



LII Jornadas SOLACI
19° Región Centroamérica y el Caribe

8, 9 y 10 de Octubre, 2025

San José de Costa Rica
COSTA RICA

**Reparación borde a borde. Reemplazo valvular
transcatéter tricuspídeo**

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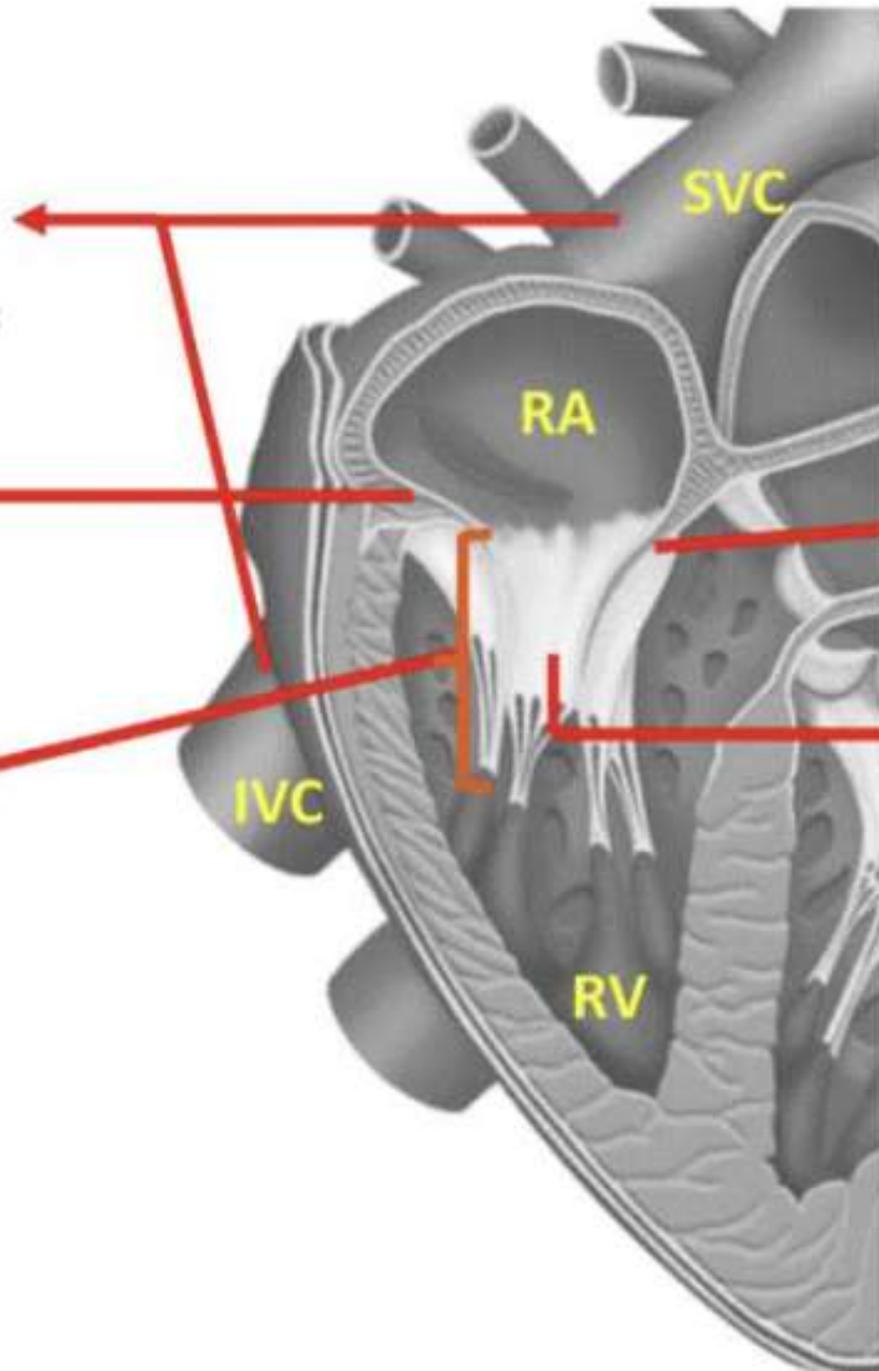
Rio de Janeiro - Brasil



CONFLITO INTERÉS

- PROCTOR P&F





Heterotopic devices

Goal: to reduce the venous congestion and backflow associated with TR for symptomatic improvement

Annulus

Goal: reducing the annular dilation

- Restrictive Annuloplasty
- Direct Annuloplasty

Tricuspid valve replacement

Goal: implantation of bioprosthetic valve within the tricuspid annulus

Leaflet

Goal: restoration of coaptation and reduction of regurgitant orifice area.

Coaptation enhancement

Goal: to fill or eliminate the coaptation defect



Screening for Transcatheter Tricuspid Valve Intervention



32% - Unfavorable for T-TEER (Large gaps, AP jets, leads)



63% - Ineligible for TTVR (Large Annulus, RV dysfunction)



23% - Ineligible for both T-TEER and TTVR



24%* - Severe Renal Dysfunction (eGFR < 30 ml/min/1.73m²)

* Severe Renal dysfunction: 24% of patients without a CT, 29.8% of unfavorable T-TEER anatomy

Innovation in the TTVI Field

- ★ ★ Need for LARGER / LONGER devices
- ★ ★ EARLIER Referral / HEART FAILURE optimization
- ★ ★ Alternative IMAGING Modalities (Cardiac Magnetic Resonance)
- ★ ★ Broad device TOOLBOX (annuloplasty, heterotopic TTVR, spacers,...)



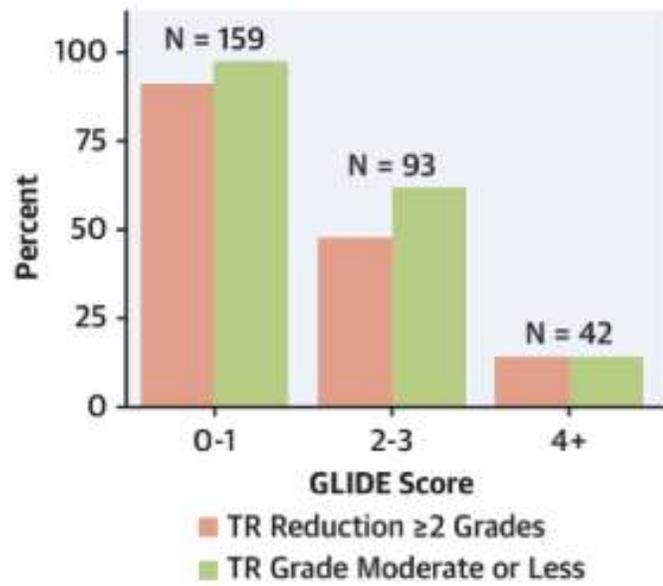
REPARACIÓN BORDE A BORDE



CENTRAL ILLUSTRATION The GLIDE Score

The GLIDE Scoring System		
Parameters	Straightforward (0 points)	Complex (1 point)
Septolateral Gap	0-5 mm 	≥6 mm 
Predominant Jet Location	Anteroseptal/Central 	Posteroseptal/Anteroposterior/Diffuse 
Image Quality	Good 	Limited 
Chordal Structure Density	Modest 	High 
En Face TR Jet Morphology	Oval/Linear 	Star-Shaped 

Procedural Success in Each GLIDE Score Group



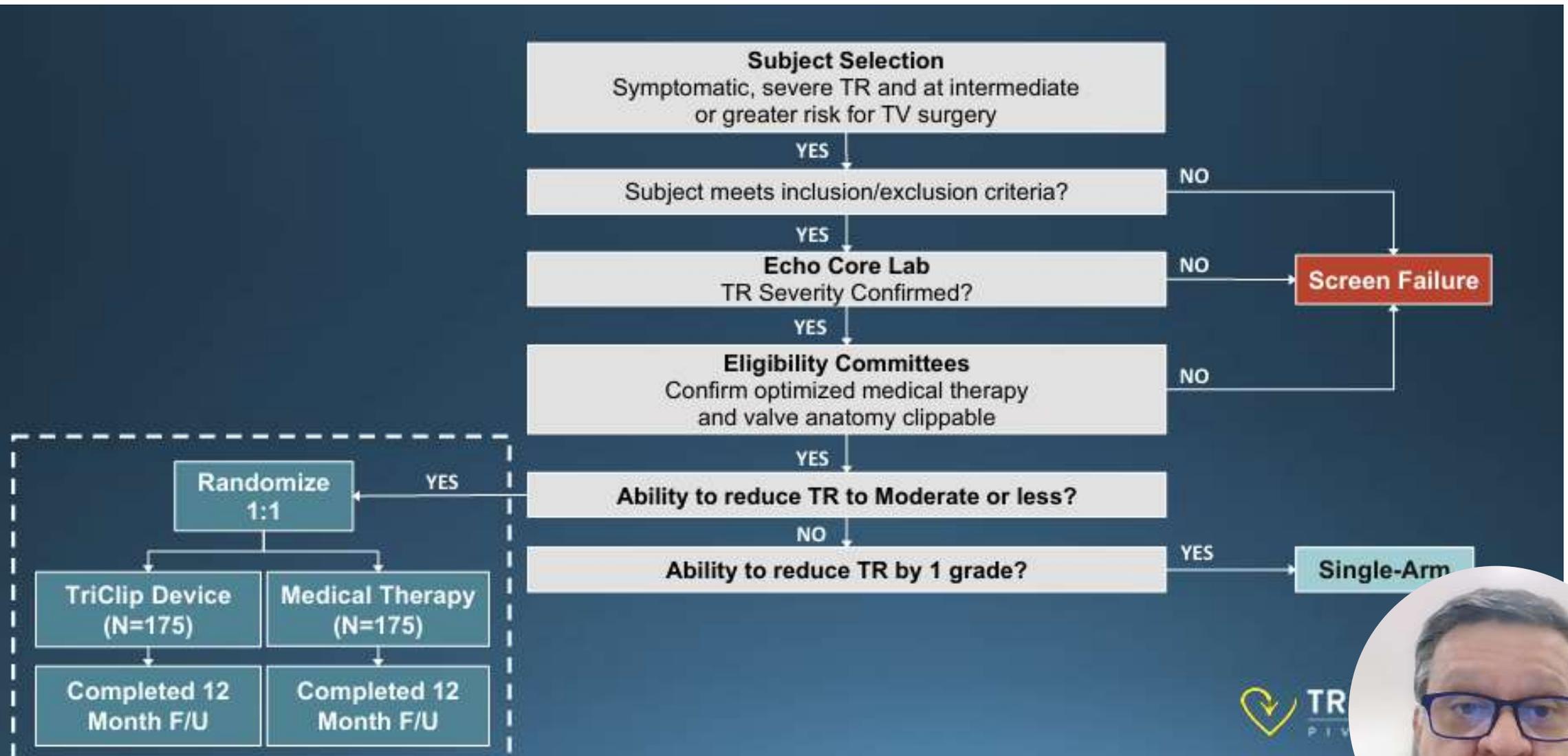
Gerçek M, et al. J Am Coll Cardiol Img. 2024;17(7):729-742.

The GLIDE (Gap, Location, image quality, density, en-face TR morphology) score is a simple, 5-component score that is readily obtained during patient imaging and can predict successful T-TEER. T-TEER = tricuspid valve transcatheter edge-to-edge repair; TR = tricuspid regurgitation.



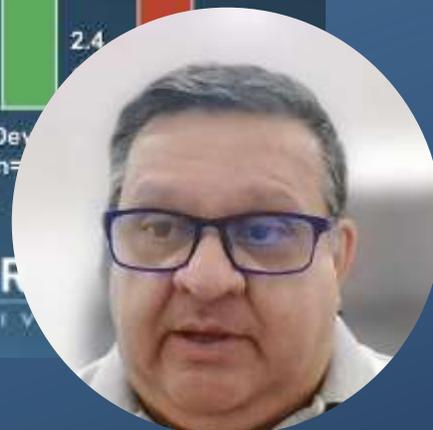
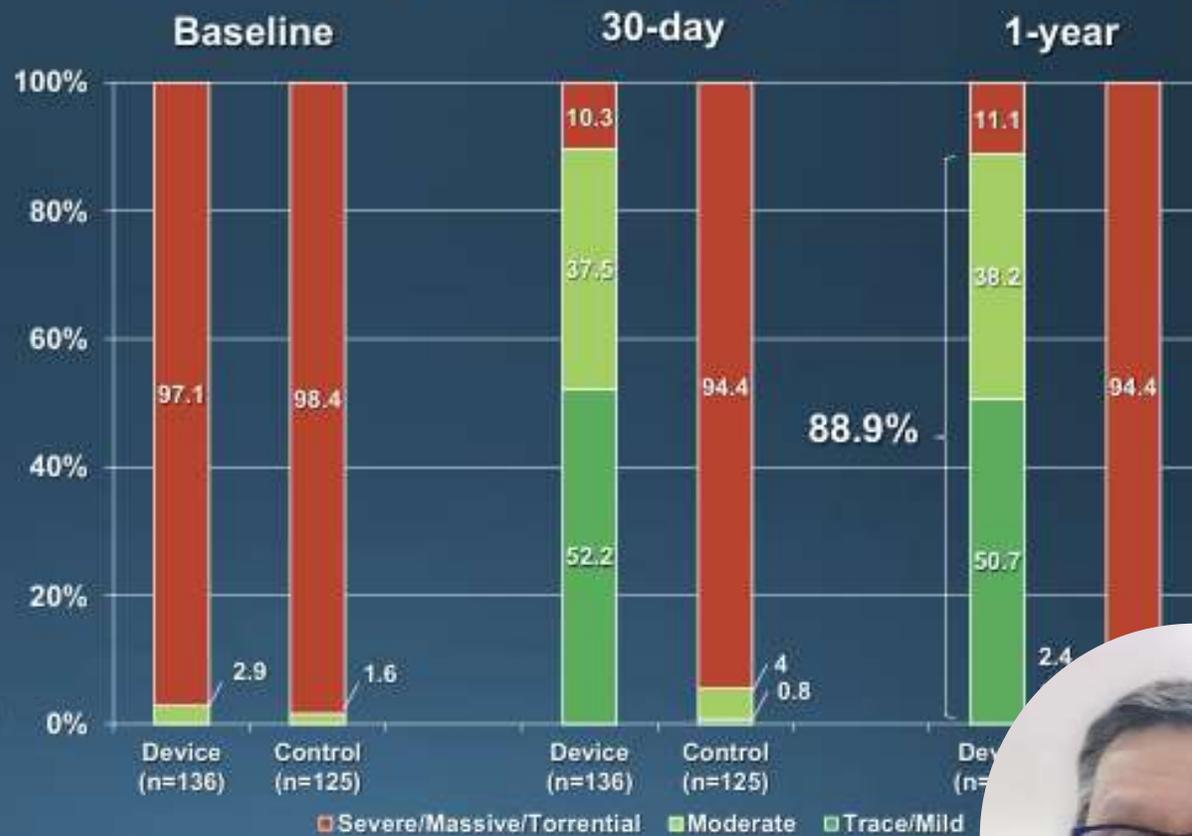
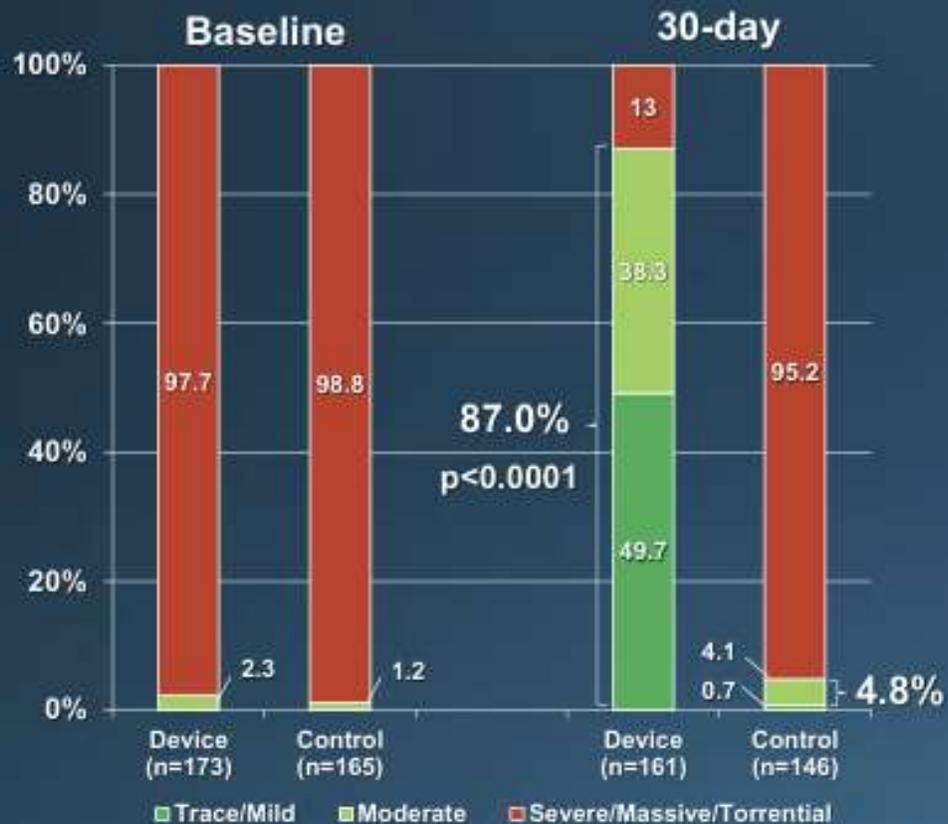
TR DISEASE STAGING AND POST-TREATMENT SURVIVAL





Reduction in TR Severity

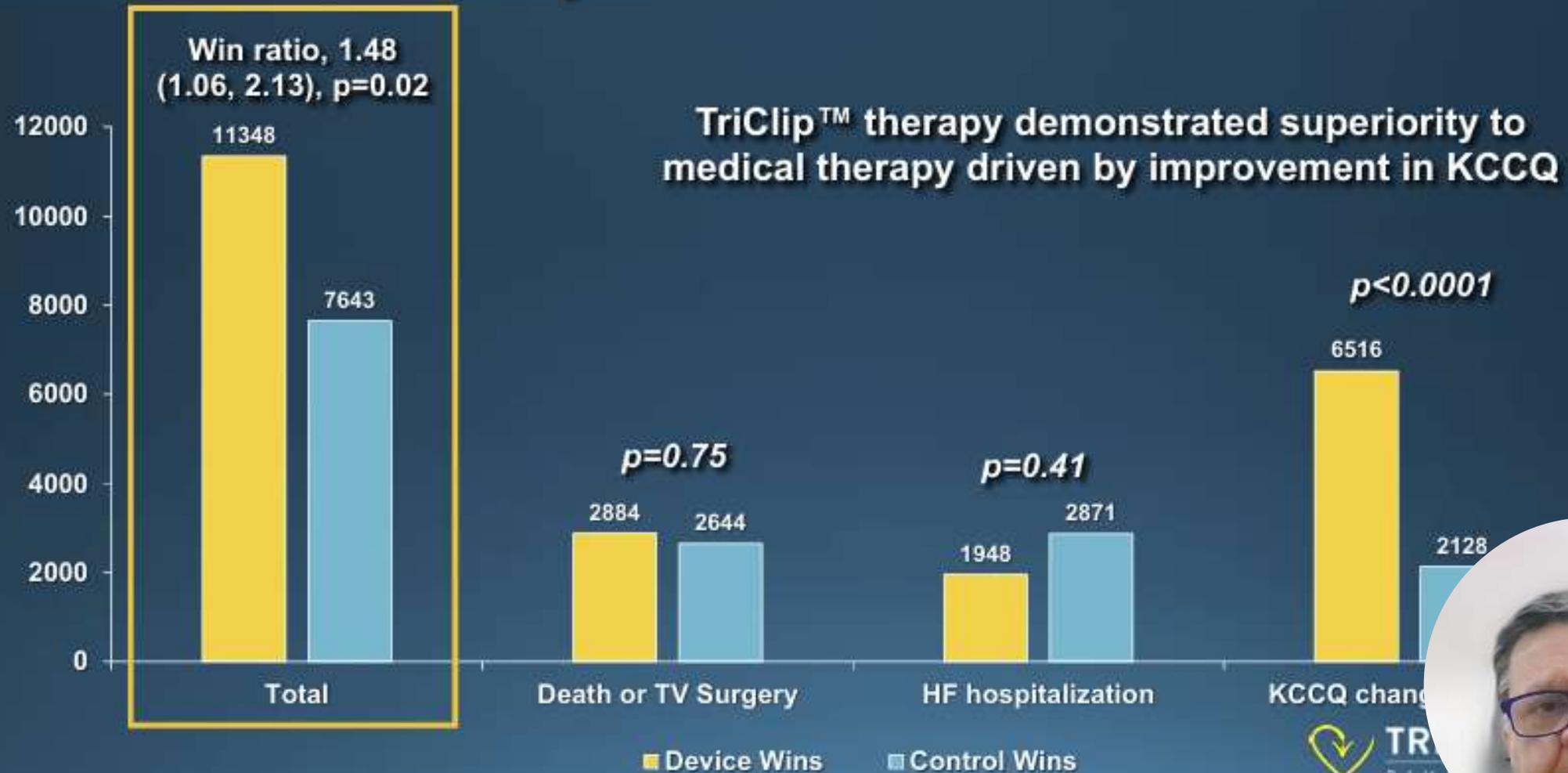
Paired Analyses



TR
PIV

Primary Endpoint

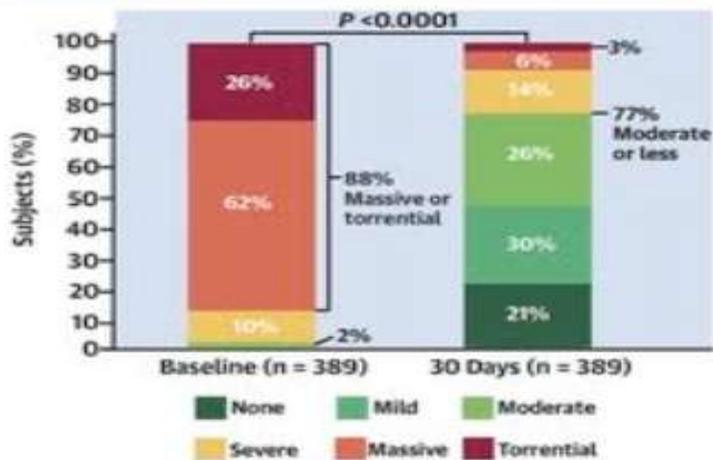
Finkelstein-Schoenfeld Analysis



CENTRAL ILLUSTRATION: Transcatheter Tricuspid Valve Repair Safe and Effective in Real-World Population



Reduction in TR at 30 Days



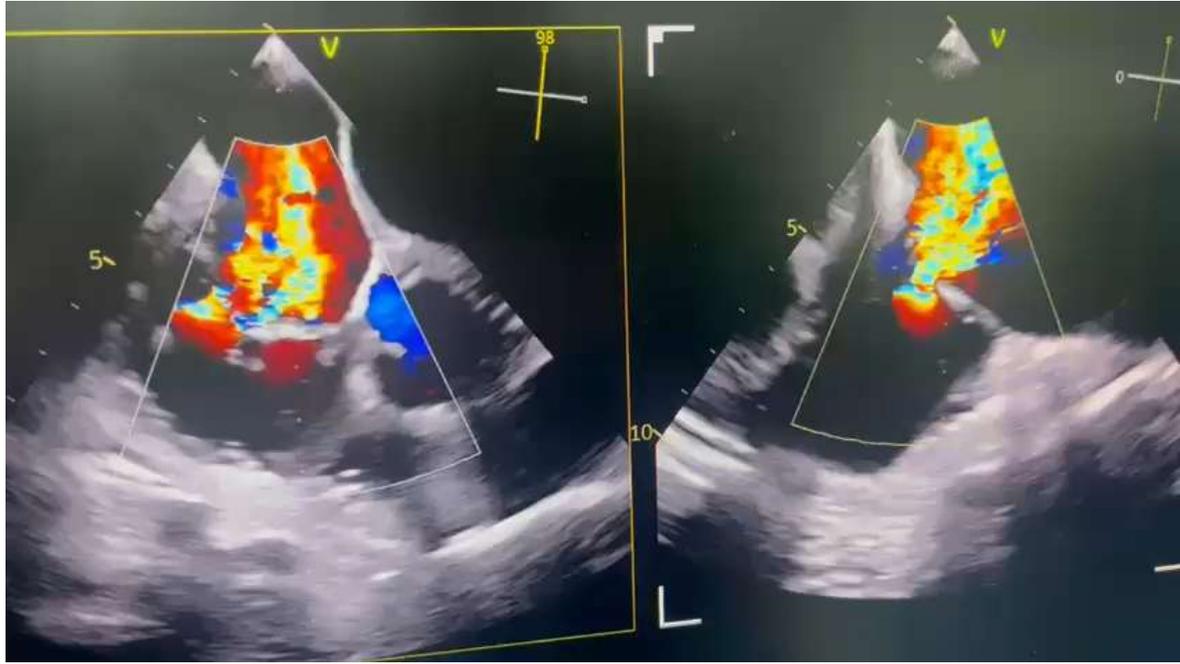
Safety Profile at 30 Days

Major Adverse Event	Percentage
Cardiovascular mortality	0.8%
Myocardial infarction	0.0%
Stroke	0.4%
New onset renal failure	1.4%
Endocarditis requiring surgery	0.0%
Nonelective CV surgery for device-related AE	0.2%

MAEs adjudicated by independent clinical events committee

Lurz P, et al. J Am Coll Cardiol. 2023;82(4):281-291.





IT ATRIOGENICA – XTW-AS XT-F

CRÉDITO PARA CLEVER

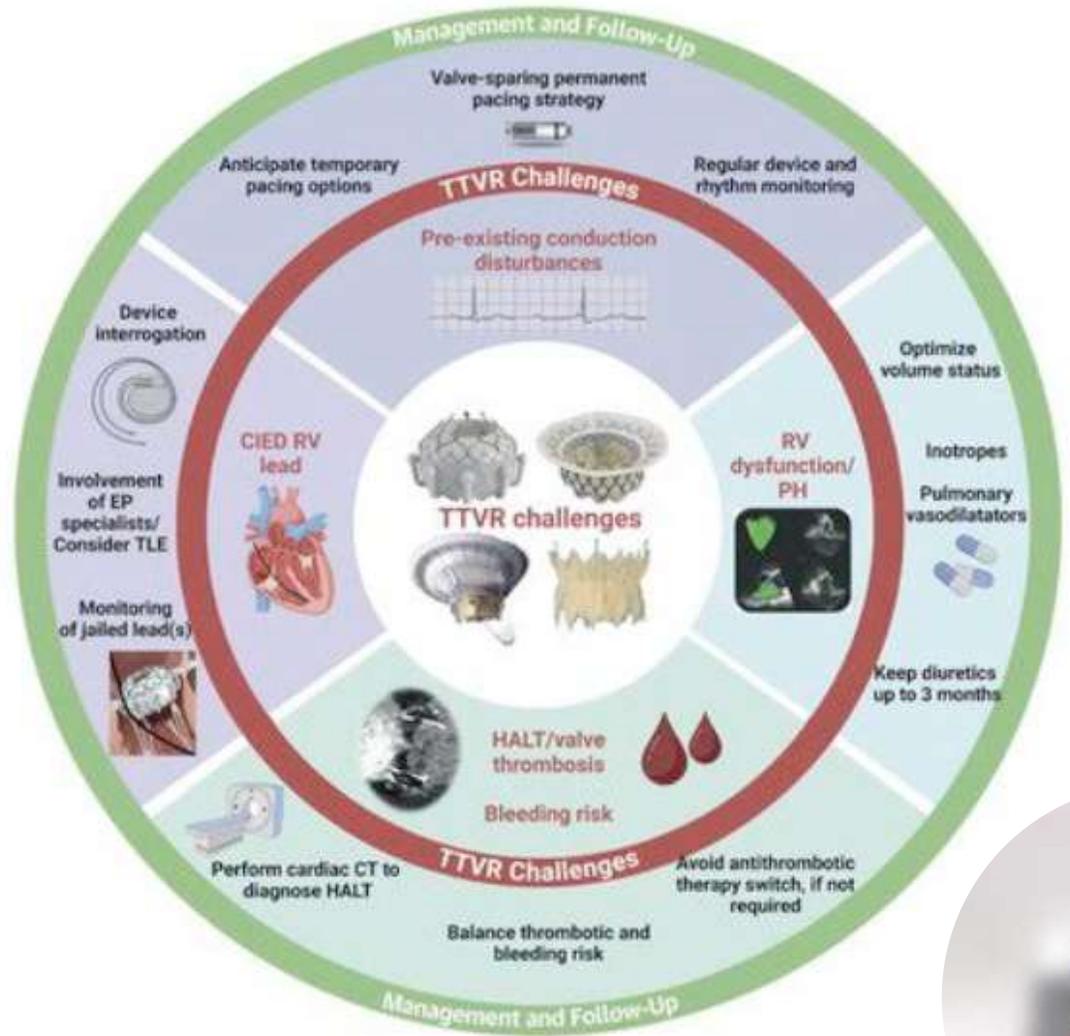


REEMPLAZO VALVULAR TRANSCATÉTER TRICUSPÍDEO



TTVR CHALLENGES

CENTRAL ILLUSTRATION: Specific Challenges of Transcatheter Tricuspid Valve Implantation and Their Management

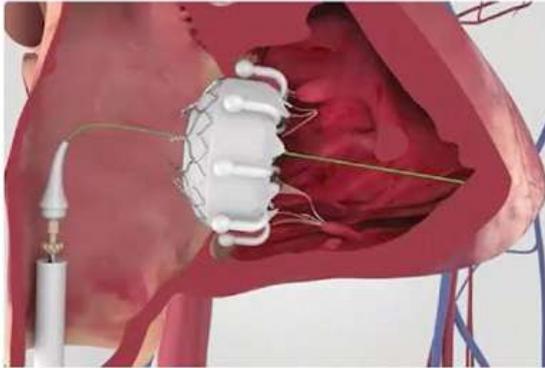


Hausleiter J, et al. JACC. 2024;10.1016/j.jacc.2024.10.071

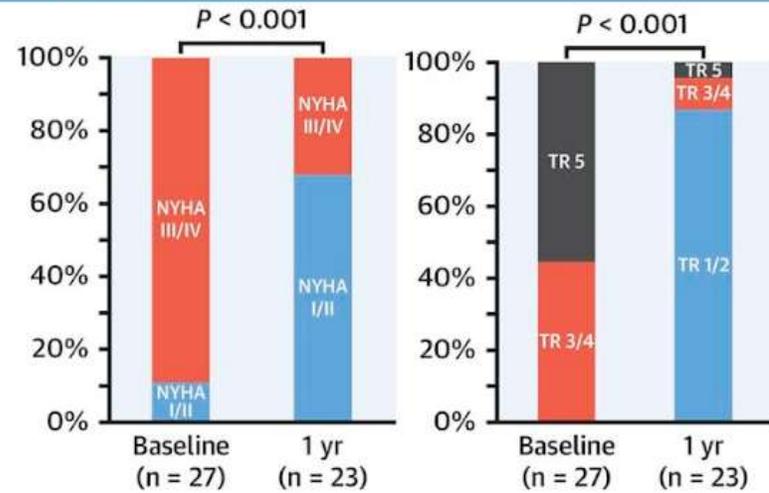


CENTRAL ILLUSTRATION: 1-Year EVOQUE Transfemoral Transcatheter Tricuspid Valve Replacement for Severe Tricuspid Regurgitation

EVOQUE Transfemoral Tricuspid Replacement 1-Year Clinical and Echocardiographic Outcomes



1-Year Follow-Up



27 patients with severe TR treated with the EVOQUE system
7 sites (Canada, Europe, U.S.)
May 2019 to July 2020

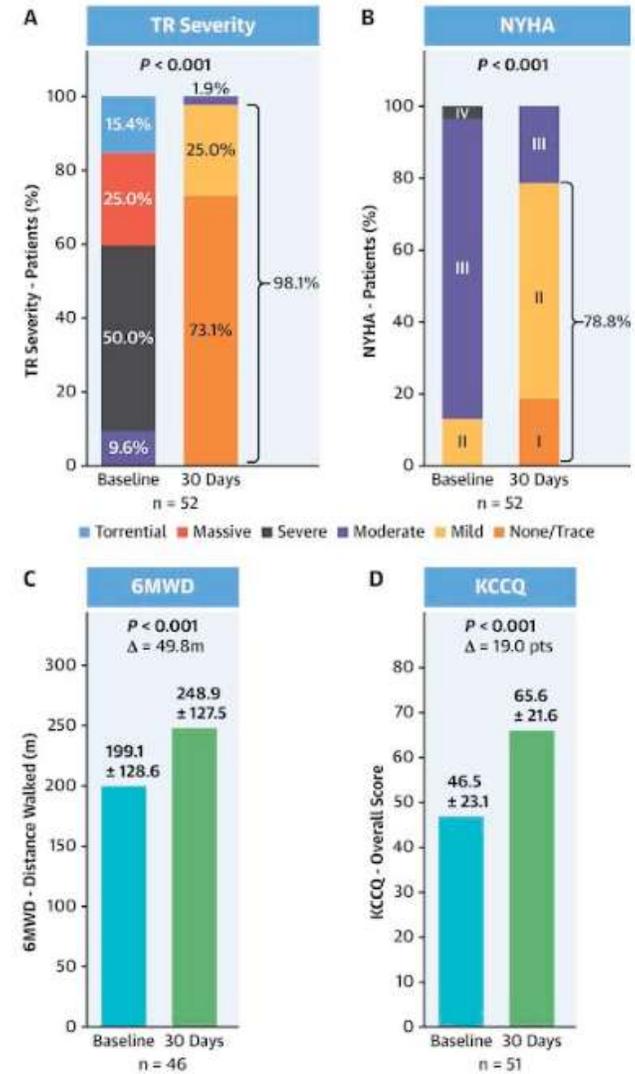
All-cause mortality: 7%
HF hospitalization: 7%
New pacemaker: 7% within 30 days, 4% beyond 30 days

Sustained improvement in NYHA functional class as well as improvement in TR degree suggesting that the EVOQUE System is a promising treatment option for this population

Webb, J.G. et al. J Am Coll Cardiol Intv. 2022;15(5):481-491.



CENTRAL ILLUSTRATION: 30-Day Results of the TRISCEND Study With the EVOQUE System



Kodali, S. et al. J Am Coll Cardiol Interv. 2022;15(5):471-480.



THE LUX VALVE PLUS TTVR SYSTEM



SELF-ADAPTIVE BRAIDED RING

THE "SELF-ADAPTIVE LEAK-PROOF BRAIDED RING" EFFECTIVELY AIMS TO DECREASE POST-PROCEDURAL PERIVALVULAR LEAKS CAUSED BY ANNULAR DILATION.

MULTI-DIMENSIONAL FIXATION

THE "INTERVENTRICULAR SEPTAL ANCHORING" TECHNOLOGY ENHANCES THE TRADITIONAL CONCEPT OF RADIAL SUPPORT FORCE FIXATION.

TRANS-JUGULAR DELIVERY

FLEXIBLE AND RETRIEVABLE LOW-PROFILE DELIVERY SYSTEM ALLOWS VALVE RO...
ACHIEVE PERFECT ALIGNMENT ON T...
TRICUSPID ANNULUS.



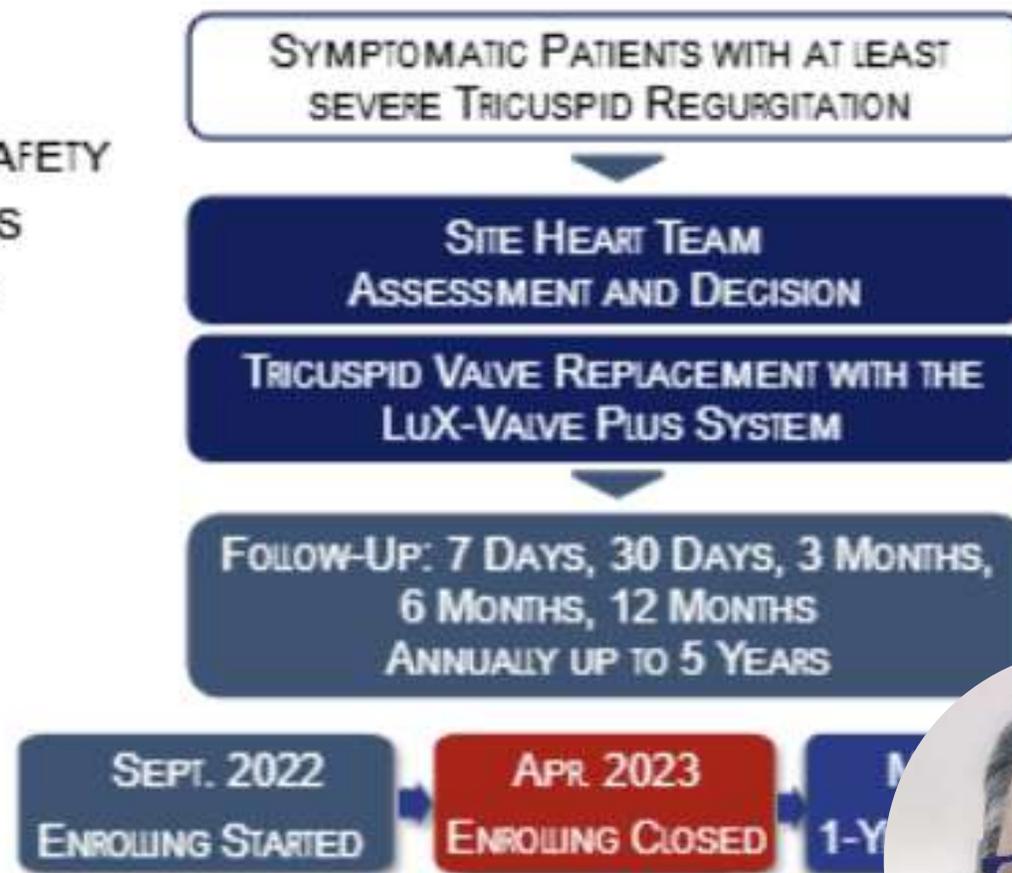
THE LUX VALVE PLUS TRAVEL II: STUDY DESIGN

PRIMARY OBJECTIVE:

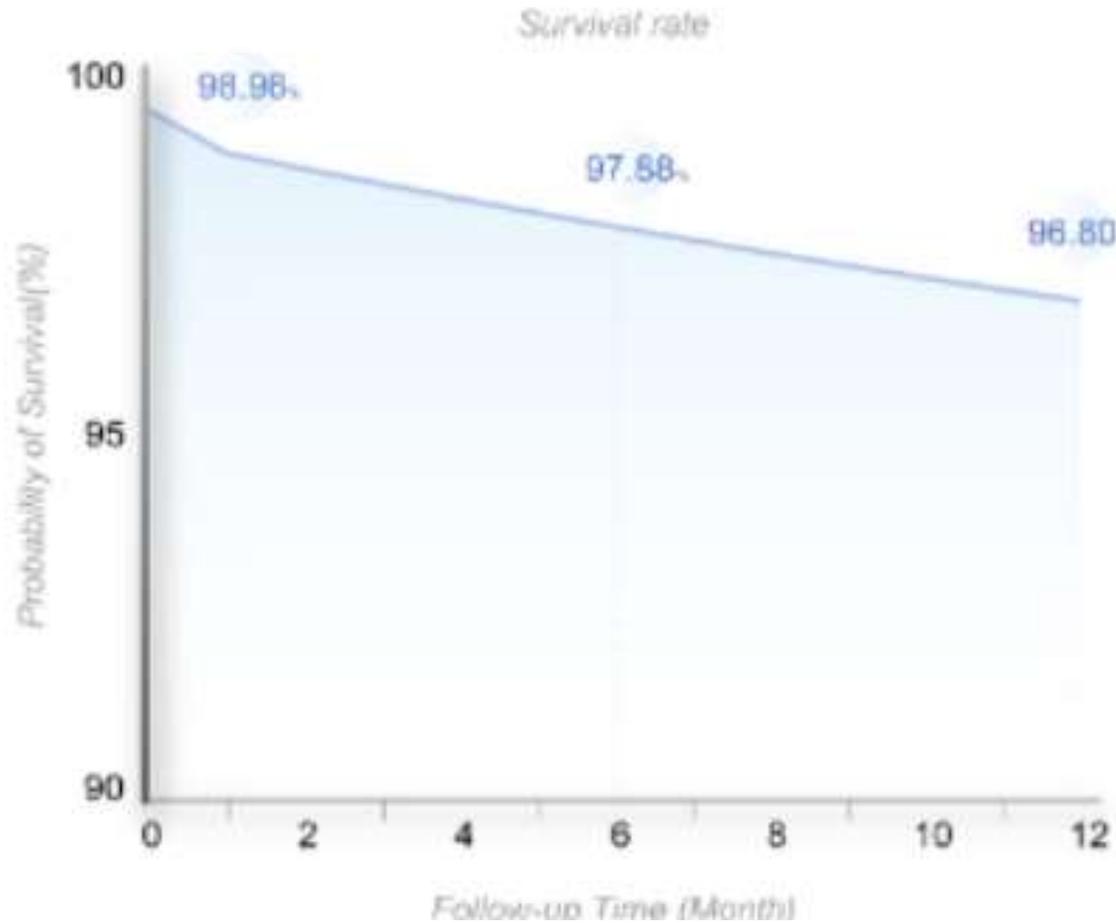
TO EVALUATE THE ACUTE AND LONG-TERM SAFETY AND PERFORMANCE OF THE LUX-VALVE PLUS SYSTEM IN PATIENTS WITH AT LEAST SEVERE TRICUSPID REGURGITATION

TRIAL OVERSIGHT

- ECHOCARDIOGRAPHIC CORE LAB
- CLINICAL EVENTS COMMITTEE
- DATA SAFETY MONITORING BOARD



1-YEAR CUMULATIVE ALL-CAUSE MORTALITY



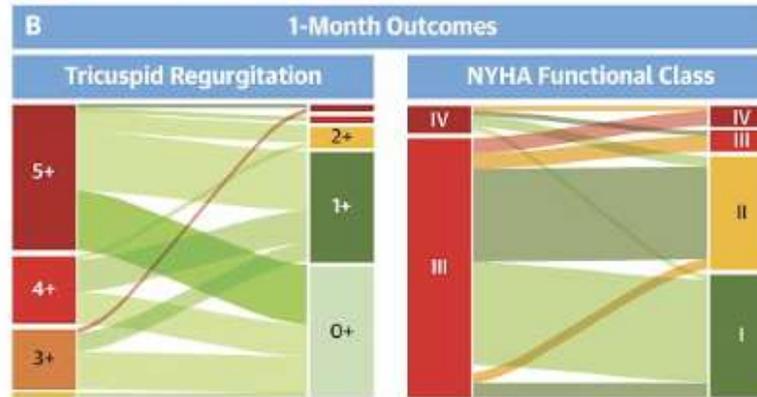
All-cause mortality: 4.17%

- 1-PATIENT DIED OF A SUSPECTED CEREBRAL INFARCTION
- 1-PATIENT DIED OF A LUNG INFECTION BY COVID-19
- 2-PATIENTS COMPLICATIONS RELATED TO FALLING



CENTRAL ILLUSTRATION: LuX-Valve Plus For Transcatheter Tricuspid Valve Replacement

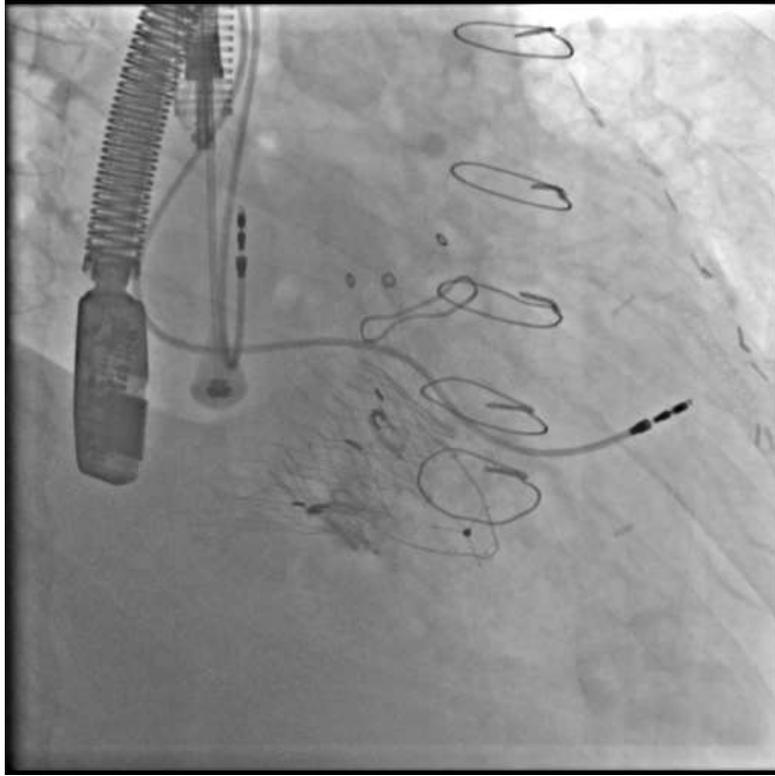
Transcatheter Tricuspid Valve Replacement Using the LuX-Valve Plus System: Early Compassionate Use Outcomes in 2022-2024, N = 76



At 1-month follow-up with the LuX-Valve Plus System:

- Infrequent need for additional surgery or repeat intervention
- Durable TR reduction to $\leq 2+$ in 95.0% of patients
- Significantly improved NYHA functional class (85.4% NYHA functional class \leq II vs 9.3% at baseline)
- No differences in outcomes or adverse events after stratification for valve size (≥ 55 vs < 55 mm)





LUX VALVE CASE 9 – CLEVERSON ZUKOVSKI





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MUCHAS GRACIAS POR SÚ ATENCIÓN!

