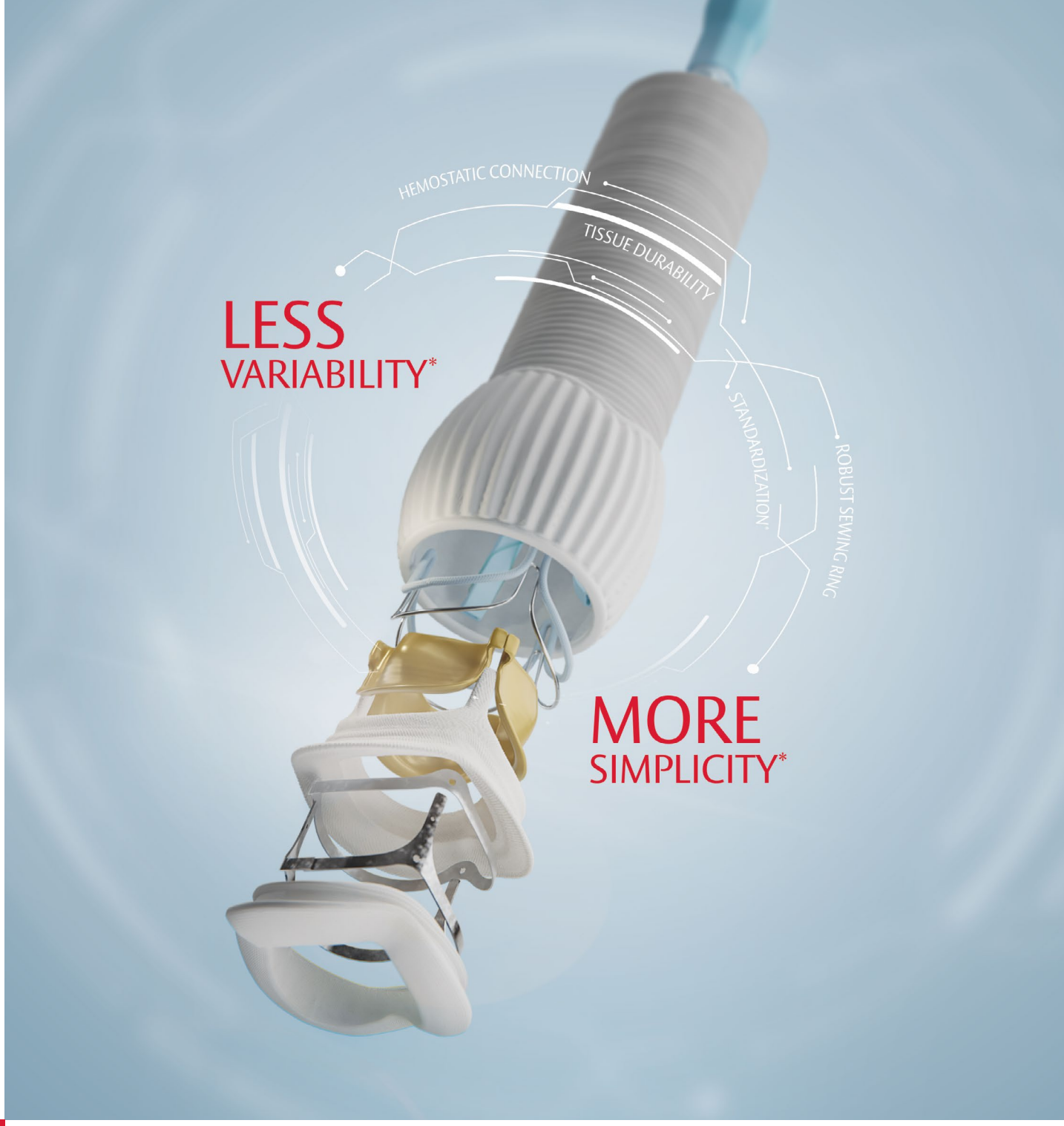


Engineered for the bio-Bentall. Down to every detail.*

KONECT RESILIA aortic valved conduit is the first and only pre-assembled, ready-to-implant† biological aortic valved conduit, built specifically for bio-Bentall procedures.

*As compared to self-assembled aortic valved conduits and non-RESILIA tissue valves.
†Consult Instructions for Use for device preparation.

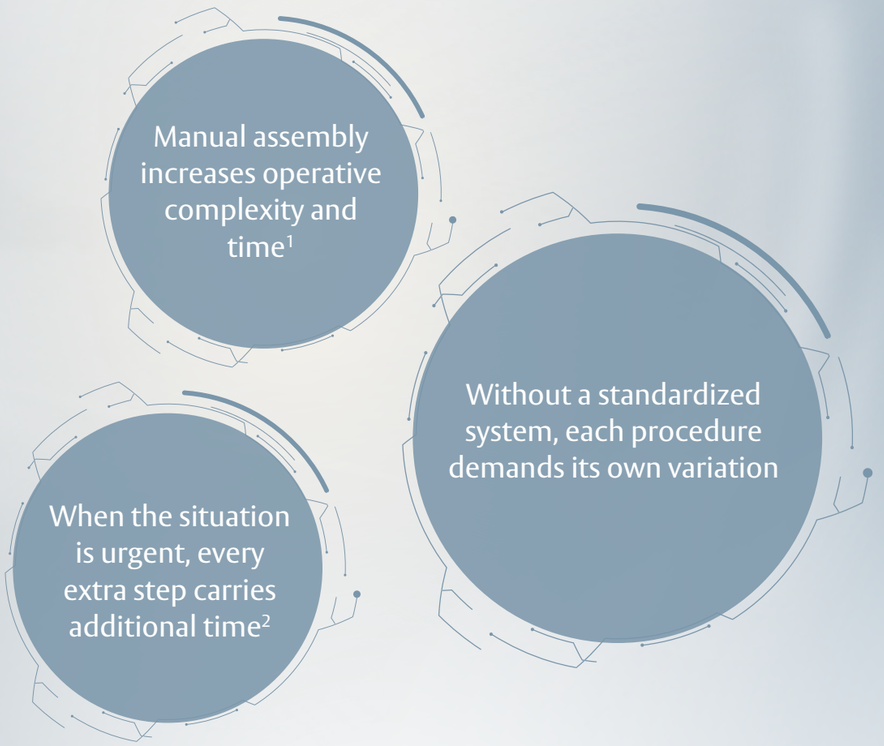
Edwards

Complex anatomy demands precise solutions

Aortic root disease — including aneurysm, acute Type A dissection, and connective tissue disorders — demands intervention with the highest precision. The Bentall procedure is the gold-standard answer. But not all Bentall procedures are standardized.

Hand-assembled conduits require surgical precision

For decades, surgeons have had to manually assemble biological conduits intraoperatively, suturing a bioprosthetic valve into a vascular graft by hand. Every stitch introduces a variable. Every variable introduces risk.

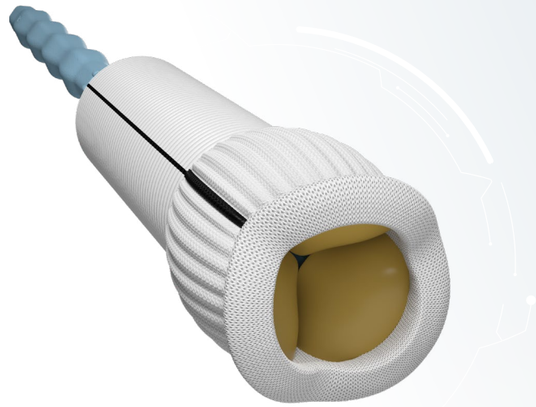


Built for bio-Bentall

KONECT RESILIA aortic valved conduit is the first and only pre-assembled, ready-to-implant* biological aortic valved conduit specifically engineered for the bio-Bentall procedure. Built on the Carpentier-Edwards PERIMOUNT platform and backed by more than 30 years of published clinical data,[3-5] it combines the proven durability of RESILIA tissue technology with the predictable performance of the Valsalva graft in a single, standardized system.[1]

Ready when you are.

Stored dry and ready to use, KONECT RESILIA aortic valved conduit removes the assembly step entirely. Ready for implant, straight from the box:



Pre-assembled precision

The valve and graft are engineered together, not sutured together at the table.[3]

~200 sutures

It's assembled with nearly 200 sutures, securing a strong, reliable connection between the valve and graft.**

Carefully crafted

Each conduit requires 5-7 operators and 8 hours to assemble, inspect, and package before it ever reaches the OR.

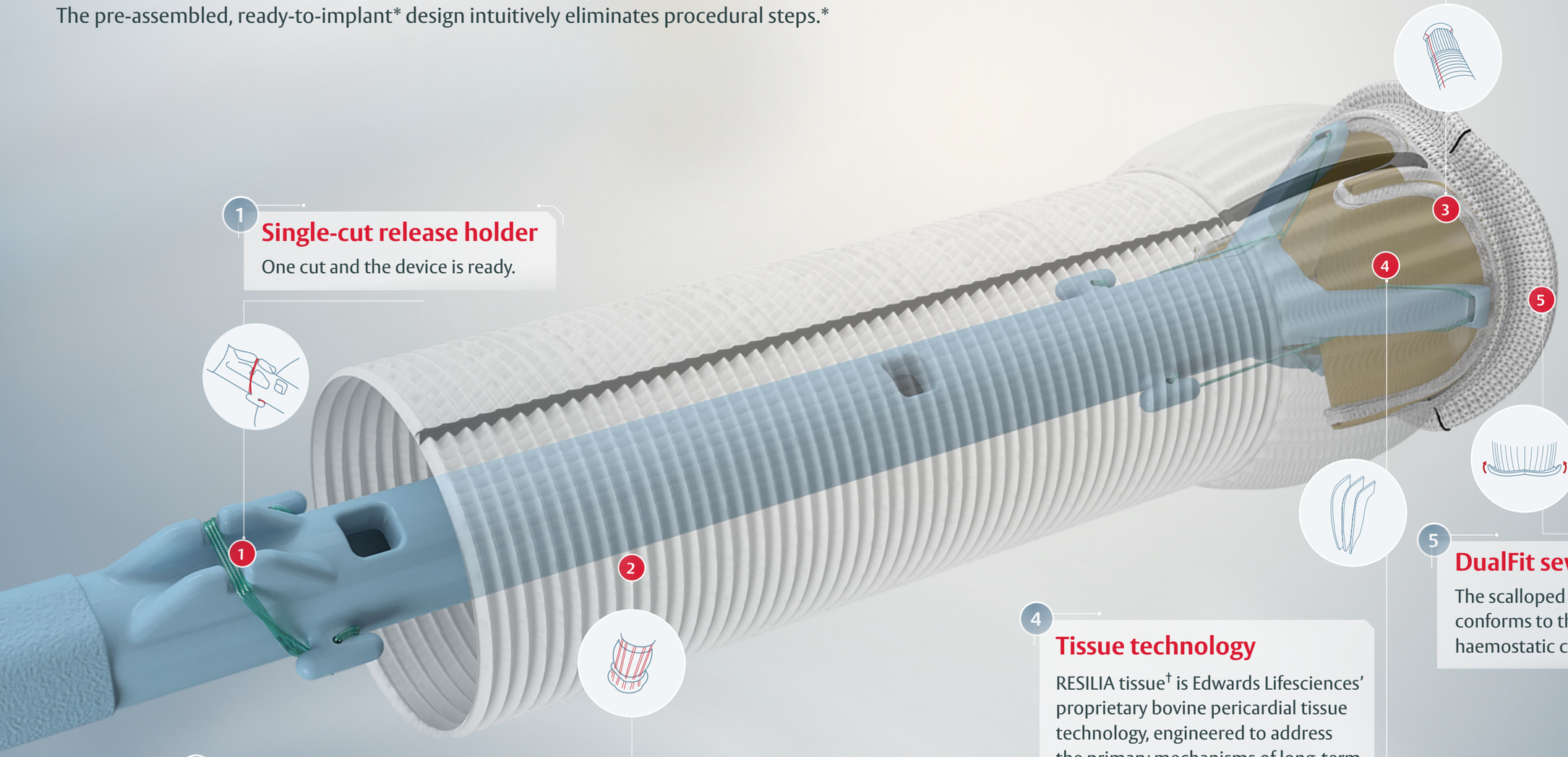
Tissue advantage

A bioprosthetic solution that avoids the lifelong anticoagulation burden of mechanical valves appropriate for a broader range of patients, including younger and more active individuals.[6]

*Consult Instructions for Use for device preparation.
**Used to assemble the graft to the valve stent.

Every feature engineered with purpose

KONECT RESILIA aortic valved conduit was specifically designed for the needs of the bio-Bentall procedure. And every design element addresses a specific surgical challenge. The pre-assembled, ready-to-implant* design intuitively eliminates procedural steps.*



1 Single-cut release holder

One cut and the device is ready.

2 Gelatin-infused Valsalva graft

The graft is sized +3mm above the valve to support natural positioning. It brings the proven performance of Valsalva graft technology into a standardized, integrated system.[7]

3 Three commissure markers

Equally spaced commissure markers aid in orientation and alignment, taking the guesswork out of coronary re-attachment and helping ensure correct positioning every time.

4 Tissue technology

RESILIA tissue† is Edwards Lifesciences' proprietary bovine pericardial tissue technology, engineered to address the primary mechanisms of long-term valve failure.

5 DualFit sewing ring

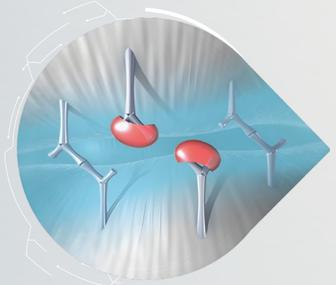
The scalloped sewing ring conforms to the root and the wider haemostatic cuff seals it.[7]

*Consult Instructions for Use for device preparation.
†Clinical data on valves with RESILIA tissue up to 7-year follow-up have been published, with additional follow-up to 10-years in progress.[10]

RESILIA tissue is designed for durability†

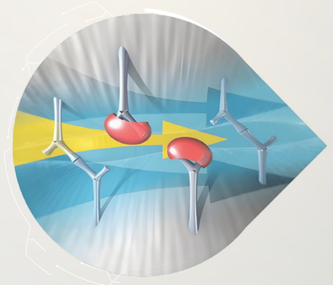
RESILIA tissue technology is backed by a strong, growing base of clinical evidence attesting to its haemodynamic performance and durability.[8-10]

Edwards Lifesciences' integrity preservation technology transforms bovine pericardial tissue into RESILIA tissue, effectively eliminating free aldehydes, while protecting and preserving the tissue.[8,11-13] RESILIA tissue is designed to neutralize these binding sites, addressing one of the primary mechanisms of long-term valve failure.[8,11-13]



+ Calcium-blocking technology

Stable-capping permanently blocks free aldehydes to prevent calcium binding within the tissue[8,11-13]

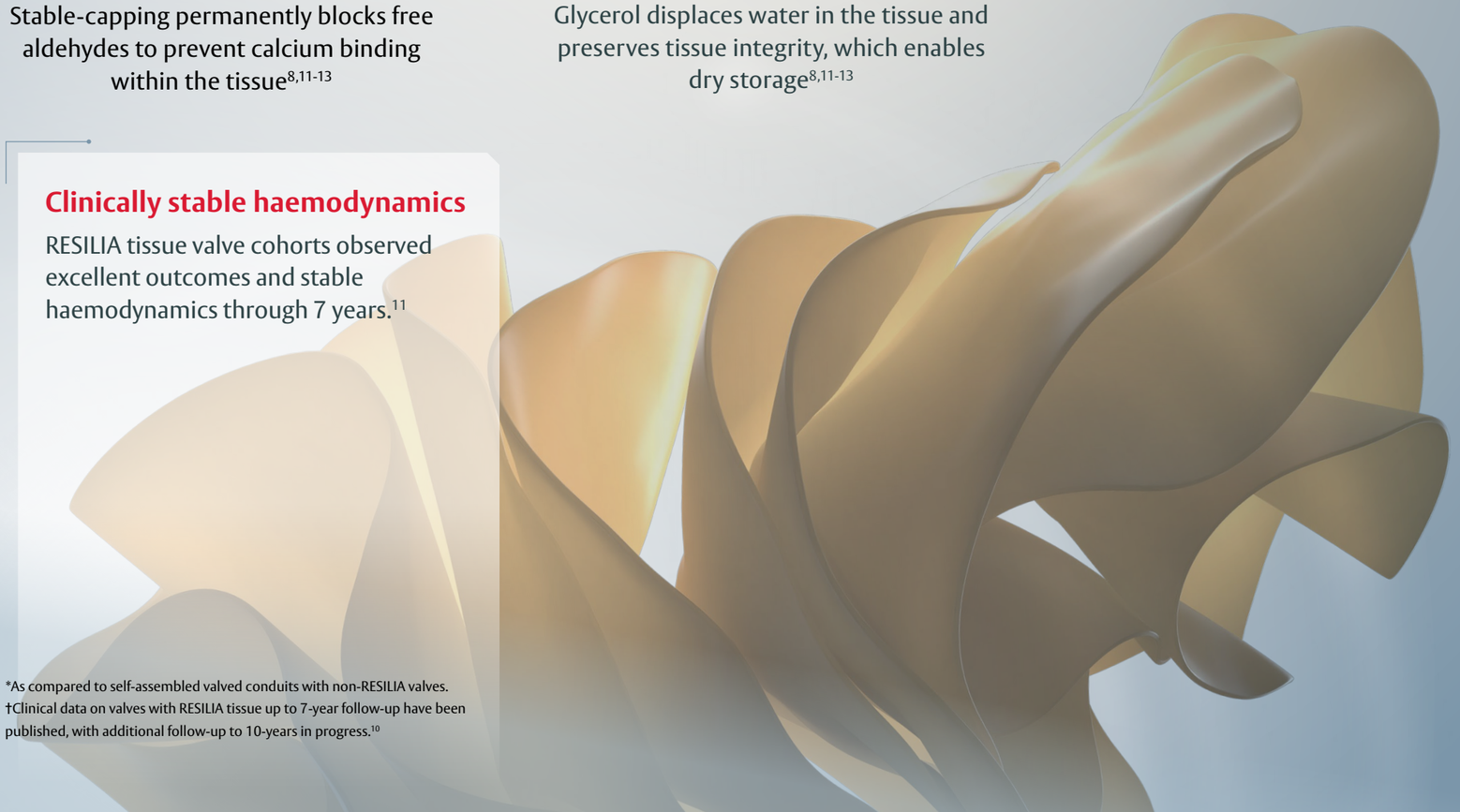


+ Glycerolization

Glycerol displaces water in the tissue and preserves tissue integrity, which enables dry storage[8,11-13]

Clinically stable haemodynamics

RESILIA tissue valve cohorts observed excellent outcomes and stable haemodynamics through 7 years.[11]

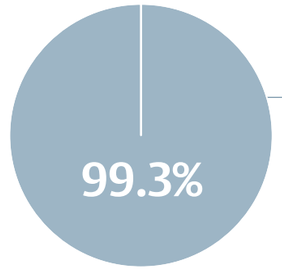


*As compared to self-assembled valved conduits with non-RESILIA valves.
†Clinical data on valves with RESILIA tissue up to 7-year follow-up have been published, with additional follow-up to 10-years in progress.[10]

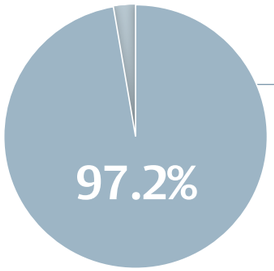
COMMENCE AORTIC

Data on valves with RESILIA tissue from the COMMENCE aortic trial show excellent outcomes through 7 years.

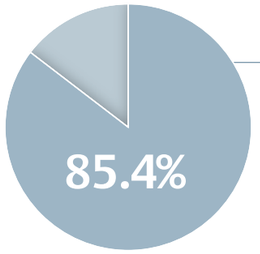
COMMENCE aortic trial
RESILIA tissue data from the COMMENCE aortic trial show:



freedom from structural valve deterioration through 7 years[10]



freedom from reoperation through 7 years[10]



freedom from all-cause mortality through 7 years[10]

KONECT RESILIA aortic valved conduit is built on the Carpentier-Edwards PERIMOUNT valve platform, whose performance is backed by a span of 30 years of published clinical data.[3-5]

Proven performance in real-world practice

The first real-world multicenter study of bio-Bentall procedures using KONECT RESILIA aortic valved conduit demonstrated utility across various aortic valve conditions with positive short-term outcomes reported through one year.[12]

Objectives

To examine the early safety and efficacy of KONECT RESILIA aortic valved conduit in an all-comers multi-center patient population

Methods

The study retrospectively collected data on subjects who were treated with the KONECT RESILIA aortic valved conduit from 15 July 2020 to 02 June 2022 for up to 1 year and 120 days of follow-up after the index procedure

Patients

329 patients

Outcomes at one year — multicenter series

100%
freedom from related death

99.6%
freedom from aortic valve or root reoperation at one year

94.9%
freedom from all-cause mortality at one year

98.5%
freedom from cardiovascular death at one year

*Consult Instructions for Use for device preparation.

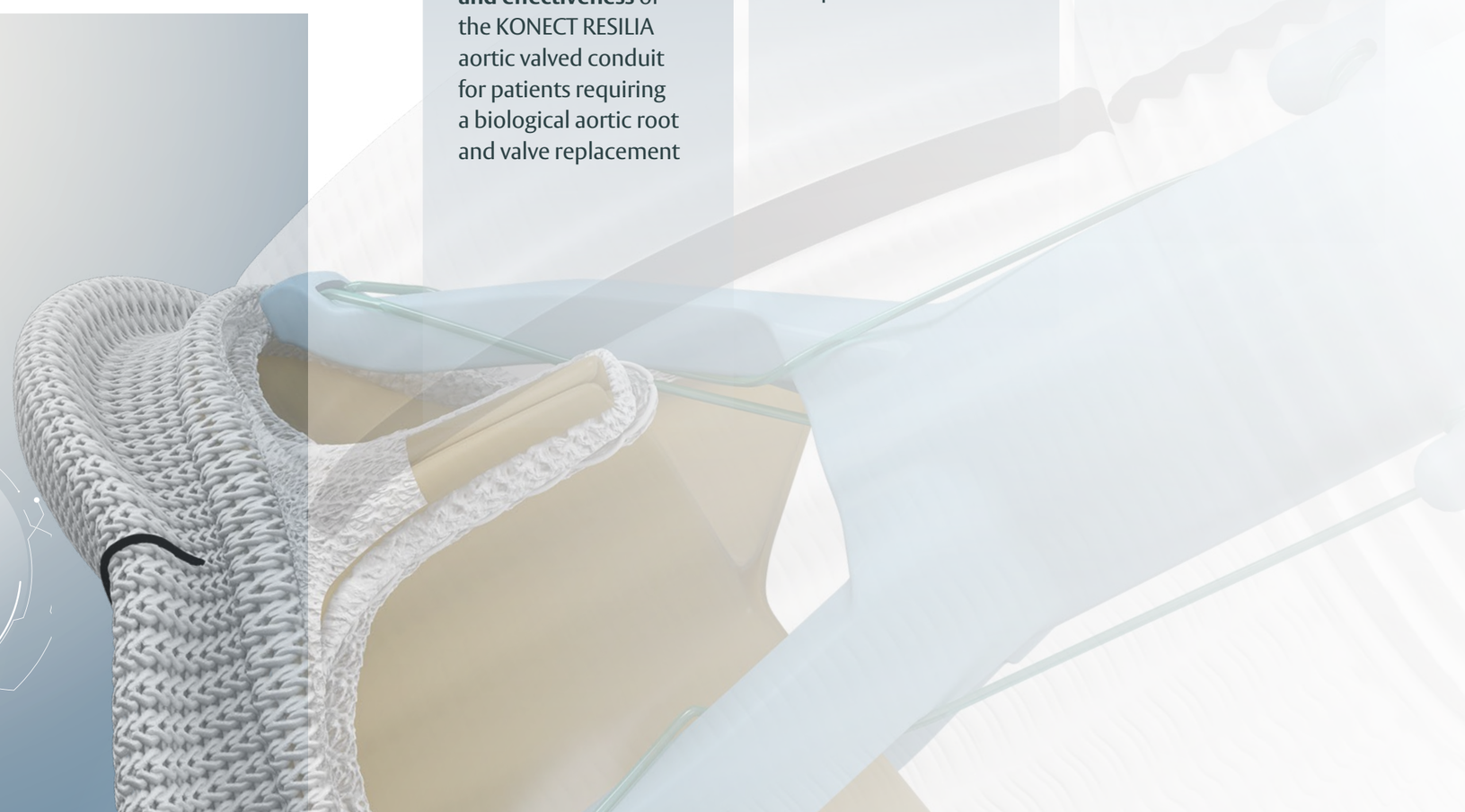
Single-Center Experience: Yale School of Medicine

In a single-center retrospective study (n=118, 2021–2023), 15 initial findings suggest KONECT RESILIA aortic valved conduit may offer favorable early outcomes for patients undergoing aortic root and valve replacement, with low operative and short-term mortality and few post-operative complications at one year.[16]

Supports the **safety and effectiveness** of the KONECT RESILIA aortic valved conduit for patients requiring a biological aortic root and valve replacement

Positive early outcomes: **Low operative and short-term mortality** with minimal post-operative complications

Median length of stay: **6.5 days**



Operative efficiency

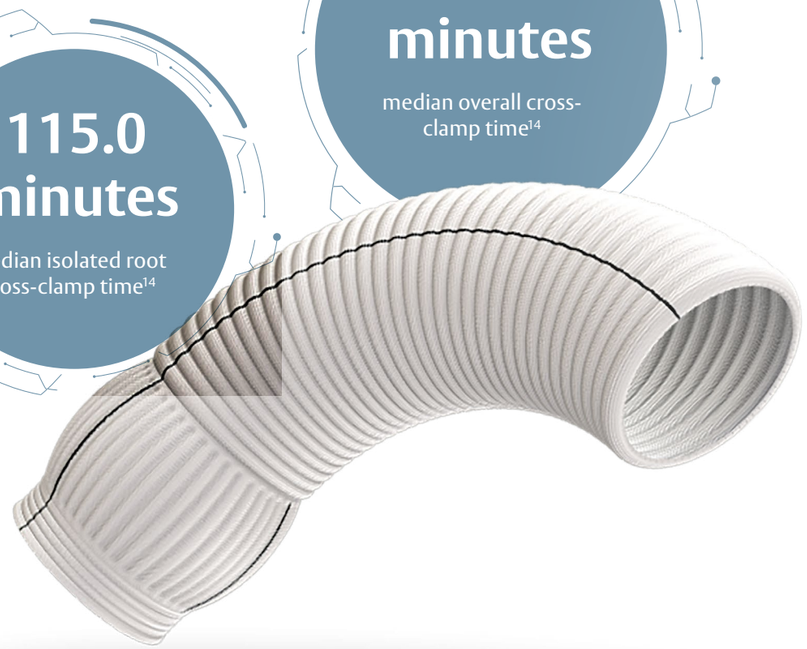
Isolated surgical aortic valve replacement (SAVR) sets the benchmark for operative efficiency, but when root reconstruction is required, the bio-Bentall procedure adds an average of 50 minutes of additional cross-clamp time.[13] KONECT RESILIA aortic valved conduit's pre-assembled configuration helps minimize cross-clamp time* by removing the assembly step from the cross-clamp period entirely.

123.5 minutes

median overall cross-clamp time[14]

115.0 minutes

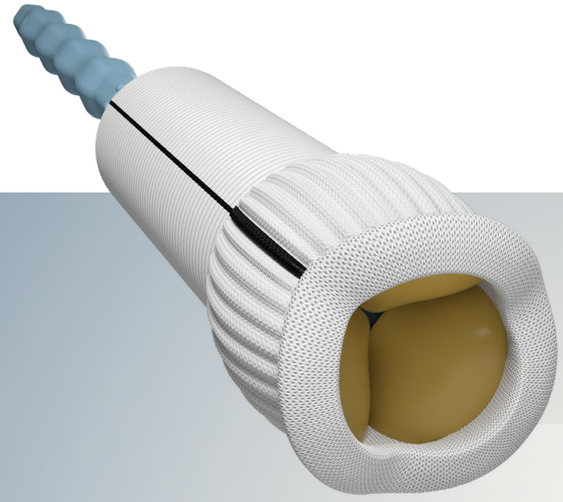
median isolated root cross-clamp time[14]



Techniques that reduce cross-clamp duration have been associated with fewer complications[3], shorter hospital stays, and lower overall healthcare costs[15]

*As compared to self-assembled valved conduits.

KONECT RESILIA aortic valved conduit



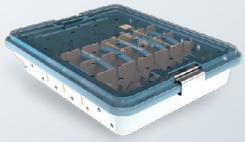
Over 30,000 patients
have been treated with the KONECT RESILIA aortic valved conduit globally

Over 500,000 patients
have been treated with RESILIA tissue devices

Scan to learn more

KONECT RESILIA aortic valved conduit model and sizing

Barrel end Replica end



Model	Valve size
11060A*	21mm, 23mm, 25mm, 27mm, 29mm

Model	Individual Sizers
1190	19*, 21, 23, 25, 27, 29 mm

*KONECT RESILIA aortic valved conduit size 19mm not available

For use with: Dedicated DualFit sewing ring sizers (Model 1190 Sizers and Tray)

References:

1. Urbanski PP, Heinz N, Zacher M, Diegeler A. Bio-Bentall procedure versus isolated biological aortic valve replacement: a case-match study. Eur *J Cardiothorac Surg*. 2015;47(6):1077-82.
2. Williams JB, Peterson ED, Zhao Y, et al. Contemporary results for proximal aortic replacement in North America. *J Am Coll Cardiol*. 2012;60(13):1156-62.
3. Bourguignon T, Lhommet P, El Khoury R, et al. Very long-term outcomes of the Carpentier-Edwards Perimount aortic valve in patients aged 50-65 years. *Eur J Cardiothorac Surg*. 2016;49(5):1462-8.
4. Johnston et al, Long-Term Durability of Bioprosthetic Aortic Valves: Implications From 12,569 Implants. *Ann Thorac Surg*. 2015; 99:1239–47
5. Forcillo et al, Carpentier-Edwards Pericardial Valve in the Aortic Position: 25-Years Experience. Ann Thorac Surg. 2013;96:486–93
6. Praz F, Borger MA, Lanz J, et al. 2025 ESC/EACTS Guidelines for the management of valvular heart disease. *Eur Heart J*. 2025;46(44):4635-4736.
7. Stewart AS, Takayama H, Smith CR. Modified Bentall operation with a novel biologic valved conduit. *Ann Thorac Surg*. 2010 Mar;89(3):938-41.
8. Flameng W, Hermans H, Verbeken E, Meuris B. A randomized assessment of an advanced tissue preservation technology in the juvenile sheep model. *J Thorac Cardiovasc Surg*. 2015;149(1):340-5.
9. Bartus K, Litwinowicz R, Bilewska A, et al. Final 5-year outcomes following aortic valve replacement with a RESILIA™ tissue bioprosthesis. *Eur J Cardiothorac Surg*. 2021;59(2):434-441.
10. Beaver T, Bavaria JE, Griffith B, et al. Seven-year outcomes following aortic valve replacement with a novel tissue bioprosthesis. *J Thorac Cardiovasc Surg*. 2024;168(3):781-791.
11. Puskas JD, Bavaria JE, Svensson LG, et al. The COMMENCE trial: 2-year outcomes with an aortic bioprosthesis with RESILIA tissue. *Eur J Cardiothorac Surg*. 2017 Sep 1;52(3):432-439.
12. De La Fuente et. al. Advanced Integrity Preservation Technology Reduces Bioprosthesis Calcification While Preserving Performance and Safety. *J Heart Valve Dis*. 2015 Jan;24(1):101-9.
13. Priev A, Almagor A, Yedgar S, Gavish B. Glycerol decreases the volume and compressibility of protein interior. *Biochemistry*. 1996 Feb 20;35(7):2061-6.
14. Roselli E, Girardi L, Desai N, et al. First real-world multicenter series of bio-Bentall procedures with a novel pre-assembled aortic valved conduit. Podium presentation at: European Association for Cardiothoracic Surgery; October 8-11 2025; Copenhagen, Denmark.
15. Al-Sarraf N, Thalib L, Hughes A, et al. Cross-clamp time is an independent predictor of mortality and morbidity in low- and high-risk cardiac patients. *Int J Surg*. 2011;9(1):104-9.
16. Erez E, Dankwa S, Higaki A, et al. Clinical, physiologic, and anatomic outcomes of a new bioprosthetic aortic valved conduit: 1-year outcomes. Presented at: 61st Annual Meeting of the Society of Thoracic Surgeons (STS 2025); January 26, 2025; Los Angeles, CA. Available at: https://sts2025.eventscribe.net/fsPopup.asp?PresenterID=1746287&mode=posterPresenterInfo.

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