

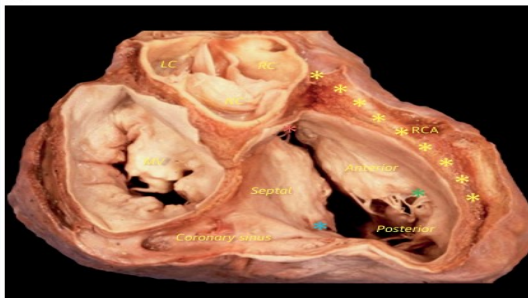


SOCIEDAD  
VASCO NAVARRA  
DE CARDIOLOGÍA

# ACTUALIZACIÓN DE LAS GUÍAS ESC 2025 EN VALVULOPATIAS

-LA VISIÓN DEL HEART TEAM VASCO NAVARRO-

24 de septiembre. PALACIO EUSKALDUNA.  
BILBAO



## Valvulopatía tricuspídea



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Hospital Universitario  
Araba

# Introducción



## Prevalencia IT ≥ moderada

- global 0,55%
- > 75 años → 4,4%

**TABLE 1** The Prevalence of All-Cause TR in the Community by Age and Sex and Adjusted for the Age and Sex Distribution of the U.S. White Population

|         |                 | All-Cause TR Greater or Equal to Moderate |                  |                  |                  |                  | Linear Trend<br>p Value | Age Adjusted<br>U.S. Burden |
|---------|-----------------|-------------------------------------------|------------------|------------------|------------------|------------------|-------------------------|-----------------------------|
|         |                 | Age Group, yrs                            |                  |                  |                  |                  |                         |                             |
|         | Number of Cases | 18-44 (n = 51)                            | 45-54 (n = 36)   | 55-64 (n = 58)   | 65-74 (n = 128)  | 75+ (n = 408)    |                         |                             |
| Female  | 426             | 0.04 (0.02-0.07)                          | 0.06 (0.02-0.13) | 0.36 (0.24-0.53) | 1.23 (0.94-1.58) | 4.40 (3.89-4.96) | 0.0001                  | 0.59 (0.52-0.67)            |
| Male    | 255             | 0.05 (0.03-0.08)                          | 0.16 (0.10-0.26) | 0.30 (0.19-0.47) | 0.93 (0.67-1.27) | 3.16 (2.58-3.84) | 0.0001                  | 0.47 (0.39-0.55)            |
| Overall | 681             | 0.05 (0.03-0.07)                          | 0.11 (0.07-0.16) | 0.33 (0.24-0.44) | 1.09 (0.89-1.33) | 3.96 (3.56-4.39) | 0.0001                  | 0.55 (0.50-0.60)            |

Topilsky et al. JACC Cardiovasc Imaging March 2019: 433-42

## Ingreso IC

## Tricuspid regurgitation and long-term clinical outcomes

Ehud Chorin<sup>1†</sup>, Zach Rozenbaum<sup>1†</sup>, Yan Topilsky<sup>1</sup>, Maayan Konigstein<sup>1</sup>,  
Tomer Ziv-Baran<sup>2</sup>, Eyal Richert<sup>1</sup>, Gad Keren<sup>1</sup>, and Shmuel Banai<sup>1\*</sup>

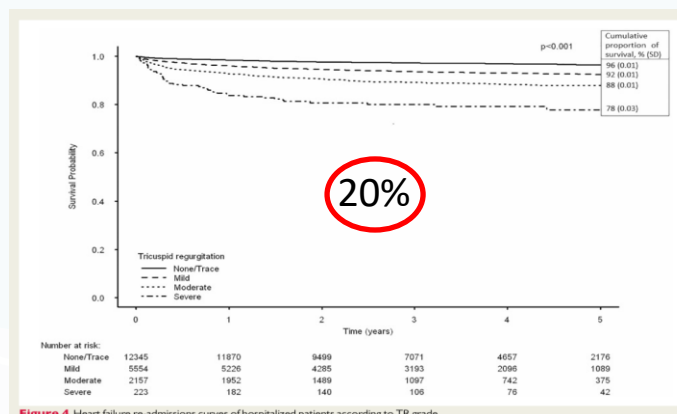


Figure 4 Heart failure re-admissions curves of hospitalized patients according to TR grade.

## Mortalidad

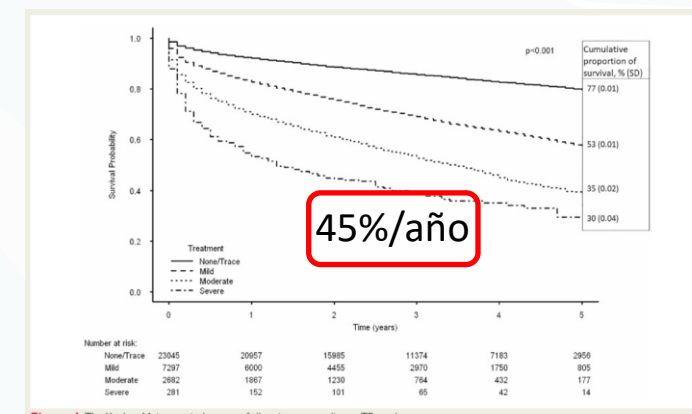
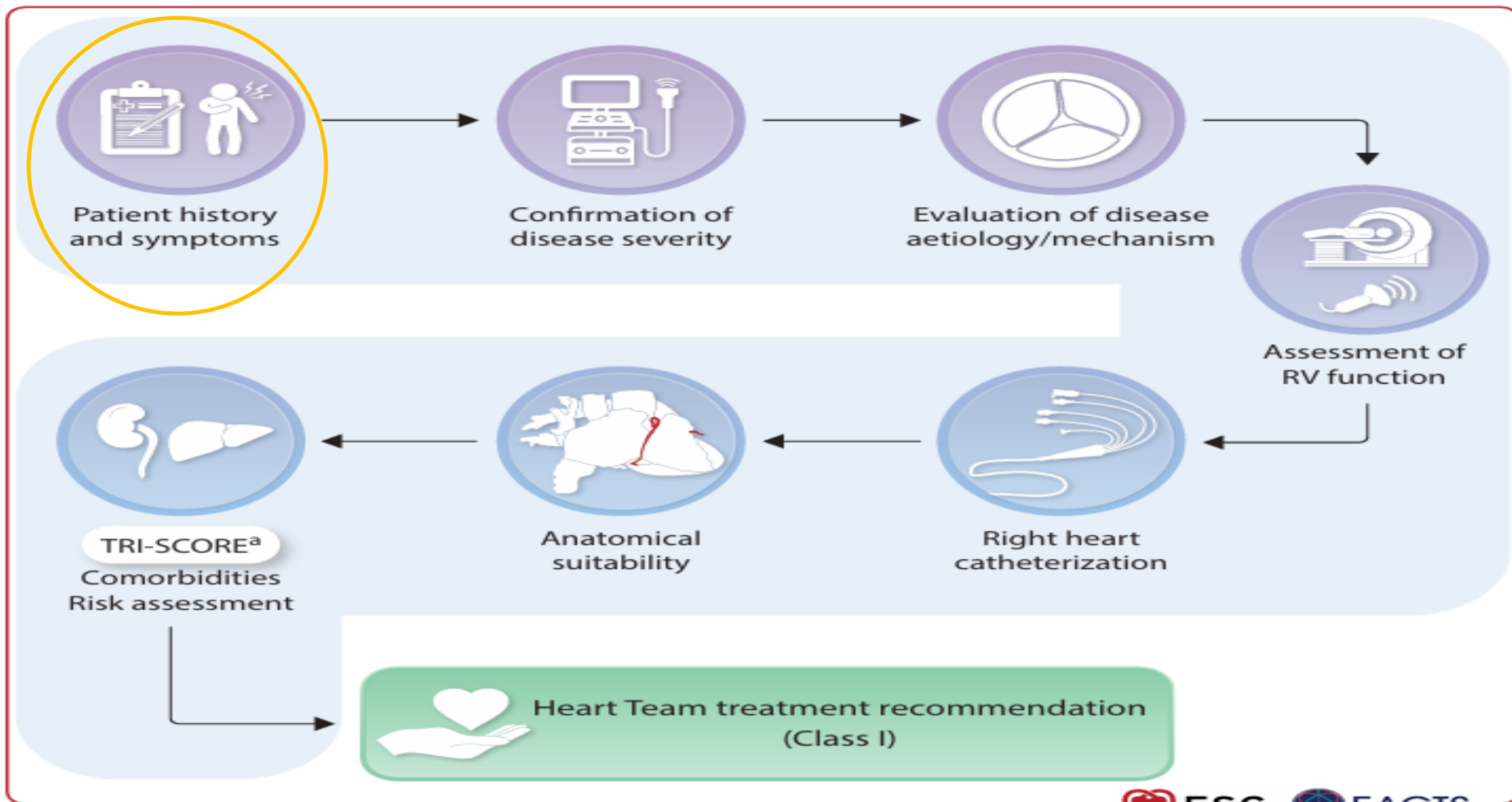


Figure 1 The Kaplan-Meier survival curves of all patients according to TR grade.

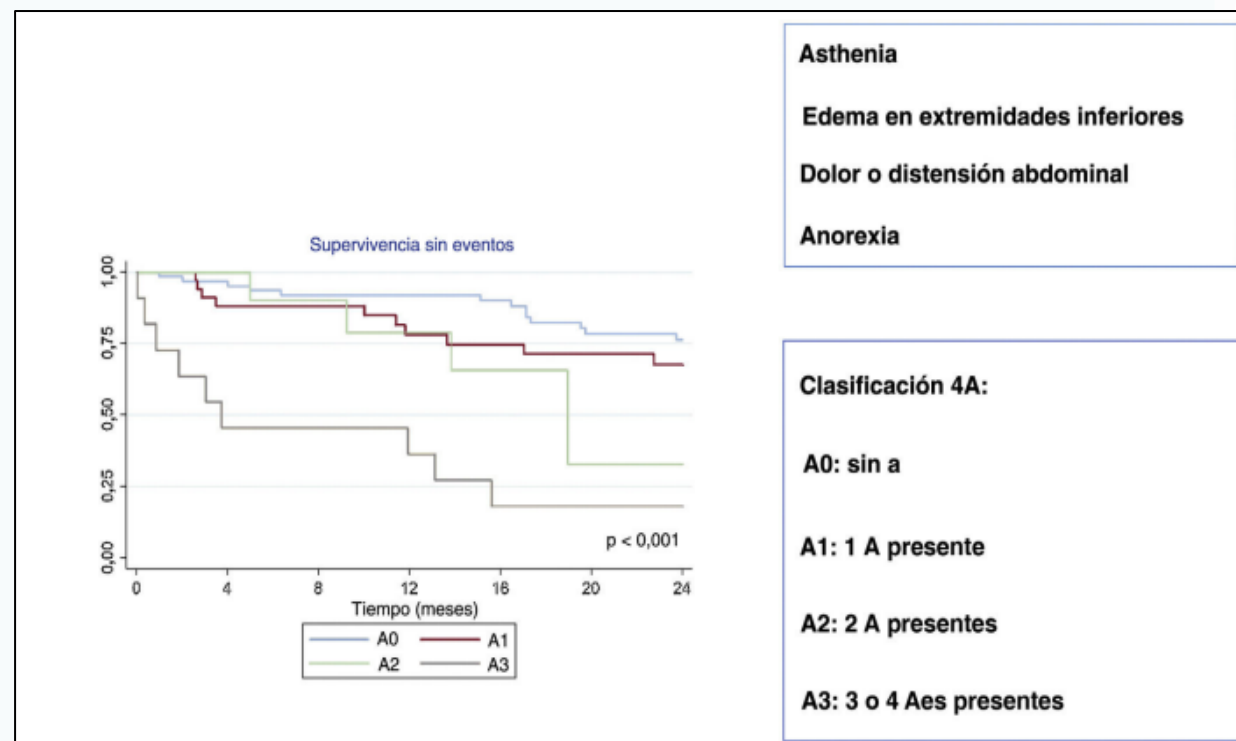


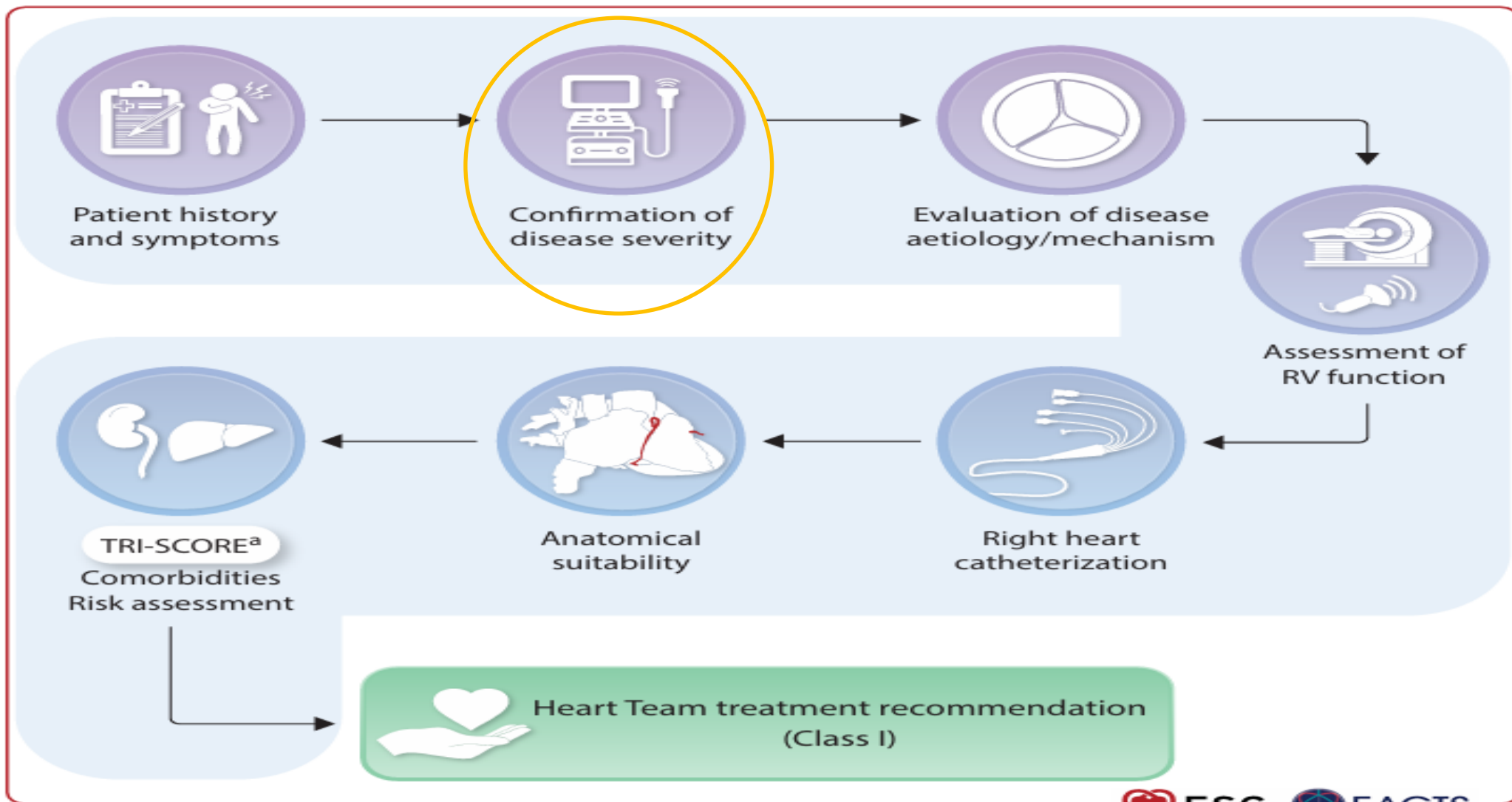
# Hº clínica y síntomas

| Symptomatic burden                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                       | Potential to improve                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <ul style="list-style-type: none"> <li>No left-sided heart failure</li> <li>Normal end-diastolic pressures</li> <li>Normal right heart function</li> </ul>                       | <ul style="list-style-type: none"> <li>Heart failure with preserved ejection fraction</li> <li>Heart failure with recovered ejection fraction</li> <li>Heart transplant recipients</li> <li>Concomitant left-sided valvular heart disease</li> <li>Incipient impaired right heart function</li> </ul> | <ul style="list-style-type: none"> <li>Heart failure with reduced ejection fraction</li> <li>Terminal heart failure</li> <li>Left ventricular assist devices</li> <li>Untreated left-sided valve disease</li> <li>Terminal right heart failure</li> </ul>                                                      |
|                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Isolated postcapillary pulmonary hypertension</li> <li>Mild to moderate pulmonary fibrosis</li> <li>Mild to moderate restrictive or obstructive pulmonary disease</li> </ul>                                                                                   | <ul style="list-style-type: none"> <li>Combined postcapillary or precapillary pulmonary hypertension</li> <li>Severe pulmonary fibrosis</li> <li>Severe restrictive or obstructive pulmonary disease</li> </ul>                                                                                                |
|  <ul style="list-style-type: none"> <li>Normal pulmonary artery pressures</li> <li>No pulmonary fibrosis</li> <li>No restrictive or obstructive pulmonary disease</li> </ul>      | <ul style="list-style-type: none"> <li>Moderately impaired renal function</li> <li>Renal transplant recipients</li> </ul>                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Severely impaired renal function</li> <li>Chronic renal failure requiring dialysis</li> </ul>                                                                                                                                                                           |
|  <ul style="list-style-type: none"> <li>Normal renal function</li> </ul>                                                                                                          | <ul style="list-style-type: none"> <li>No liver fibrosis</li> <li>Normal liver synthesis function</li> <li>No symptoms attributable to liver failure</li> </ul>                                                                                                                                       | <ul style="list-style-type: none"> <li>Liver fibrosis (Child Pugh Class A)</li> <li>Increased circulating liver enzymes</li> <li>Liver transplant recipient</li> <li>Manifest liver cirrhosis (Child Pugh Class B&amp;C)</li> <li>Coagulopathy due to liver disease</li> <li>Hepatic encephalopathy</li> </ul> |
|  <ul style="list-style-type: none"> <li>Capability to fulfil work tasks of daily routine</li> <li>Good subjective physical, psychological and social quality of life</li> </ul> | <ul style="list-style-type: none"> <li>Impaired capability to fulfil work tasks of daily routine</li> <li>Impaired subjective physical, psychological and social quality of life</li> </ul>                                                                                                           | <ul style="list-style-type: none"> <li>Mobility dependent on assistance</li> <li>Terminal comorbidity limiting life expectancy to &lt;1 year</li> </ul>                                                                                                                                                        |

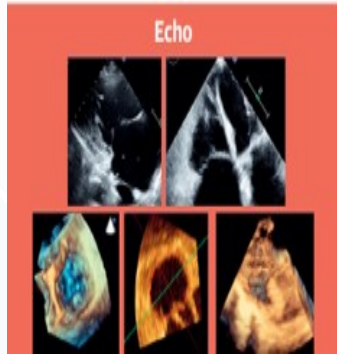
## La clasificación 4A para pacientes con insuficiencia tricuspídea

Ariana González-Gómez<sup>a,b,\*</sup>, Covadonga Fernández-Golfín<sup>a,b</sup>, Rocío Hinojar<sup>a</sup>, Juan Manuel Monteagudo<sup>a,b</sup>, Ana García<sup>a,b</sup>, Cristina García-Sebastián<sup>a</sup>, Inés García-Lunar<sup>a,b,c</sup>, Ángel Sánchez-Recalde<sup>a,b</sup>, Luisa Salido<sup>a,b</sup>, Ana Pardo<sup>a,b</sup> y José Luis Zamorano<sup>a,b</sup>





# Cuantificación IT



Echocardiographic criteria for severe TR

## Qualitative

- Flail leaflet, large coaptation defect, severe tenting
- Large central jet
- Large holosystolic convergence zone
- Dense, triangular CW Doppler jet with early peaking

## Semi-quantitative

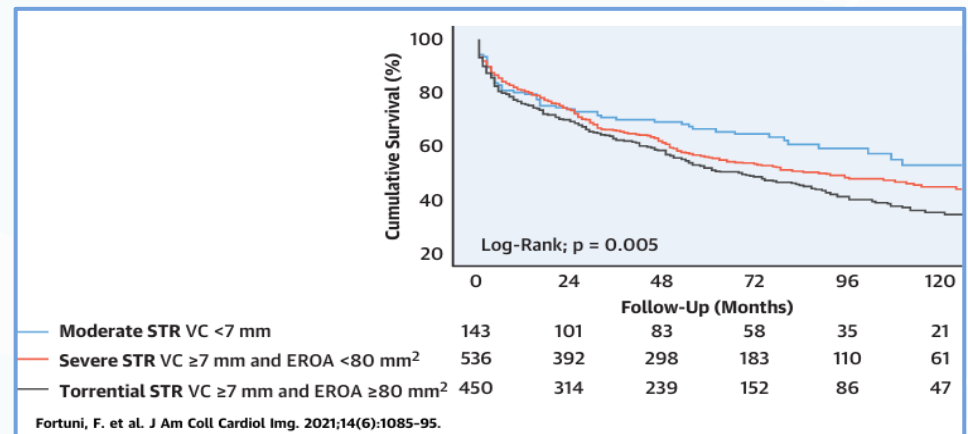
- PISA radius  $\geq 9$  mm (at Nyquist 20–30 cm/s)
- Vena contracta width  $\geq 7$  mm
- Hepatic vein systolic flow reversal

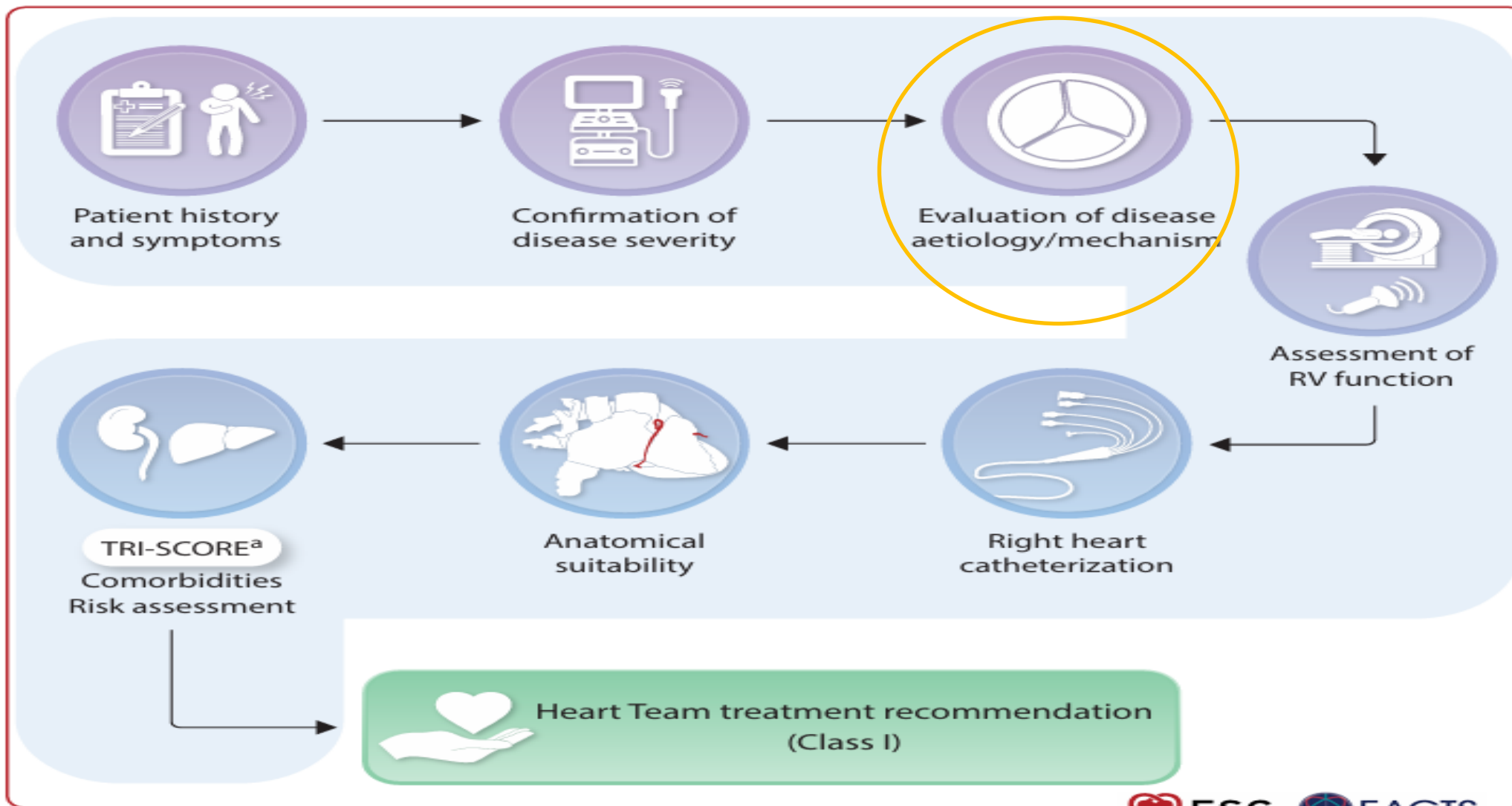
## Quantitative

- EROA  $\geq 40$  mm<sup>2</sup>
- RVol  $\geq 45$  mL/beat
- RF  $\geq 50\%$
- 3D VCA  $\geq 75$  mm<sup>2</sup>

| Parameters                                          | MILD                | MODERATE              | SEVERE                | MASSIVE                | TORRENTIAL                 |
|-----------------------------------------------------|---------------------|-----------------------|-----------------------|------------------------|----------------------------|
| Vena Contracta width (biplane average)              | <3 mm               | 3-6.9 mm              | 7 mm - 13 mm          | 14-20 mm               | $\geq 21$ mm               |
| EROA by PISA                                        | <20 mm <sup>2</sup> | 20-39 mm <sup>2</sup> | 40-59 mm <sup>2</sup> | 60-79 mm <sup>2</sup>  | $\geq 80$ mm <sup>2</sup>  |
| 3D Vena Contracta Area or Quantitative Doppler EROA | -                   | -                     | 75-94 mm <sup>2</sup> | 95-114 mm <sup>2</sup> | $\geq 115$ mm <sup>2</sup> |

Example:





# Etiología/mecanismo

80-90%

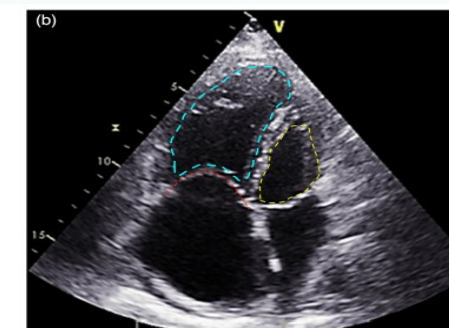
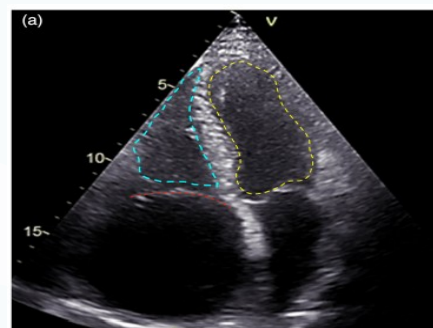
5-10%

8-10%

|                     | Secondary   |        | CIED (A)         | Primary     |          |
|---------------------|-------------|--------|------------------|-------------|----------|
| 2D TTE              |             |        |                  |             |          |
| 3D TTE              |             |        |                  |             |          |
| Parameter           | Ventricular | Atrial | CIED Type A      | Primary TR  |          |
| Carpentier Class    | IIIb        | I      | I, IIIa, IIIb    | Prolapse II | RHD IIIa |
| TV Tethering        | ++++        | +/-    | ++               | -           | -        |
| Leaflet Restriction | Systole     | -      | Systole/Diastole | -           | Diastole |
| RA/TA Dilatation    | ++          | ++++   | +/-              | ++          | +++      |
| RV Dilatation       | +++         | +/-    | +/-              | +/-         | +/-      |
| RV Dysfunction      | +++         | +/-    | +/-              | +/-         | +/-      |

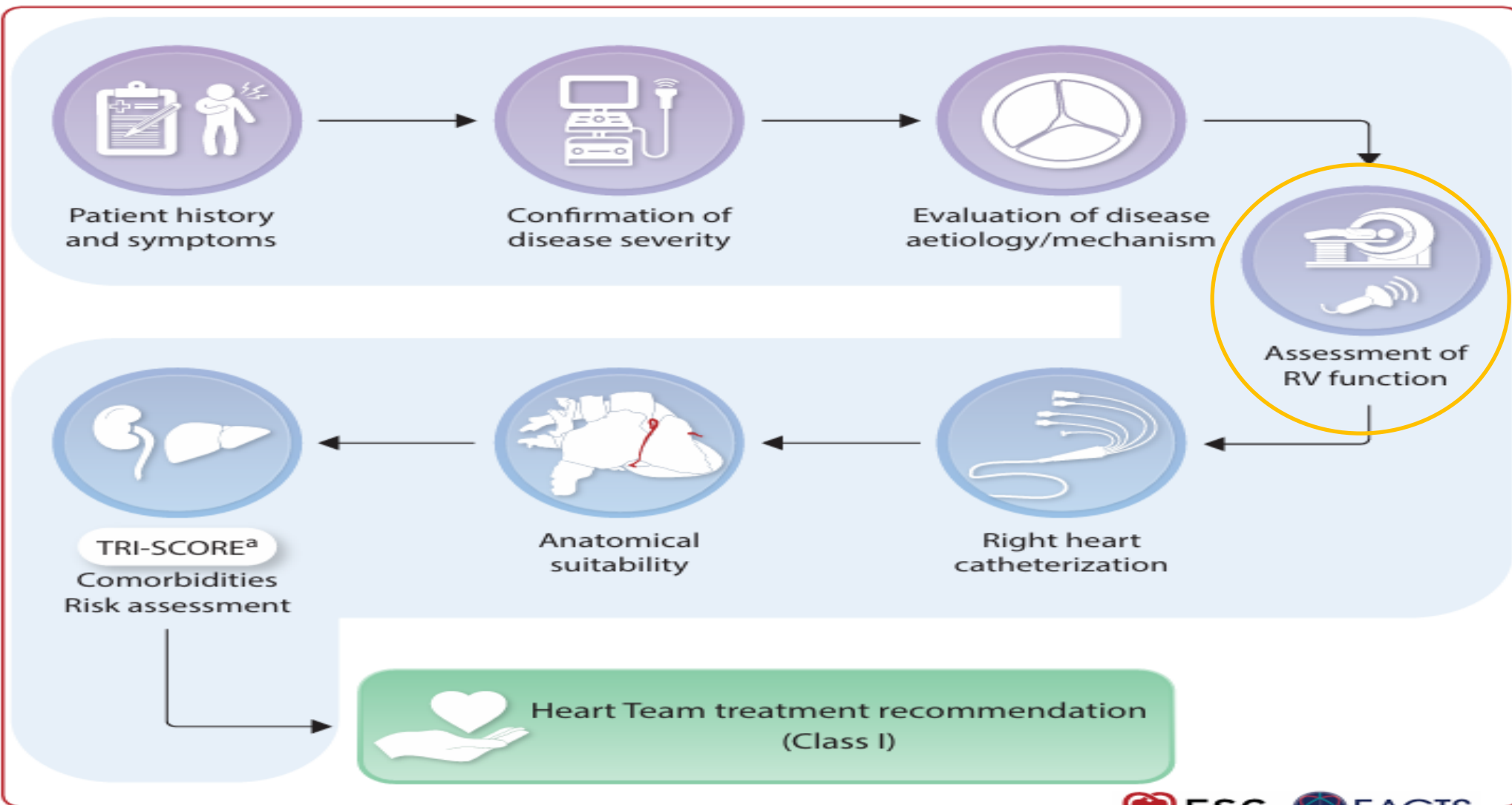
**TABLE 2 Current Parameters That May Be Used to Distinguish Atrial From Ventricular Secondary TR**

|                                                     | A-STR Phenotype | V-STR Phenotype |
|-----------------------------------------------------|-----------------|-----------------|
| <b>Leaflet morphology</b>                           |                 |                 |
| Tenting height (4-chamber), mm                      | ≤9              | >9              |
| Tenting area (4-chamber), cm <sup>2</sup>           | <2.1            | ≥2.1            |
| Tenting volume, mL                                  | <2.5            | ≥2.5            |
| <b>Right heart chamber size</b>                     |                 |                 |
| RV midventricular diameter, mm                      | ≤38             | >38             |
| RV midventricular diameter index, mm/m <sup>2</sup> | <21             | ≥21             |
| RV end-diastolic volume index, mL/m <sup>2</sup>    | <80             | ≥80             |
| RV end-systolic volume index, mL/m <sup>2</sup>     | <21             | ≥21             |
| 2D sphericity index                                 | <55             | ≥55             |
| End-systolic RA:RV volume or area ratio             | ≥1.5            | <1.5            |
| <b>RV systolic function</b>                         |                 |                 |
| TAPSE, mm                                           | >17             | <17             |
| FAC, %                                              | ≥35             | <35             |
| RVFWS, %                                            | ≥20             | <20             |
| RV TDI S', cm/s                                     | ≥9              | <9              |
| 3D RVEF, %                                          | ≥50             | <50             |
| LVEF                                                | ≥50             | (variable)      |
| <b>Invasive pulmonary vascular hemodynamics</b>     |                 |                 |
| PCWP, mm Hg                                         | ≤15             | (variable)      |
| mPAP, mm Hg                                         | <20             | usually >20     |
| PVR, WU                                             | <2.0            | (variable)      |



Hanh et al JACC Cardiovasc Imaging Oct 24: 1711-1735

Hanh et al JACC Cardiovasc Imaging 2025 Sep;18(9):1013-1041



ESC



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# Valoración VD

## RV dilatation<sup>a</sup>

RV basal diameter index:  
>24 mm/m<sup>2</sup>

RV mid-diameter index:  
>21 mm/m<sup>2</sup>

Tricuspid annulus index:  
>21 mm/m<sup>2</sup>

RV end-diastolic  
volume index:  
>95 mL/m<sup>2</sup>

RV end-systolic  
volume index:  
>37 mL/m<sup>2</sup>

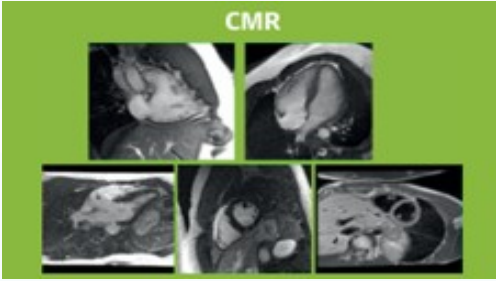
## RV dysfunction<sup>a</sup>

### RV dysfunction:

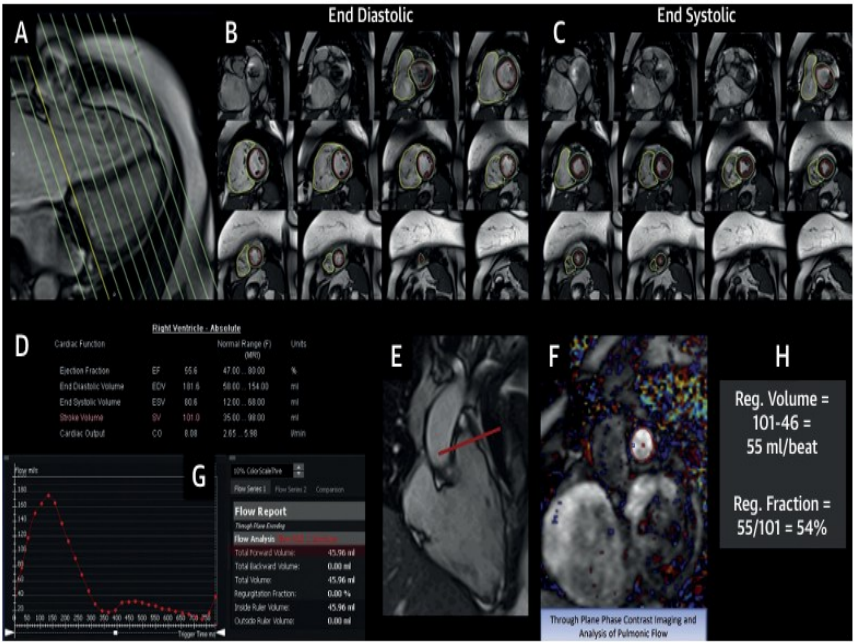
TAPSE <17 mm  
RV TDI s' <10 cm/s  
RV FWS <23%  
RV GLS <21%  
3D RV EF <50%  
FAC ≤35%

### Severe RV dysfunction:

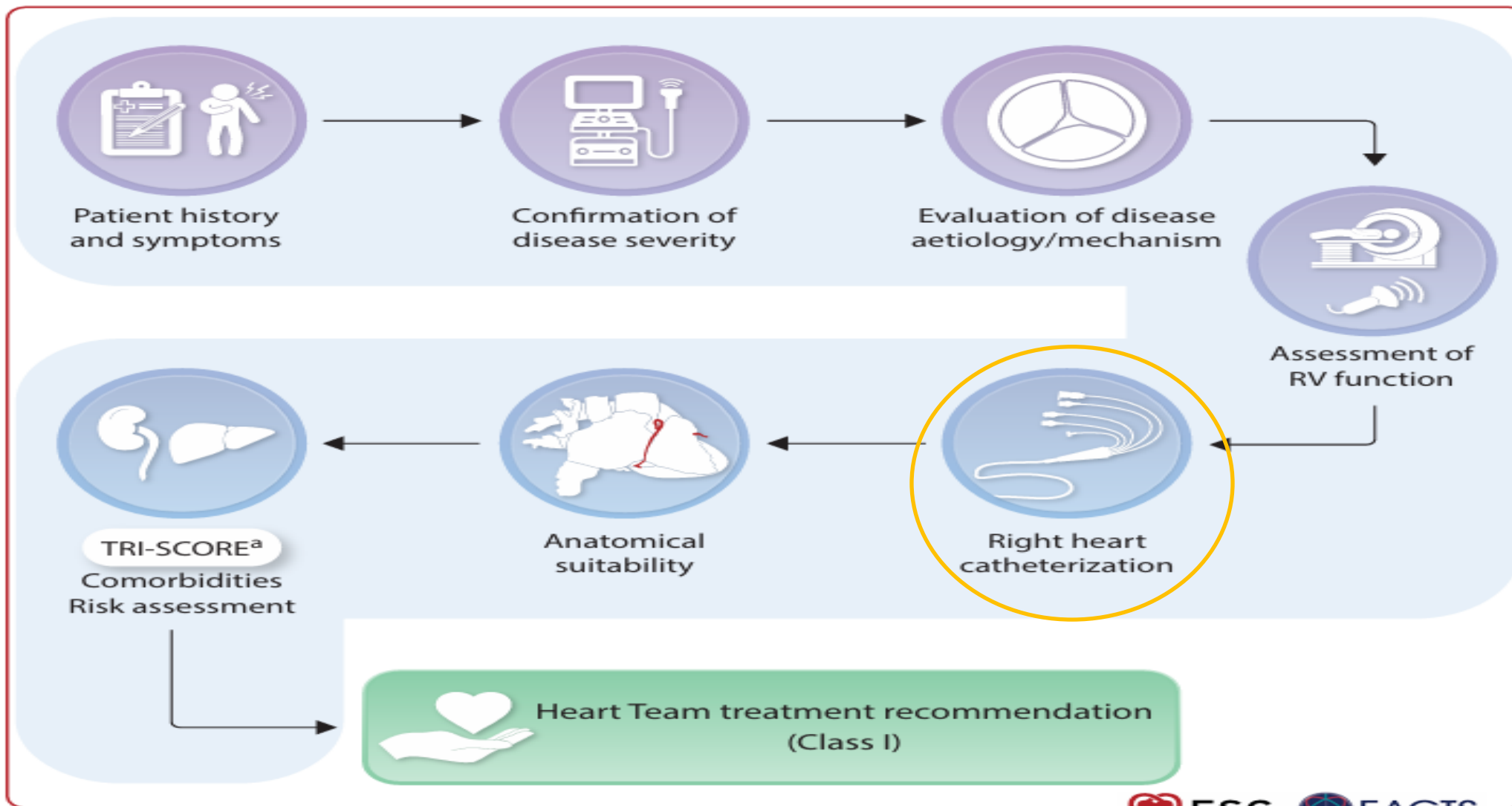
TAPSE <10 mm  
RV TDI s' <6 cm/s  
RV FWS <11%  
RV GLS <9%  
3D RV EF <35%  
FAC ≤22%



| Threshold Value for Poor Outcomes |                 | Acoplamiento V-A                                                                                                                                       |                                                                                                                                                                                              |                                                                                                                                                                                                                                   |
|-----------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |                 | Strengths                                                                                                                                              | Limitations                                                                                                                                                                                  | Use/Value in the Clinical Setting                                                                                                                                                                                                 |
| TAPSE/PASP                        | >0.406 mm/mm Hg | <ul style="list-style-type: none"><li>Easy and fast to obtain, widely available and reproducible</li><li>Normalize RV function for afterload</li></ul> | <ul style="list-style-type: none"><li>Pre-load dependent</li><li>PASP estimation is inaccurate in patients with severe TR</li><li>All the limitations of TAPSE apply</li></ul>               | <ul style="list-style-type: none"><li>Established prognostic value, both in patients under medical treatment and those who underwent T-TEER</li><li>Use of invasive PASP improves the prognostic value of the parameter</li></ul> |
| FWLS/PASP                         | ≤0.34%/mm Hg    | <ul style="list-style-type: none"><li>All the pros of FWLS apply</li><li>Normalize RV function for afterload</li></ul>                                 | <ul style="list-style-type: none"><li>Pre-load dependent</li><li>PASP estimation is inaccurate in patients with severe TR</li><li>All limitations of 2DE longitudinal strain apply</li></ul> | <ul style="list-style-type: none"><li>Associated with all-cause mortality in patients with severe STR</li><li>Independent of TAPSE/PASP</li></ul>                                                                                 |

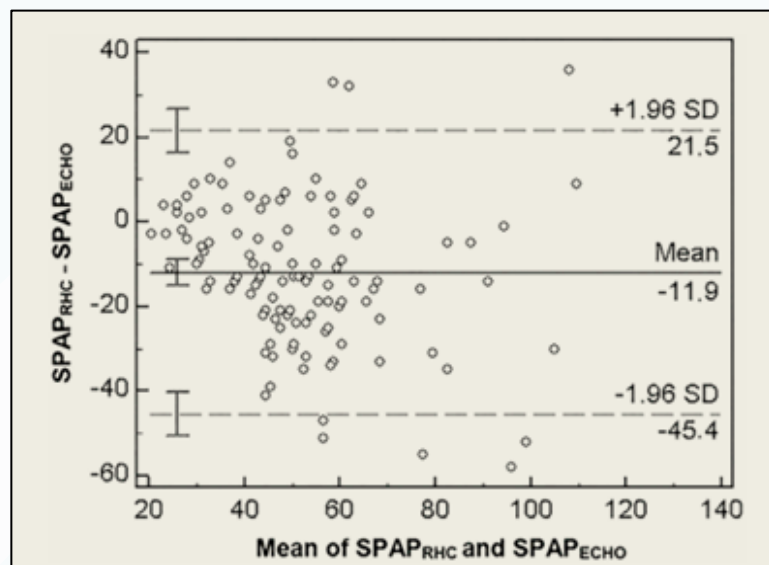


Hanh et al JACC Cardiovasc Imaging 2025 Sep;18(9):1013-1041



# Cateterismo derecho

## Correlation Between Doppler Echocardiography and Right Heart Catheterisation-Derived Systolic and Mean Pulmonary Artery Pressures: Determinants of Discrepancies Between the Two Methods



Sonaglioni et al. Heart, lung and circulation 2021. 30, 658-664

### Pulmonary pressures

#### Pre-capillary PH:

mPAP >20 mmHg  
PAWP ≤15 mmHg  
PVR >2 WU

#### Post-capillary PH:

mPAP >20 mmHg  
PAWP >15 mmHg  
PVR ≤2 WU

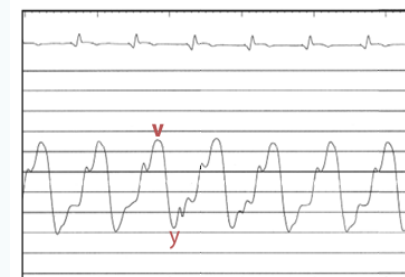
#### Severe PH:

PVR >5 WU  
mPAP >35 mmHg

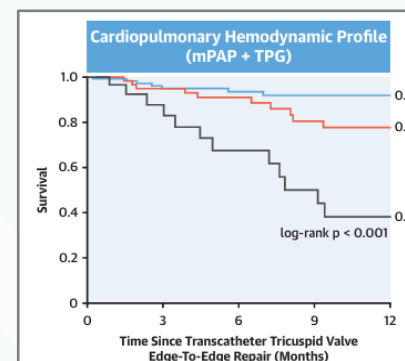
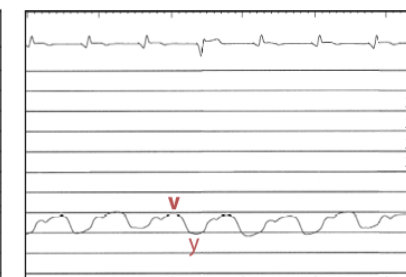
## Cardiopulmonary Hemodynamic Profile Predicts Mortality After Transcatheter Tricuspid Valve Repair in Chronic Heart Failure

Thomas J. Stocker, MD,<sup>a,b</sup> Helene Hertel,<sup>a,b</sup> Mathias Orban, MD,<sup>a,b</sup> Daniel Braun, MD,<sup>a,b</sup> Karl-Philipp Rommel, MD,<sup>c</sup> Tobias Ruf, MD,<sup>d</sup> Geraldine Ong, MD,<sup>e</sup> Michael Nabauer, MD,<sup>a,b</sup> Simon Deseive, MD,<sup>a,b</sup> Neil Fam, MD,<sup>e</sup> Ralph S. von Bardeleben,<sup>d</sup> Holger Thiele, MD,<sup>c</sup> Steffen Massberg, MD,<sup>a,b</sup> Philipp Lurz, MD, PhD,<sup>a,b</sup> Jörg Hausleiter, MD<sup>a,b,e</sup>

### Right atrial pressure: pre TTVR



### Right atrial pressure: post TTVR



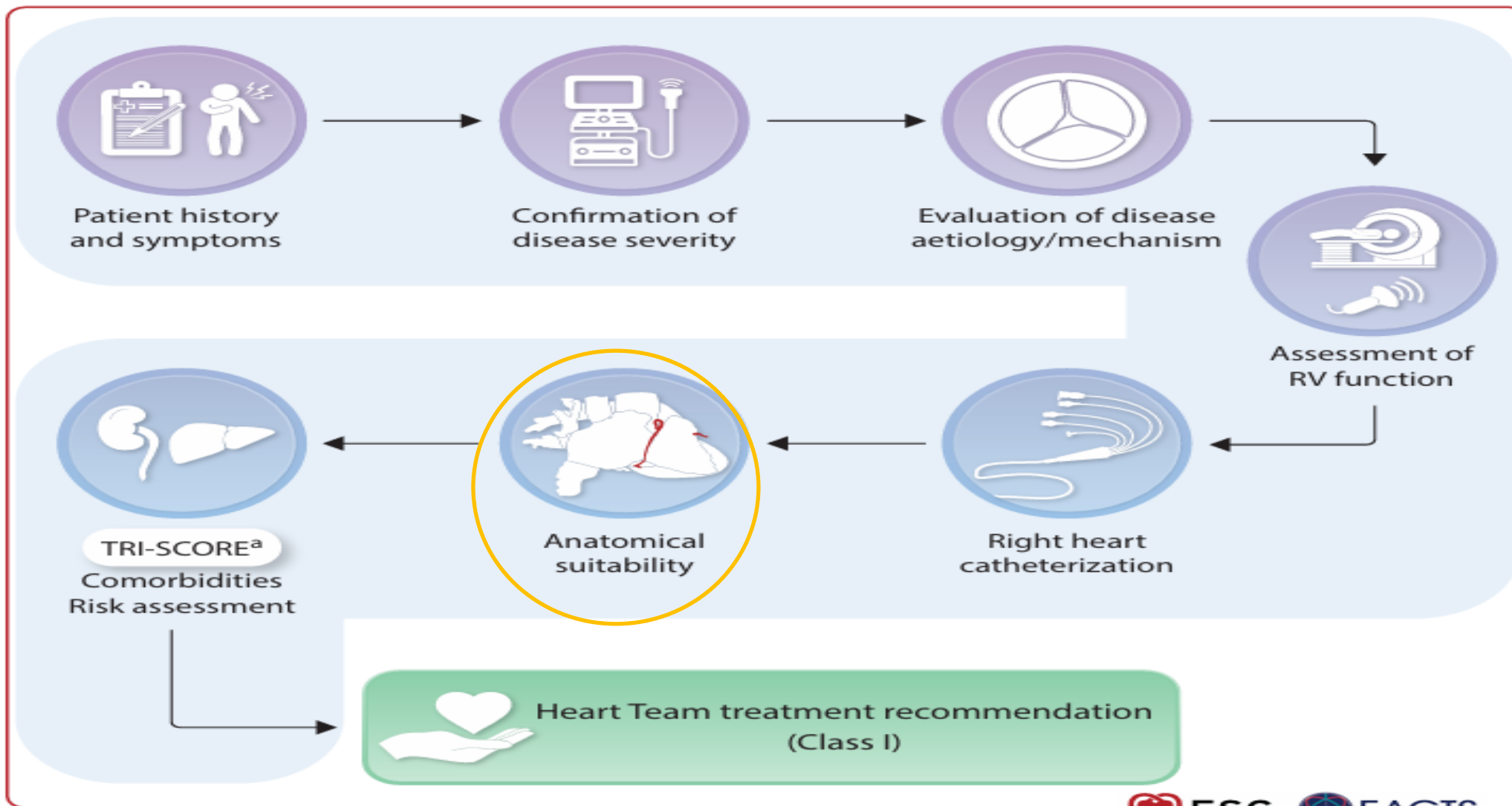
— No Pulmonary Hypertension  
(Mean Pulmonary Artery Pressure ≤30 mm Hg)

— Post-Capillary Pulmonary Hypertension  
(Mean Pulmonary Artery Pressure >30 mm Hg, Transpulmonary Gradient ≤17 mm Hg)

— Pre-Capillary Pulmonary Hypertension  
(Mean Pulmonary Artery Pressure >30 mm Hg, Transpulmonary Gradient >17 mm Hg)

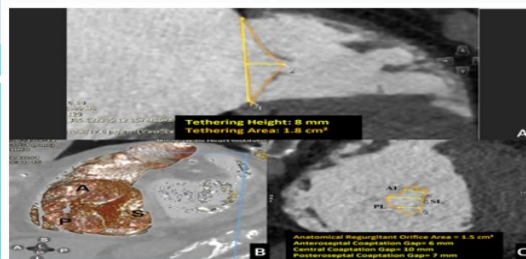
Stocker et al JACC Cardiovasc Imaging. January 11, 2021: 29-38

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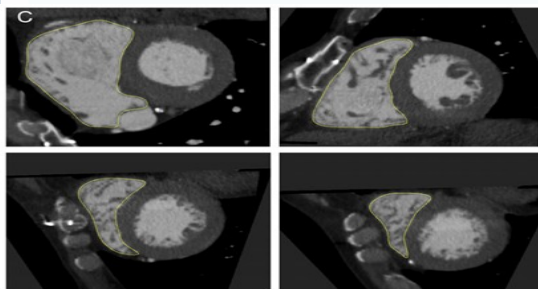


# Valoración anatómica

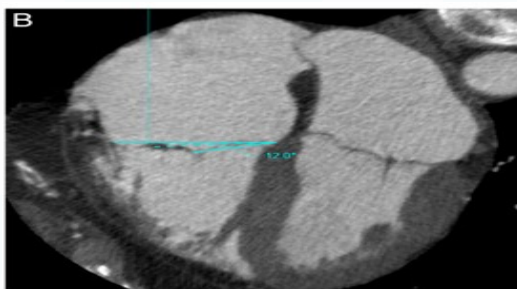
## Mecanismo



## Volúmenes y función VD

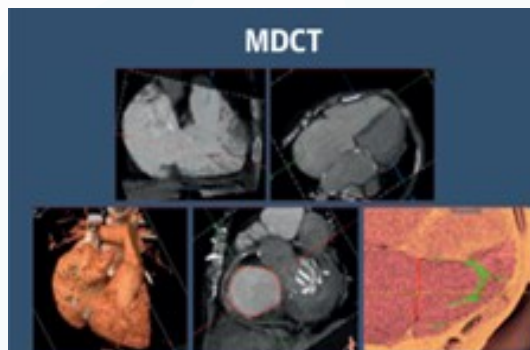


## Anillo tricuspídeo

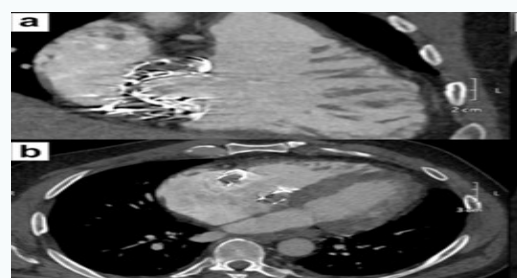
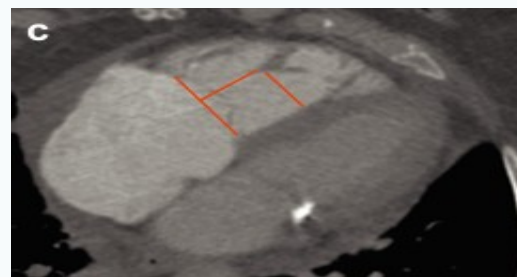


Gitustino et al. Structural Heart. 2025.

## MDCT



## Aparato subvalvular



- annulus size
- right heart size and function
- subvalvular apparatus
- trabeculations
- coronary visualization
- vena cavae and femoral veins
- procedural planning

## Angulos a cavas



## Planning y control prótesis

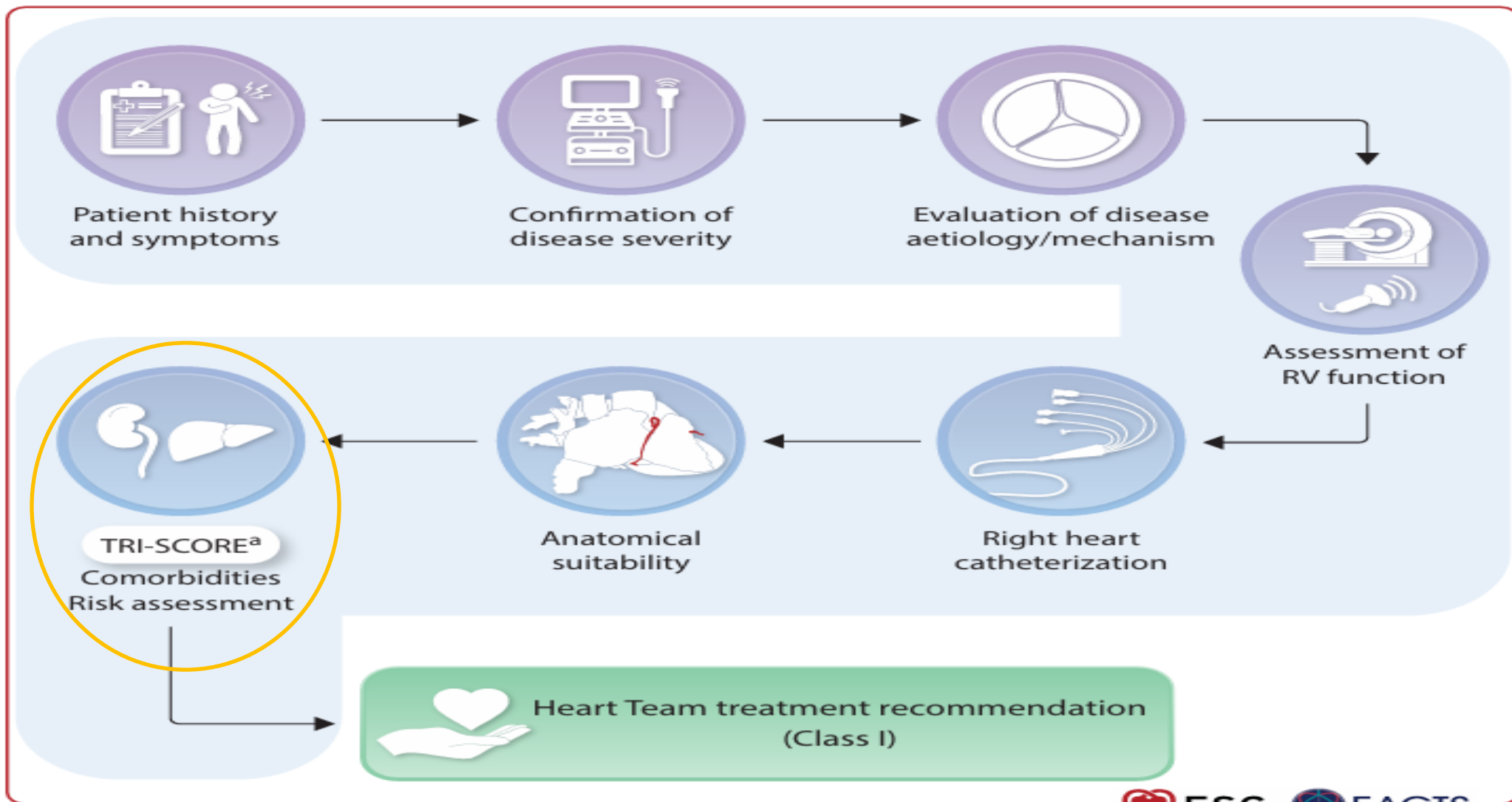
Ingraham et al. Structural Heart. 2023.

ACTUALIZACIÓN DE LAS GUÍAS ESC 2025 EN valvulopatías

| Anchor/<br>Mechanism                            | Historical and New Technologies |  |  |  |  |  |
|-------------------------------------------------|---------------------------------|--|--|--|--|--|
| Annuloplasty<br>(Direct and<br>Indirect) Device |                                 |  |  |  |  |  |
| Leaflet Device/<br>Spacers                      |                                 |  |  |  |  |  |
| Heterotopic<br>Valve (in<br>IVC/SVC)            |                                 |  |  |  |  |  |
| Orthotopic Valve<br>Replacement                 |                                 |  |  |  |  |  |
|                                                 |                                 |  |  |  |  |  |

Hanh et al JACC Cardiovasc Imaging 2025 Sep;18(9):1013-1041

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# Escala de riesgo: TRISCORE

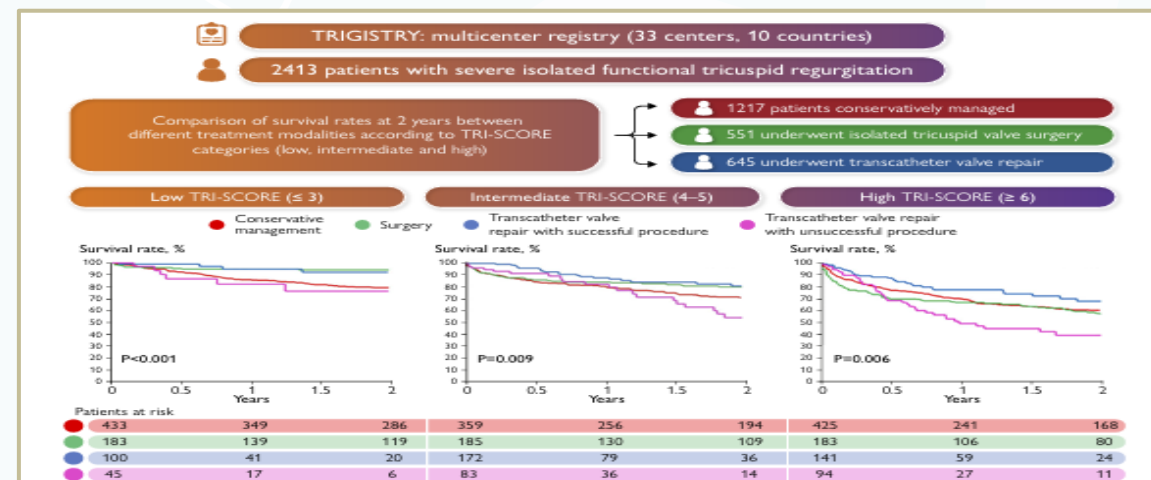
**Table S4 Predictors of in-hospital mortality after isolated TV surgery (TRI-SCORE)**

| Risk factors                             | Scoring |
|------------------------------------------|---------|
| Age $\geq 70$ years                      | 1       |
| NYHA functional class III-IV             | 1       |
| Right-sided HF signs                     | 2       |
| Daily dose of furosemide $\geq 125$ mg   | 2       |
| Glomerular filtration rate $< 30$ mL/min | 2       |
| Elevated total bilirubin                 | 2       |
| LVEF $< 60\%$                            | 1       |
| Moderate/severe RV dysfunction           | 1       |

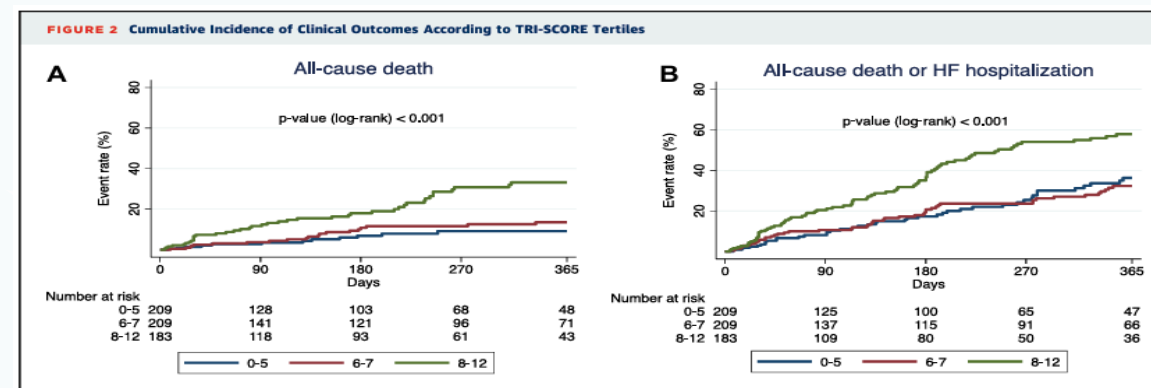
## Predicted in-hospital mortality rate according to risk score

| Score:   | Predicted in-hospital mortality: |
|----------|----------------------------------|
| 0        | 1%                               |
| 1        | 2%                               |
| 2        | 3%                               |
| 3        | 5%                               |
| 4        | 8%                               |
| 5        | 14%                              |
| 6        | 22%                              |
| 7        | 34%                              |
| 8        | 48%                              |
| $\geq 9$ | 65%                              |

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Dreyfus et al. EHJ 2024. 45. 586-597

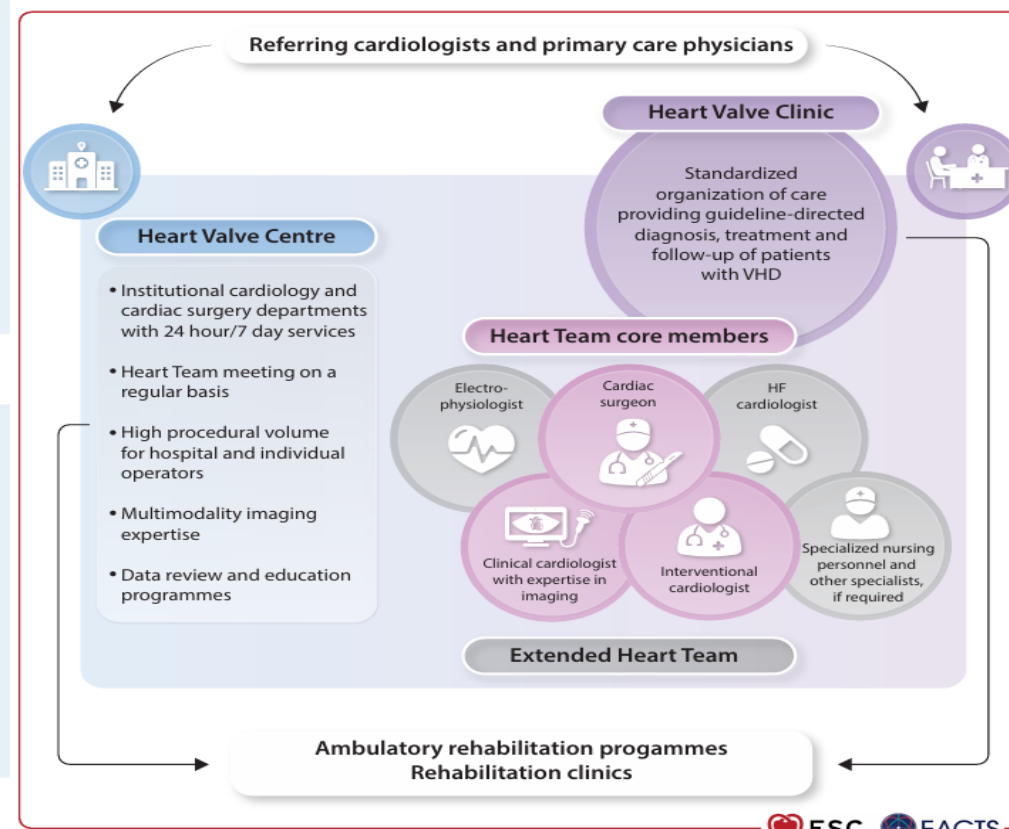


Adamo et al JACC Cardiovasc Interventions 2024 April 8; 859-870

**Table 6** Complex procedures ideally performed in the most experienced Heart Valve Centres

| Transcatheter interventions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Surgical interventions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Transfemoral TAVI in patients with high-risk features: <ul style="list-style-type: none"> <li>– Low coronary ostia</li> <li>– Difficult femoral anatomy</li> <li>– Bicuspid valve</li> <li>– Severe calcification protruding into the LVOT</li> <li>– Severe LV and/or RV impairment</li> <li>– Pure AV regurgitation</li> <li>– Multiple valve disease</li> <li>– Complex coronary artery disease</li> <li>– Severe extracardiac disease (e.g. renal failure, PH)</li> </ul> </li> <li>• Non-transfemoral TAVI</li> <li>• Valve-in-valve (including TAV-in-TAV)</li> <li>• All leaflet modification procedures (BASILICA, LAMPOON etc.)</li> <li>• PVL closure procedures</li> <li>• Complex M-TEER<sup>a</sup></li> <li>• Redo M-TEER procedures</li> <li>• Tricuspid or mitral valve-in-ring or valve-in-valve, valve-in-MAC</li> <li>• TAVI</li> <li>• All tricuspid procedures</li> </ul> | <ul style="list-style-type: none"> <li>• High-risk procedures (especially in patients with LV and/or RV impairment)</li> <li>• Redo procedures</li> <li>• Minimally invasive and robotic valve surgery</li> <li>• Complex MV repair <ul style="list-style-type: none"> <li>– Barlow disease</li> <li>– Anterior or bileaflet prolapse</li> <li>– High risk of SAM</li> <li>– Severe MAC</li> </ul> </li> <li>• AV repair</li> <li>• Ross procedure</li> <li>• Valve surgery combined with complex surgery of the aorta</li> <li>• Endocarditis surgery</li> </ul> |

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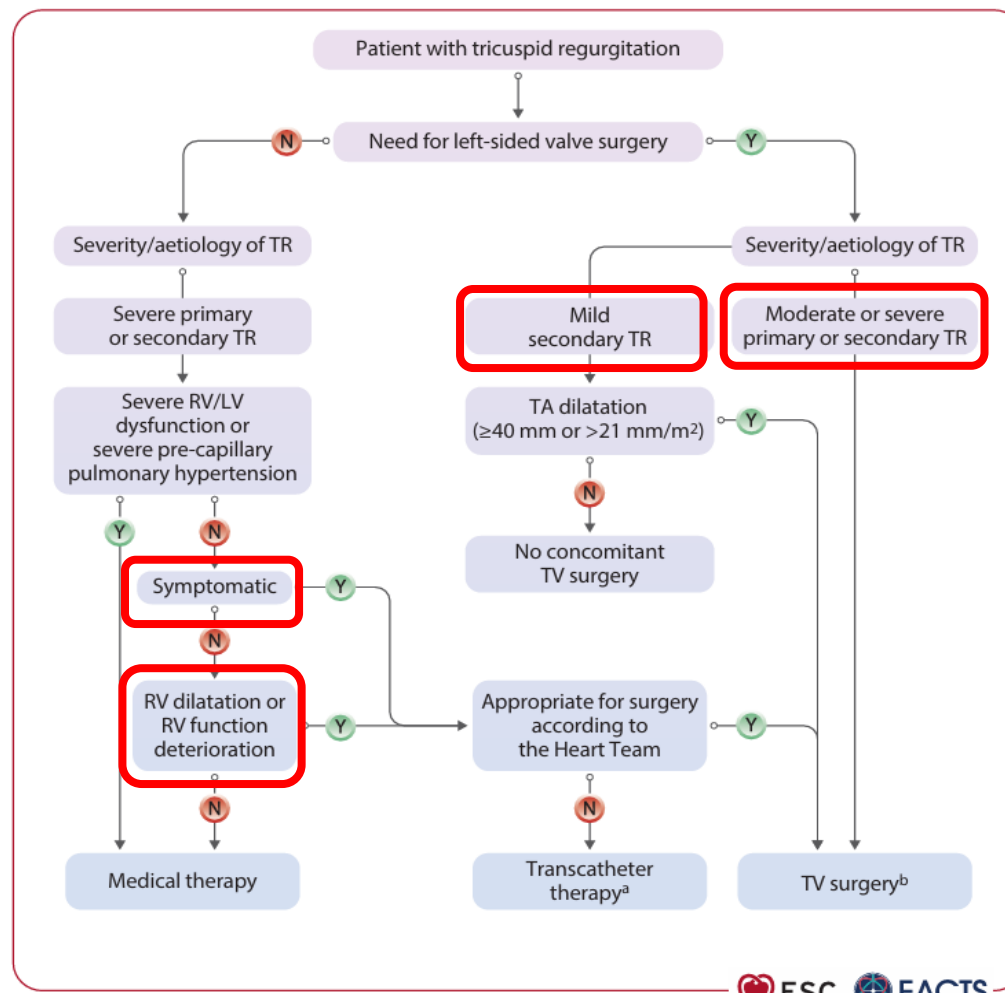


 **Heart Team treatment recommendation (Class I)**

# Abordaje terapéutico

## Patients with severe tricuspid regurgitation without left-sided valvular heart disease requiring surgery

|                                                                                                                                                                                                                                                                                       |     |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|
| TV surgery <sup>c</sup> is recommended in <u>symptomatic</u> patients with severe <u>primary</u> TR without severe RV dysfunction or severe PH.                                                                                                                                       | I   | C |
| TV surgery <sup>c</sup> should be considered in asymptomatic patients with severe <u>primary</u> TR who have RV dilatation/RV function deterioration, but without severe LV/RV dysfunction or severe PH.                                                                              | IIa | C |
| TV surgery <sup>c</sup> should be considered in patients with severe <u>secondary</u> TR who are <u>symptomatic</u> or have RV dilatation/RV function deterioration, but without severe LV/RV dysfunction or PH. <sup>685,720,745-747</sup>                                           | IIa | B |
| Transcatheter TV treatment should be considered to improve quality of life and RV remodelling in high-risk patients with <u>symptomatic</u> severe TR despite optimal medical therapy in the absence of severe RV dysfunction or pre-capillary PH. <sup>713,733,735,738,748-751</sup> | IIa | A |

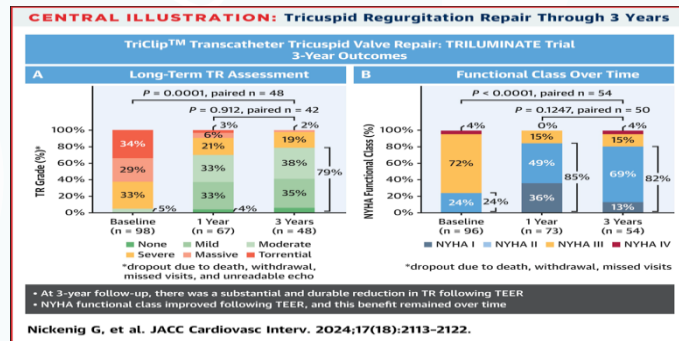


## Patients with tricuspid regurgitation and left-sided valvular heart disease requiring surgery

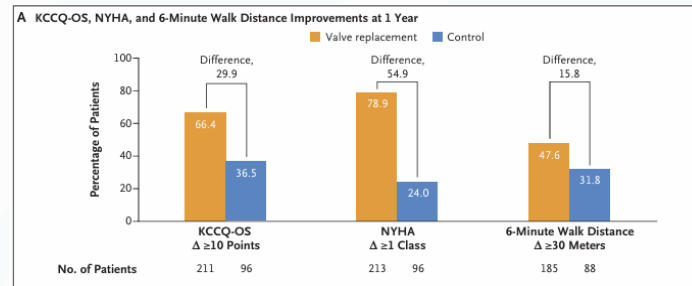
|                                                                                                                                                                                                                              |     |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|
| Concomitant TV surgery <sup>c</sup> is recommended in patients with <u>severe</u> primary or secondary TR. <sup>725,731,743,744</sup>                                                                                        | I   | B |
| Concomitant TV repair should be considered in patients with <u>moderate</u> primary or secondary TR, to avoid progression of TR and RV remodelling. <sup>723,724,726,731</sup>                                               | IIa | B |
| Concomitant TV repair may be considered in selected patients with <u>mild</u> secondary TR and tricuspid annulus dilatation (≥40 mm or >21 mm/m²), to avoid progression of TR and RV remodelling. <sup>723-726,731,743</sup> | IIb | B |

# Tratamiento percutáneo

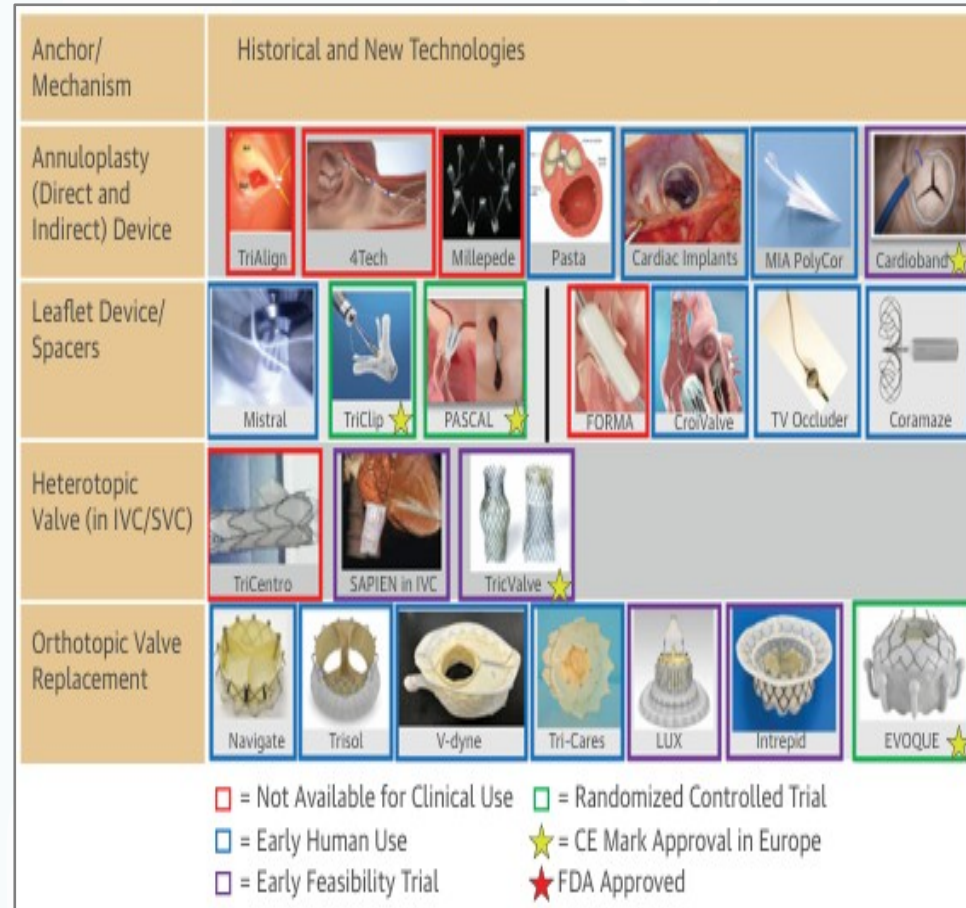
## Percutaneous Edge-to-Edge Repair for Tricuspid Regurgitation: 3-Year Outcomes From the TRILUMINATE Study



## Transcatheter Valve Replacement in Severe Tricuspid Regurgitation



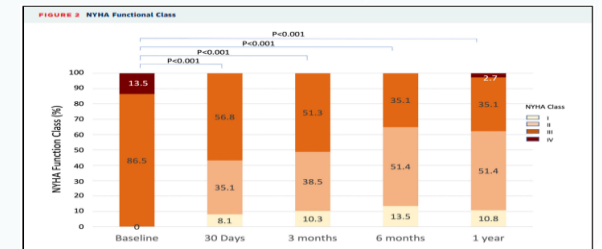
Hanh et al NEJM January 9, 2025



Hanh et al JACC Cardiovasc Imaging 2025 Sep;18(9):1013-1041

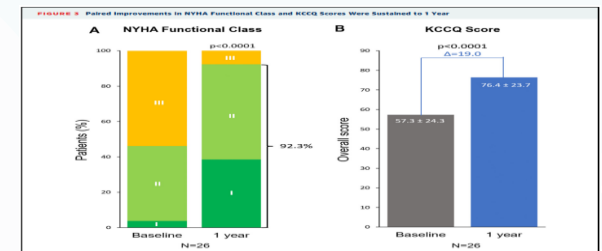
## Bicaval TricValve Implantation in Patients With Severe Symptomatic Tricuspid Regurgitation

### 1-Year Follow-Up Outcomes



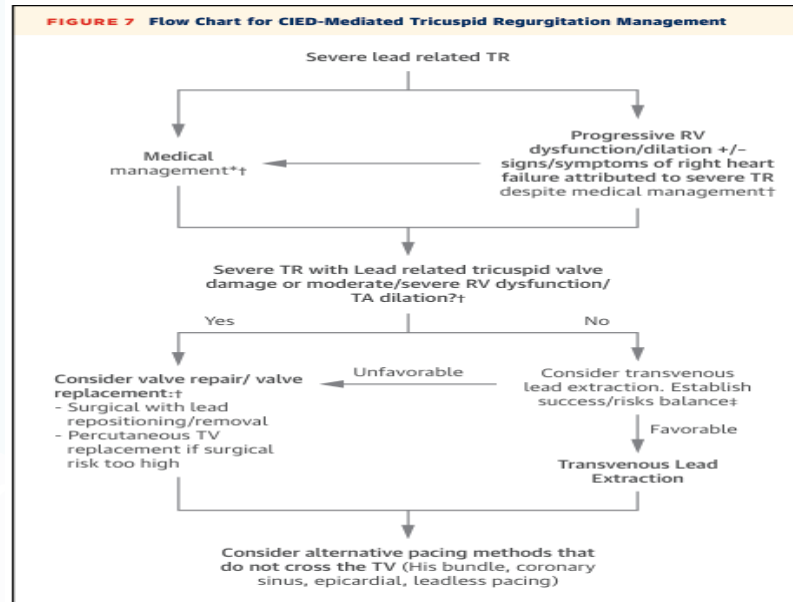
Blasco Turron et al. JACC cardiovascular Interventions 224. 17 (1)

## 1-Year Outcomes of Cardioband Tricuspid Valve Reconstruction System Early Feasibility Study



Gray et al JACC Cardiovasc Interventions 2022. 15 (19)

# IT asociada a dispositivo



# Conclusiones

- Se da gran importancia al **Heart Team** y **Heart Valve Centres** donde se realiza un abordaje individualizado y especializado de acuerdo a las necesidades de cada paciente.
- La **imagen multimodal** toma relevancia en cualquier fase de la enfermedad del paciente valvular incluyendo en estas guías parámetros más concretos.
- Se incluye una nueva **escala de riesgo** (Triscore) para estratificar el riesgo a los pacientes subsidiarios de tratamiento invasivo (quirúrgico vs percutáneo).
- El **intervencionismo percutáneo** con sus múltiples dispositivos gana terreno y presenta más evidencia científica para su empleo en los pacientes de alto riesgo quirúrgico y sintomáticos.



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**¡GRACIAS!**



ACTUALIZACIÓN DE LAS GUÍAS ESC 2025 EN valvulopatias