

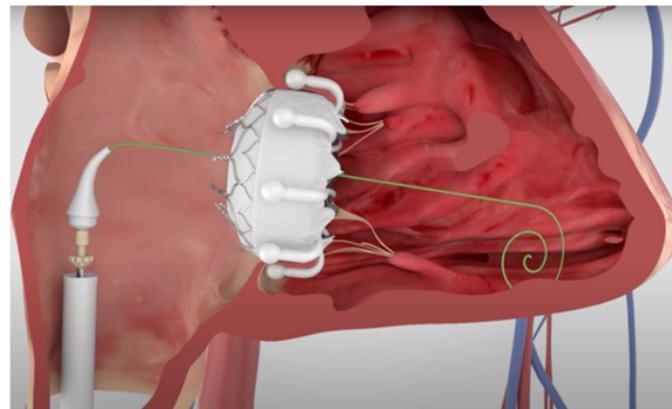
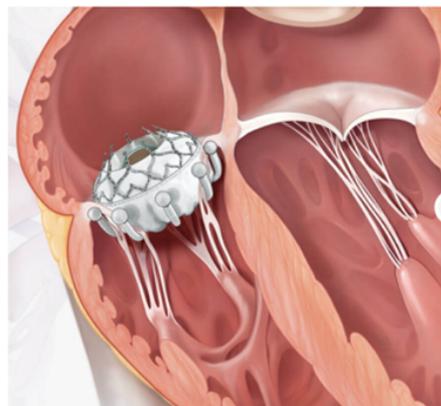
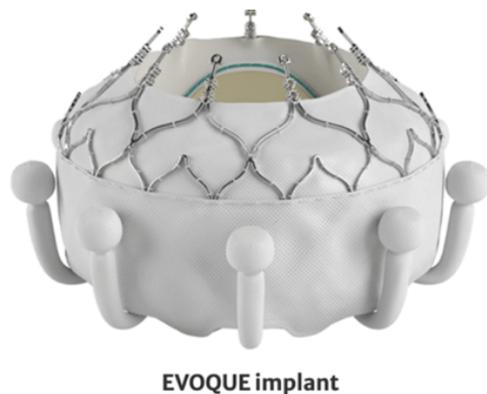
**Full title:** Transcatheter Tricuspid Valve Replacement (TTVR): Case Selection, Technical Considerations, and Procedural Planning

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**Supplementary Material**

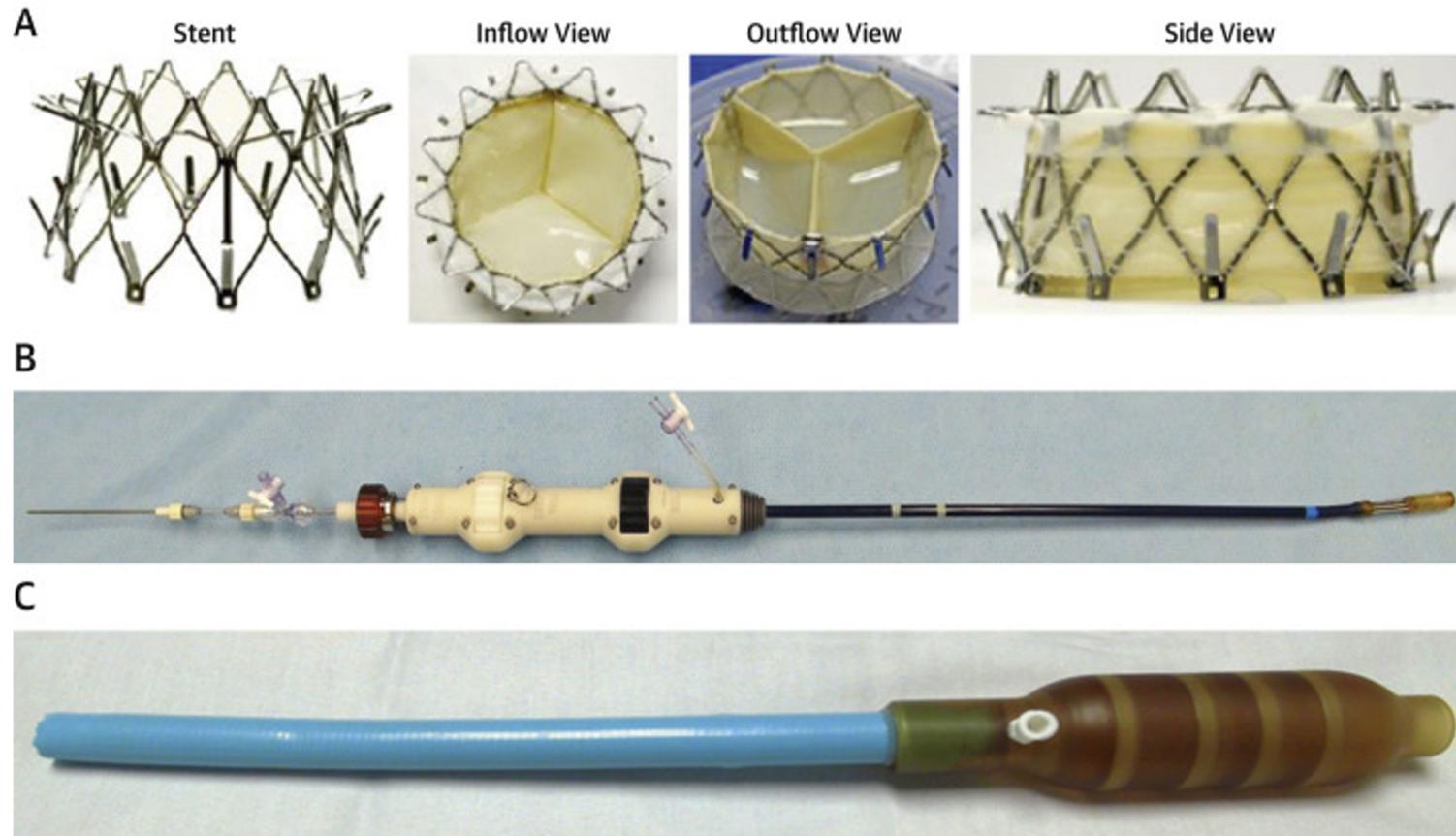
### Supplementary Figure 1: EVOQUE valve schematic.

Unique valve design engages leaflets, chords, and annulus to achieve secure placement. Atraumatic anchors compatible with preexisting leads and respect the native anatomy with conforming frame designed to achieve optimal retention force. Multiple sizes offer treatment for a broad range of tricuspid pathologies and anatomies (52, 48, 44 mm). 28F transfemoral delivery system is compatible with all valve sizes.



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**Supplementary Figure 2: The GATE system is composed of an atrioventricular valved stent (A), the delivery system (B), a compression loading system, introducer sheath (C), and dilator.**



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**Supplementary Figure 3: LuX-valve implant.**



Source: Demir et al. 2018.<sup>2</sup> Reproduced from Frontiers under a CC BY 4.0 License.

**Supplementary Table 1:** Types of transcatheter tricuspid valves.

<b>Valve system</b>	<b>Company</b>	<b>Structure</b>	<b>Anchoring mechanism</b>	<b>Available sizes</b>	<b>Access site</b>	<b>Sheath size</b>	<b>Clinical trials</b>
EVOQUE system	Edwards Lifesciences	Intra-annular fabric sealing skirt	Ventricular anchors	44 mm, 48 mm	Trans-femoral	28 Fr	TRISCEND
NaviGate system	NaviGate Cardiac Structures	Self-expanding nitinol frame	Atrial and ventricular anchors	40 mm, 44 mm, 48 mm, 52 mm	Trans-jugular or trans-atrial	42 Fr	Small single-arm Compassionate studies
LuX-valve	Jenscare Biotechnology	Self-expanding nitinol frame	Interventricular septal anchor, and two graspers.	50 mm, 60 mm, 70 mm	Transatrial or transjugular	32 Fr	TRAVEL, TRAVEL II
Intrepid Valve	Medtronic	Self-expanding nitinol frame	Radial force and sub-annular cleats	42 mm, 48 mm	Transfemoral	35 Fr	TTVR Early feasibility study
Cardiovalve	Cardiovalve	Dual nitinol frame	Focal 'sandwiching' points	40 mm	Transfemoral	28 Fr	Cardiovalve Early feasible study

## References

1. Hahn RT, George I, Kodali SK, et al. Early single-site experience with transcatheter tricuspid valve replacement. *JACC Cardiovasc Imaging* 2019;12:416–29. <https://doi.org/10.1016/j.jcmg.2018.08.034>; PMID: 30553658.
2. Demir OM, Regazzoli D, Mangieri A, et al. Transcatheter tricuspid valve replacement: principles and design. *Front Cardiovasc Med* 2018;5:129. <https://doi.org/10.3389/fcvm.2018.00129>; PMID: 30283790.