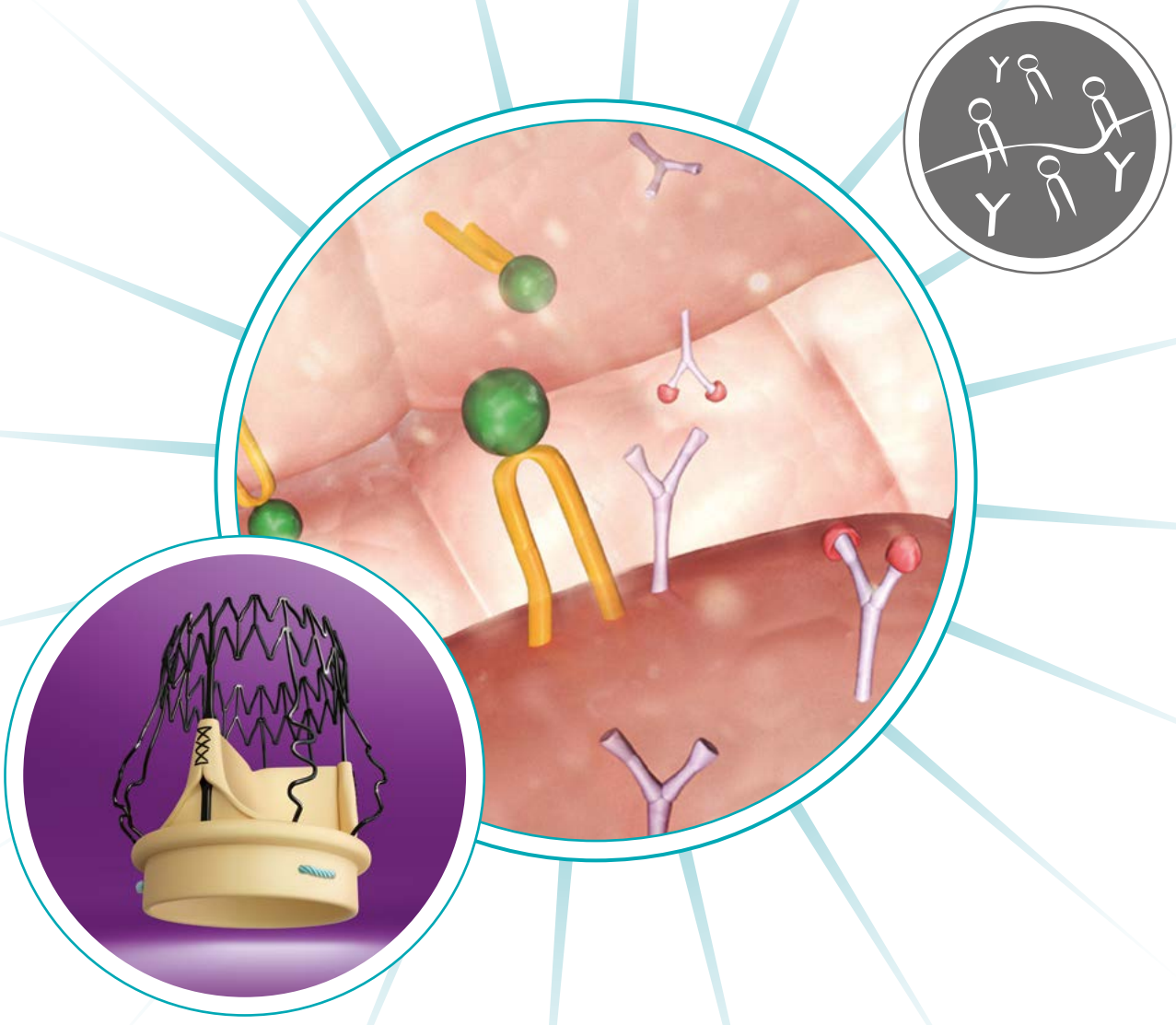
LivaNova

Health innovation that matters

PERCEVAL® PLUS

Designed to Improve Durability



Now with an innovative tissue treatment

- Addresses both Phospholipids and Aldehydes
- Ready-to-use, straight from the jar

PERCEVAL® PLUS

Designed to Reduce Calcification and Improve Durability

- All tissue valves are subject to structural valve deterioration (SVD), mainly due to calcification.

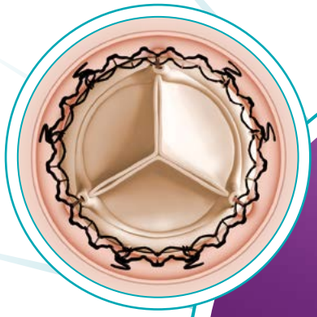
- SVD is a complex and multifactorial process involving chemical, mechanical, biological and clinical factors.

- Phospholipids and aldehydes are major sources of calcification.

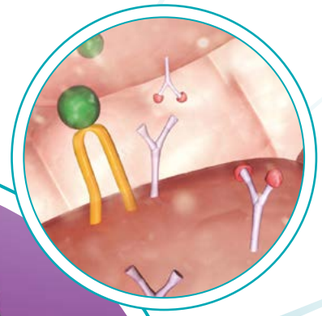
- PERCEVAL PLUS is designed to enhance even further the already optimal results shown in more than 10 years of PERCEVAL clinical experience.[1]

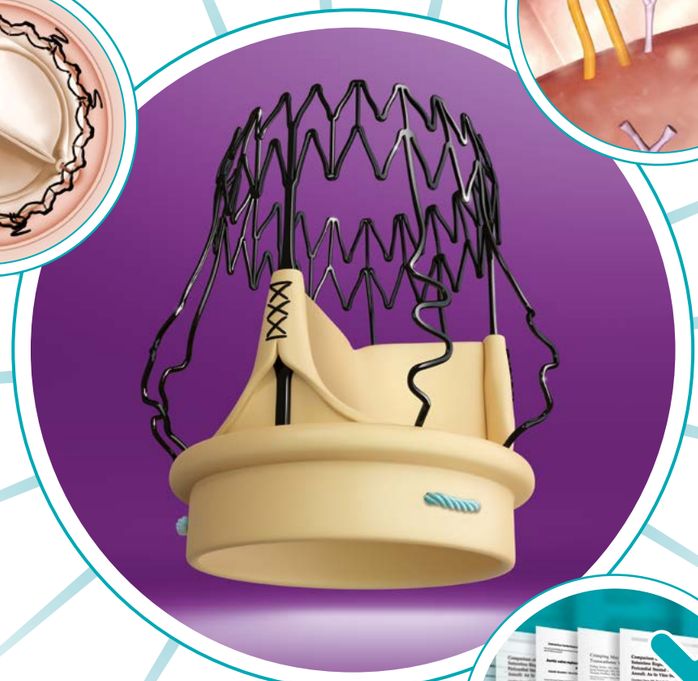
Valve Durability

Unique Valve Design



Innovative Tissue Treatment





Clinically Proven Technology

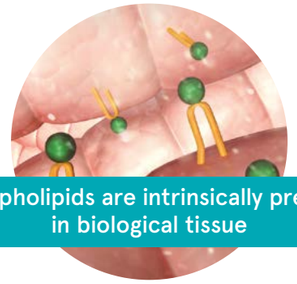
FREE Tissue Treatment
Designed to Reduce Calcification

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

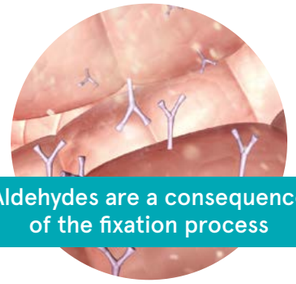
Phospholipids and aldehydes contribute to calcification as they are calcium binding sites.[2-6]

Phospholipids



Phospholipids are intrinsically present in biological tissue

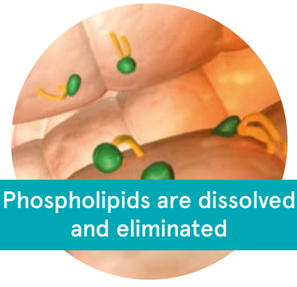
Aldehydes



Aldehydes are a consequence of the fixation process

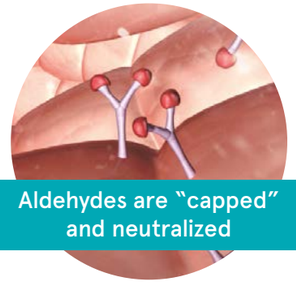
FREE addresses calcium binding sites

Phospholipids



Phospholipids are dissolved and eliminated

Aldehydes



Aldehydes are "capped" and neutralized

Supporting evidence of the FREE tissue treatment

-96%
phospholipid content*

ZERO
aldehyde toxicity

* vs control group.[7]

No clinical data are available that evaluate the long-term impact of FREE tissue treatment in patients.

Ready-to-Use,
Straight from the Jar

LivaNova pericardial valves that have been treated with the innovative FREE tissue treatment are stored in a physiological, aldehyde-free solution and do not require rinsing, hence, they are ready-to-use, straight from the jar.

Physiological solution
(aldehyde-free storage)

No toxicity for the patient

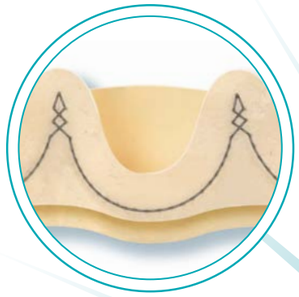
Faster Procedures

FREE TISSUE TREATMENT AND ALDEHYDE-FREE STORAGE

The FREE-Treatment addresses both phospholipids and aldehydes together with an aldehyde-free storage. This combination enhances anticalcification properties and may improve tissue durability.

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.

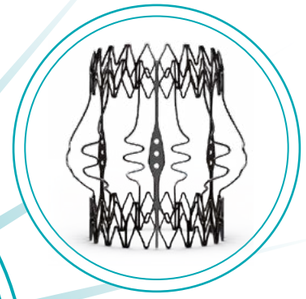


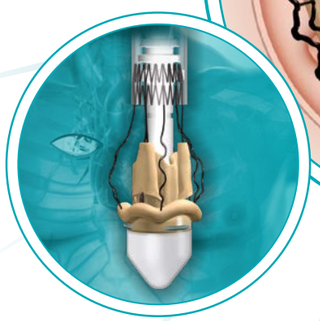
DOUBLE SHEET DESIGN

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 atraumatic collapsing does not impair leaflet functionality.[8] 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.[9]

CARBOFILM® COATING

Reduces inflammatory reaction favoring a gentle endothelialization.[10-11]

Clinically Proven Durability

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.

0.29%
SVD
10 years[1]

PERCEVAL PLUS: DESIGNED TO IMPROVE DURABILITY

The FREE-Treatment is designed to be an ideal base for our tissue valves and for the life of our patients.

Because patients wish to return to a full and active life

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11. Della Barbera et al., *Cardiovascular Pathology 14 (2005) 96-103*

INDICATIONS: The PERCEVAL 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 prosthesis may include, but not be limited to dislodgment and/or migration of the prosthesis.
MRI conditional.

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11/2018 IM-01952 C RE0210254