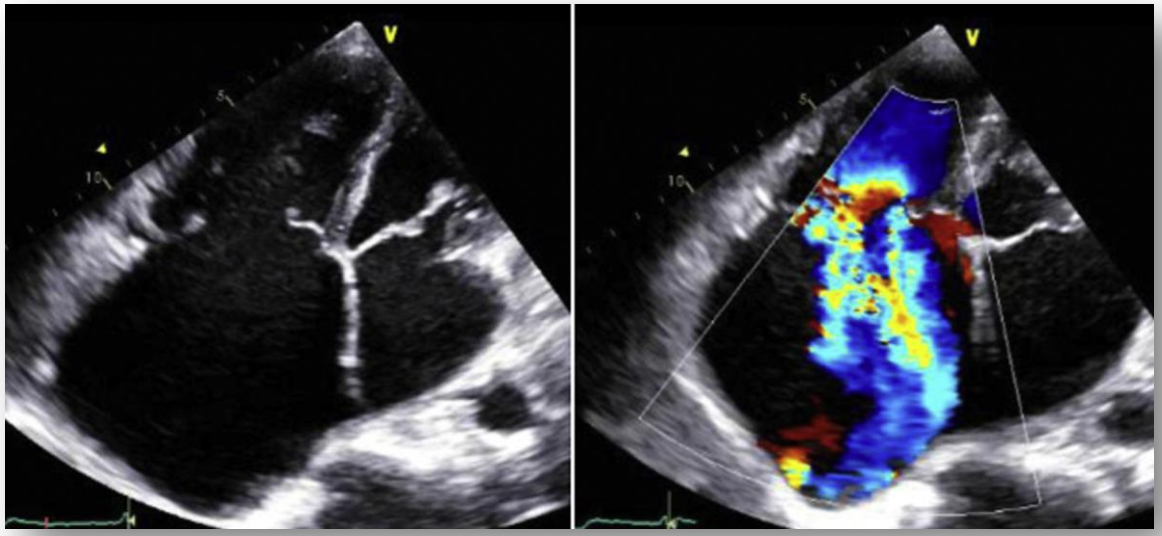
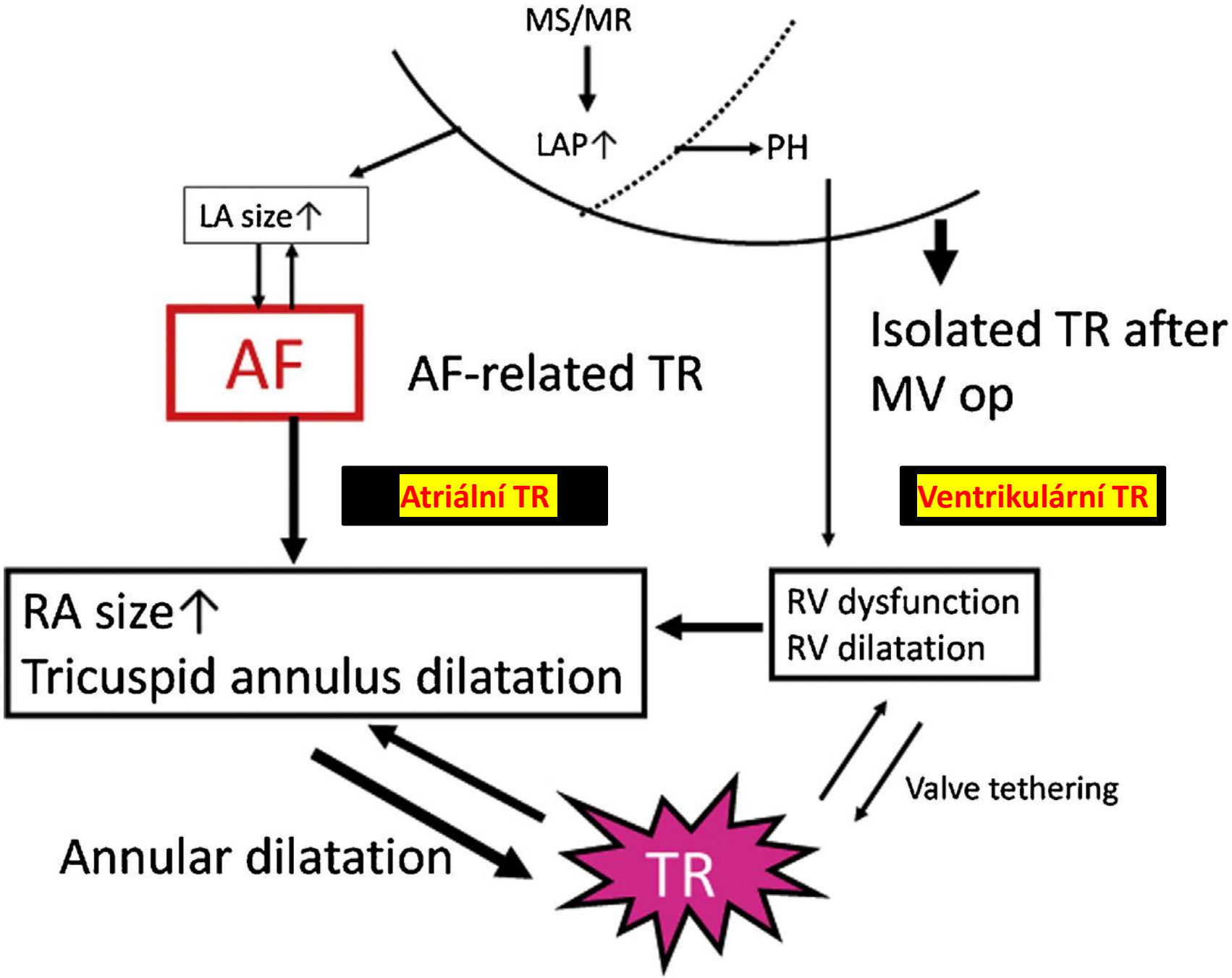
Izolovaná trikuspidální regurgitace:

Pohled kardiochirurga?

Jan Vojáček
Kardiochirurgická klinika LF a FN v Hradci Králové



jan.vojacek1@fnhk.cz


MS/MR
LAP↑
PH
LA size↑
AF
AF-related TR
Isolated TR after MV op
Atriální TR
Ventrikulární TR
RA size↑
Tricuspid annulus dilatation
RV dysfunction
RV dilatation
Valve tethering
Annular dilatation
TR

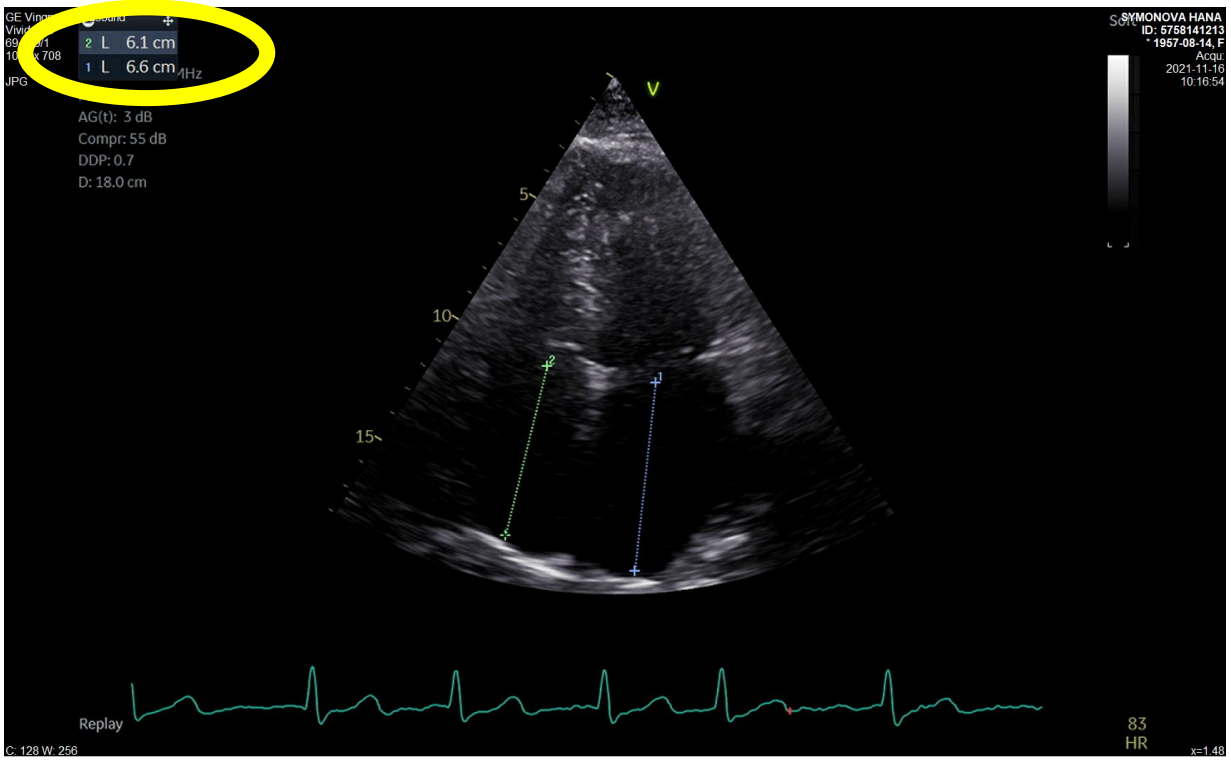
Operační program - COS:

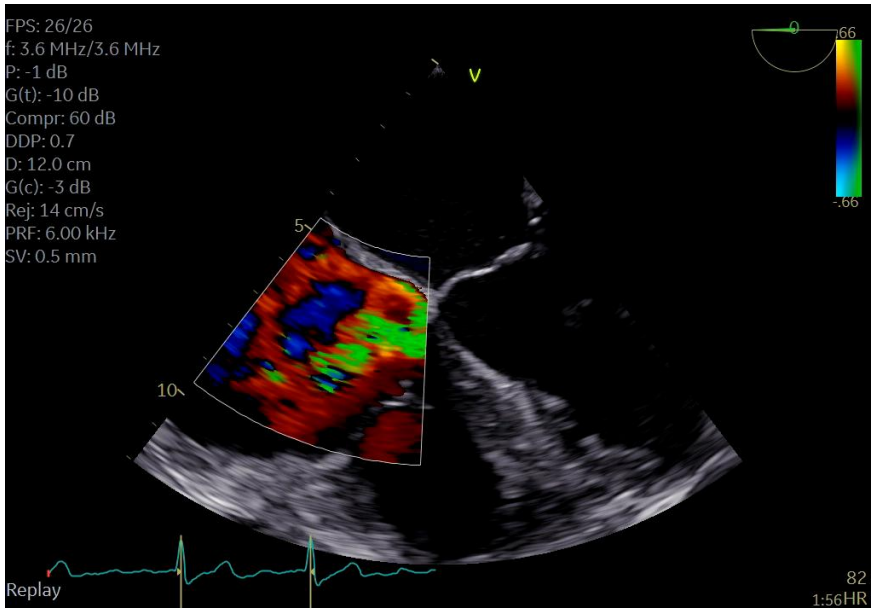
5/8 G	??	1957	CA	S	záda	JIP 3	Tri vada + jiné	TVP, ev. MAZE + uzávěr ouška LS

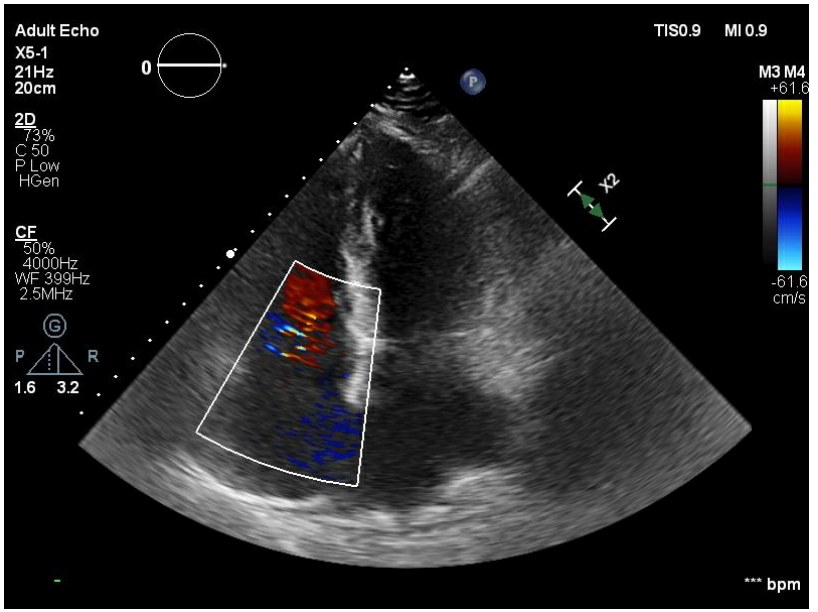
Žena, 65 let
TR 4st, NYHA II.st
Perzistující FiS (2018)

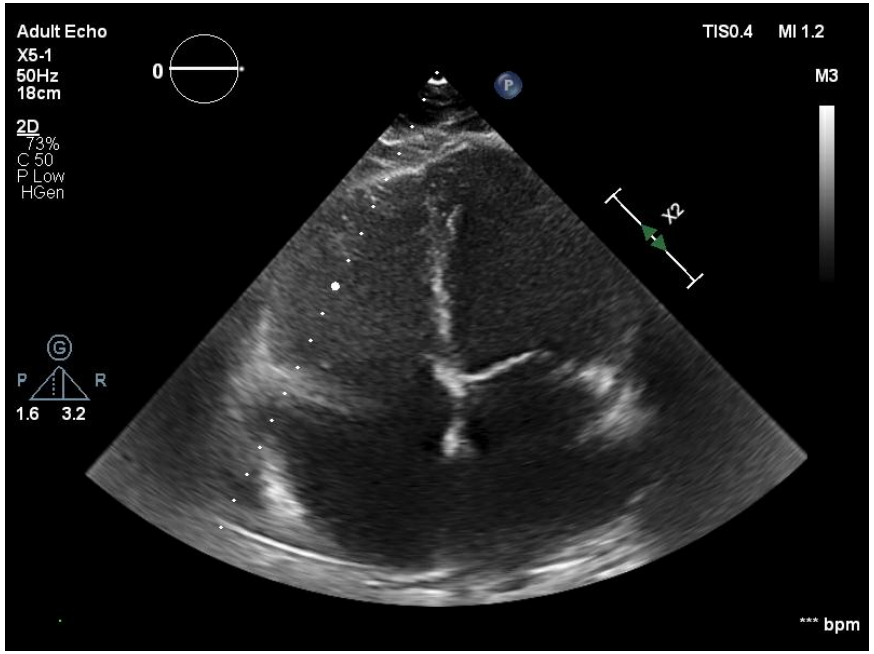
EF LK 60%
bez ICHS
Bez postižení chlopní levého srdce

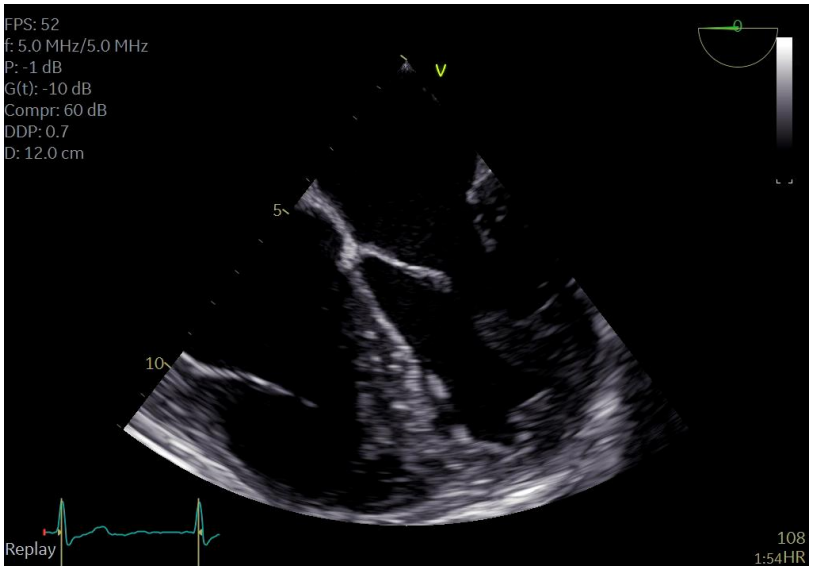
Bez PH
AH, DM
Trik.anulus: 46




FPS: 26/26
f: 3.6 MHz/3.6 MHz
P: -1 dB
G(t): -10 dB
Compr: 60 dB
DDP: 0.7
D: 12.0 cm
G(c): -3 dB
Rej: 14 cm/s
PRF: 6.00 kHz
SV: 0.5 mm
Replay
82
1:56HR


Adult Echo
X5-1
21Hz
20cm
2D
73%
C 50
P Low
HGen
CF
50%
4000Hz
WF 399Hz
2.5MHz
TIS0.9
MI 0.9
M3 M4
+61.6
-61.6
cm/s
1.6
3.2
*** bpm

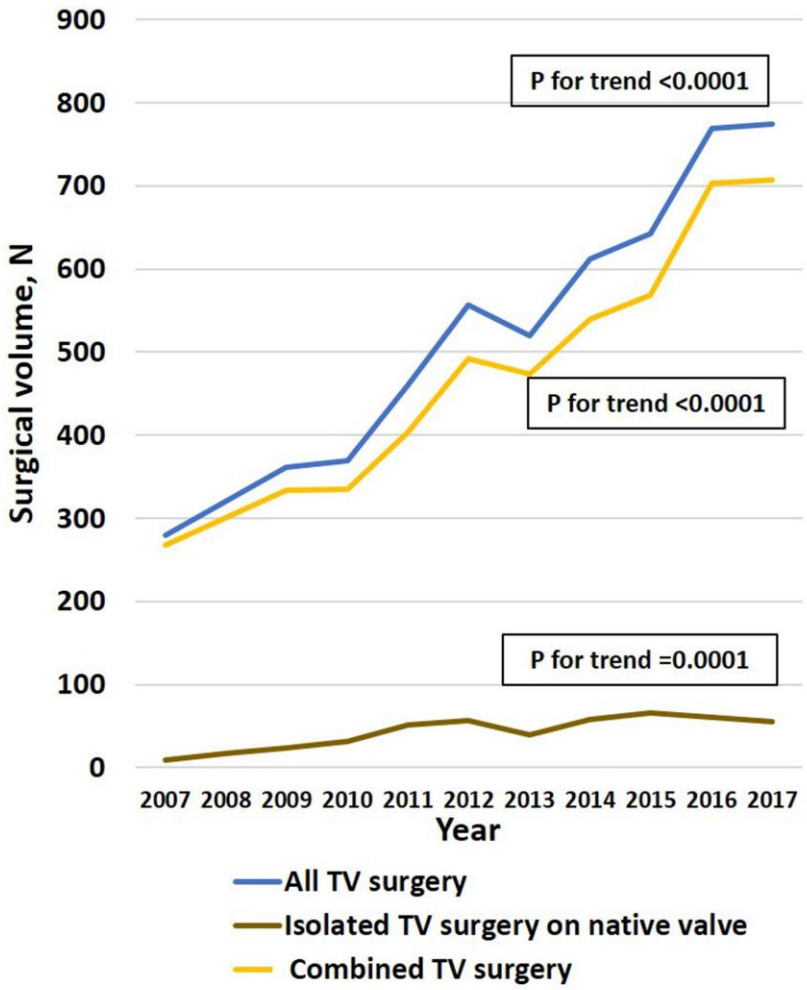

Adult Echo
X5-1
50Hz
18cm
2D
73%
C 50
P Low
HGen
TIS0.4
MI 1.2
M3
1.6
3.2
*** bpm


FPS: 52
f: 5.0 MHz/5.0 MHz
P: -1 dB
G(t): -10 dB
Compr: 60 dB
DDP: 0.7
D: 12.0 cm
Replay
108
1:54HR

TVP, cryoMAZE, uzávěr ouška LS

5611 pacientů z 12 francouzských center

2007 - 2017



Dreyfus J. Isolated tricuspid valve surgery: impact of aetiology and clinical presentation on outcomes. Eur Heart J. 2020 Dec 1;41(45):4304-4317

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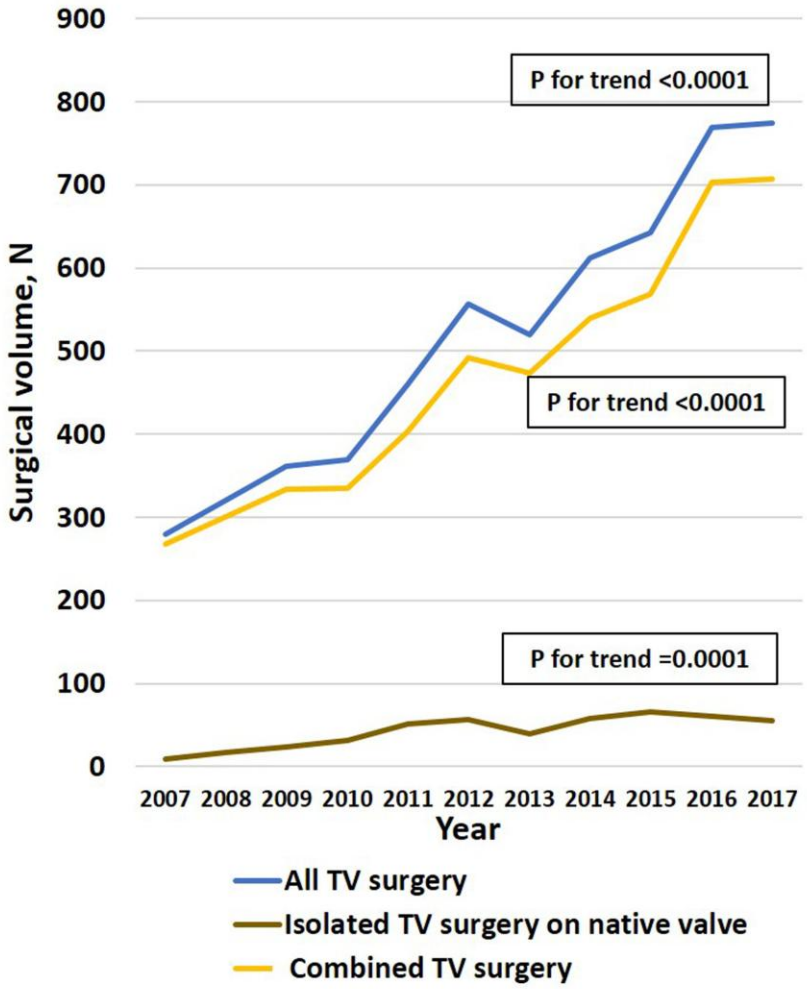

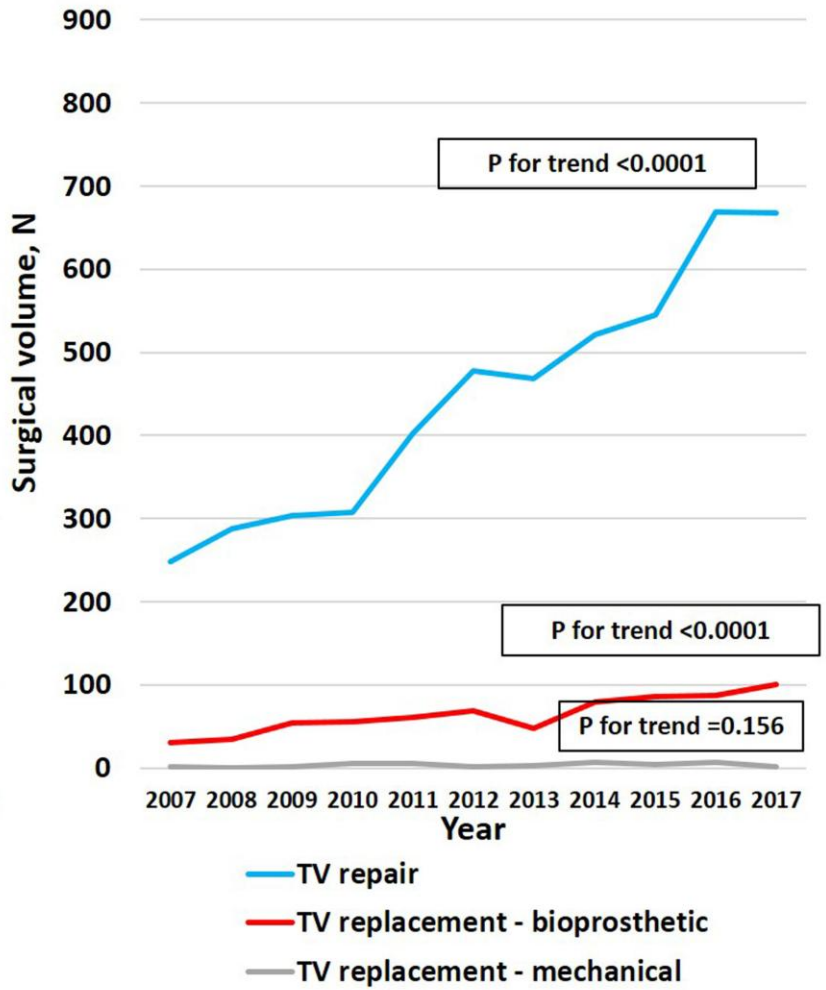

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Kardiochirurgická klinika LF a FN, Hradec Králové 2020 - 2022

	2020		2021		2022	
	N	**Mortalita**	**N**	**Mortalita**	**N**	**Mortalita**
TVP/TVR (concomitant)	61	1 (1,6%)	55	2 (3,63%)	71	1 (1,41 %)
TVP/TVR isolated)	0	0 (0%)	1	0 (0%)	3	0 (0%)

ESC European Society of Cardiology
European Heart Journal (2022) **43**, 654–662
https://doi.org/10.1093/eurheartj/ehab679

CLINICAL RESEARCH
Valvular heart disease

TRI-SCORE: a new risk score for in-hospital mortality prediction after isolated tricuspid valve surgery

Risk factors and scoring system for in-hospital mortality after isolated tricuspid valve surgery

Risk factors (final model from multivariate analysis)	Scoring
Age ≥ 70 years	1
NYHA functional class III-IV	1
Right-sided heart failure signs	2
Daily dose of furosemide ≥ 125mg	2
Glomerular filtration rate < 30 ml/min	2
Elevated total bilirubin	2
Left ventricular ejection fraction < 60%	1
Moderate/severe right ventricular dysfunction	1
Total	**12**

Predicted in-hospital mortality rate according to the final risk score model

TRI-SCORE and benefit of intervention in patients with severe tricuspid regurgitation FREE

Julien Dreyfus, MD, PhD ✉, Xavier Galloo, MD, Maurizio Taramasso, MD, PhD, Gregor Heitzinger, MD, Giovanni Benfari, MD, PhD, Karl-Patrick Kresoja, MD,

EHJ 2023

TRIGISTRY: multicenter registry (33 centers - 10 countries)
2,413 patients with severe isolated functional tricuspid regurgitation

Comparison of the survival rates at 2 years between the different treatment modalities according to the TRI-SCORE category (low, intermediate and high).

- 1217 patients conservatively managed
- 551 underwent an isolated tricuspid valve surgery
- 645 underwent a transcatheter valve repair

LOW TRI-SCORE (<3)	INTERMEDIATE TRI-SCORE (4-5)	HIGH TRI-SCORE (≥6)

TRI-SCORE and benefit of intervention in patients with severe tricuspid regurgitation

FREE

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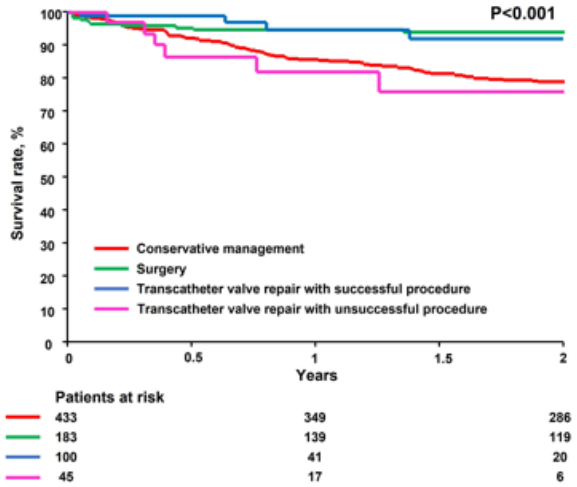

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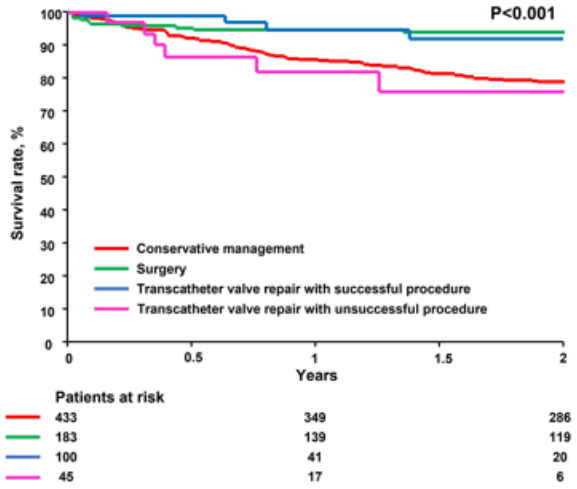
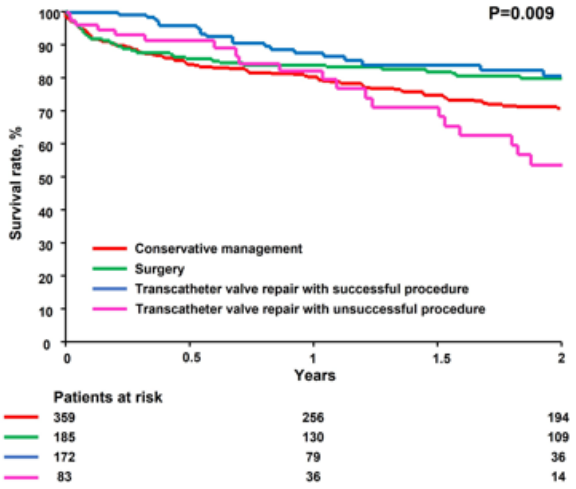


INTERMEDIATE TRI-SCORE (4-5)



HIGH TRI-SCORE (≥6)

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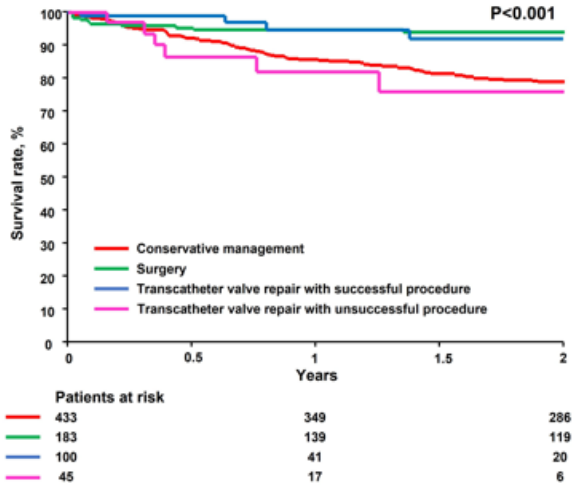
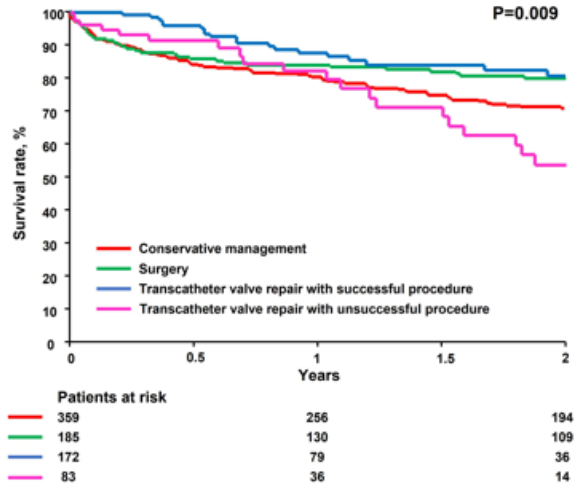
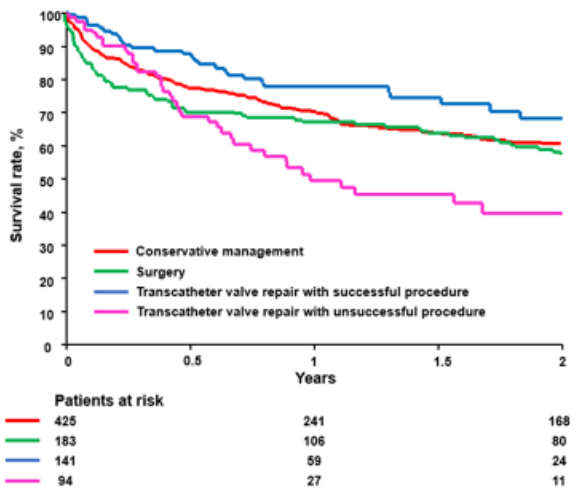


INTERMEDIATE TRI-SCORE (4-5)



HIGH TRI-SCORE (≥6)



The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MAY 18, 2023 VOL. 388 NO. 20

Transcatheter Repair for Patients with Tricuspid Regurgitation

Paul Sorajja, M.D., Brian Whisenant, M.D., Nadira Hamid, M.D., Hursh Naik, M.D., Raj Makkar, M.D., Peter Tadros, M.D., Matthew J. Price, M.D., Gagan Singh, M.D., Neil Fam, M.D., Saibal Kar, M.D., Jonathan G. Schwartz, M.D., Shamir Mehta, M.D., Richard Bae, M.D., Nishant Sekaran, M.D., Travis Warner, M.D., Moody Makar, M.D., George Zorn, M.D., Erin M. Spinner, Ph.D., Phillip M. Trusty, Ph.D., Raymond Benza, M.D., Ulrich Jorde, M.D., Patrick McCarthy, M.D., Vinod Thourani, M.D., Gilbert H.L. Tang, M.D., Rebecca T. Hahn, M.D., and David H. Adams, M.D., for the TRILUMINATE Pivotal Investigators*

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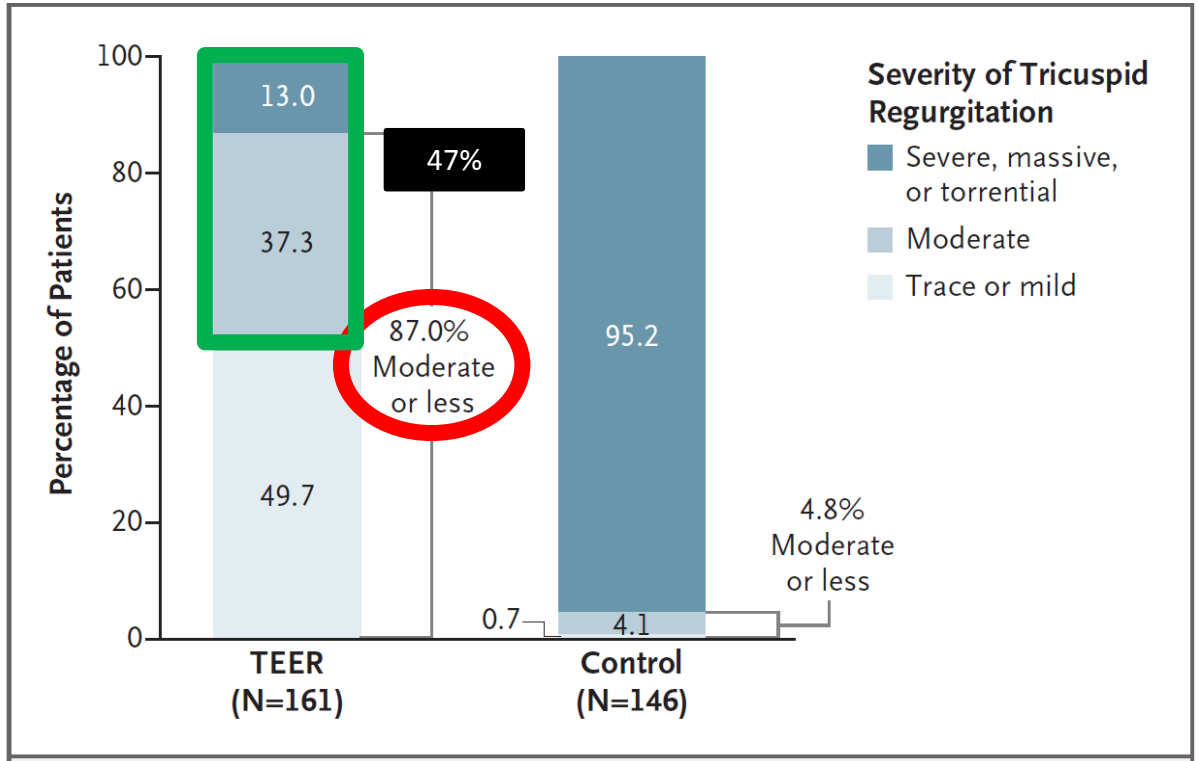

Figure 3. Severity of Tricuspid Regurgitation at 30 Days.

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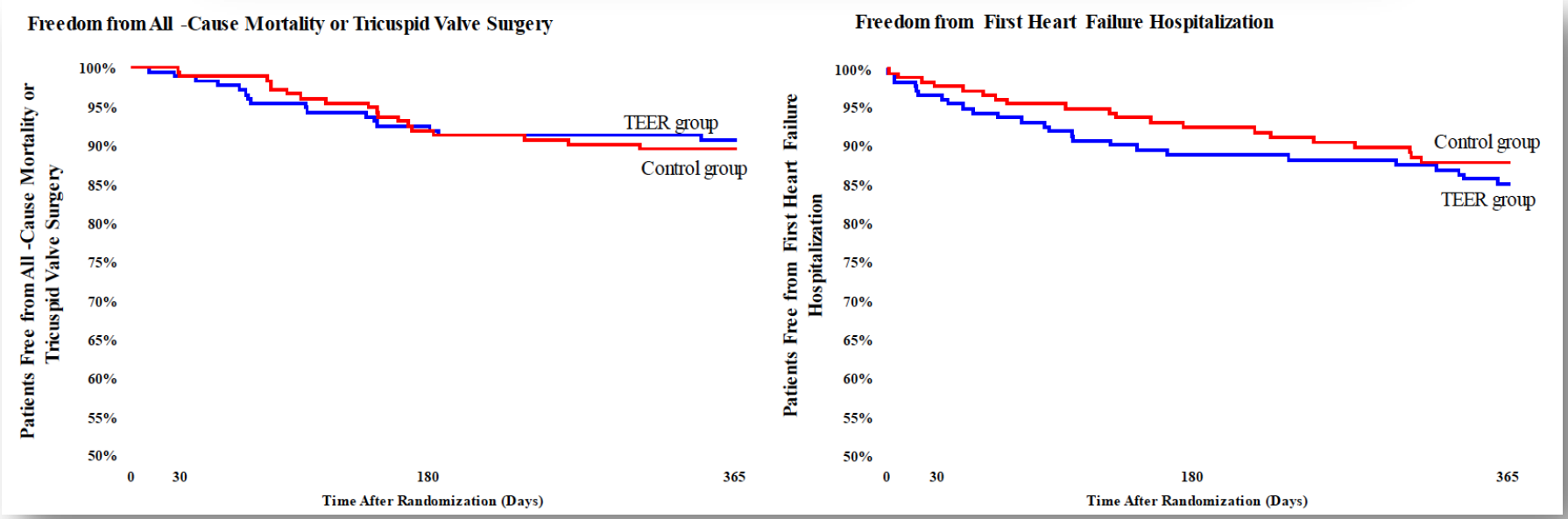

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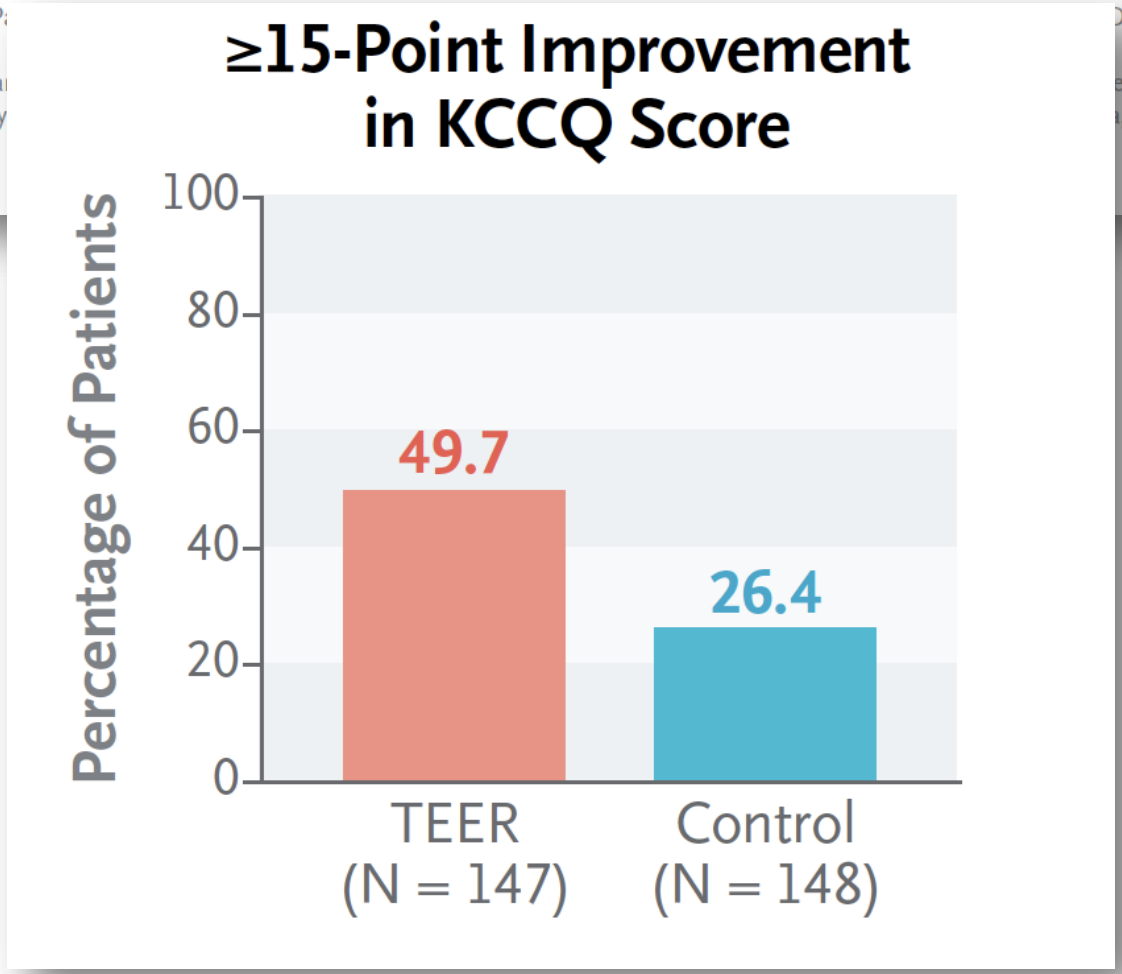
Transcatheter Repair for Patients with Tricuspid Regurgitation

P... D.,

Jonatha... er, M.D.,
Moody... , M.D.,



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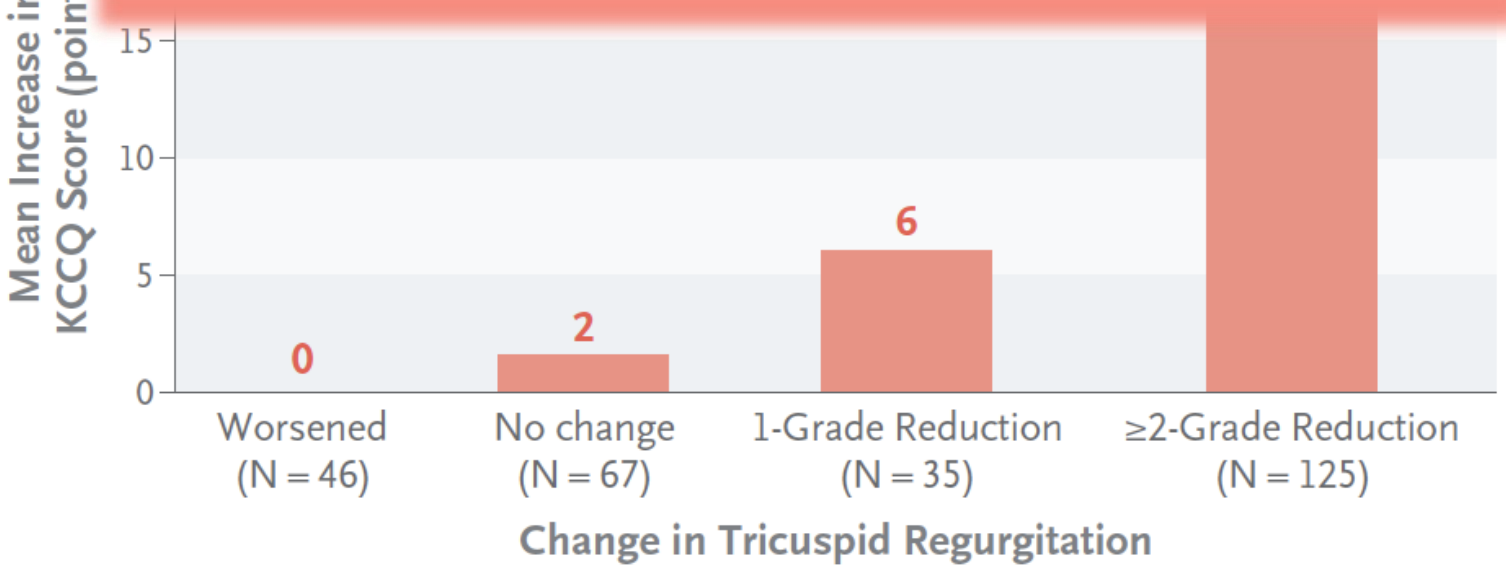
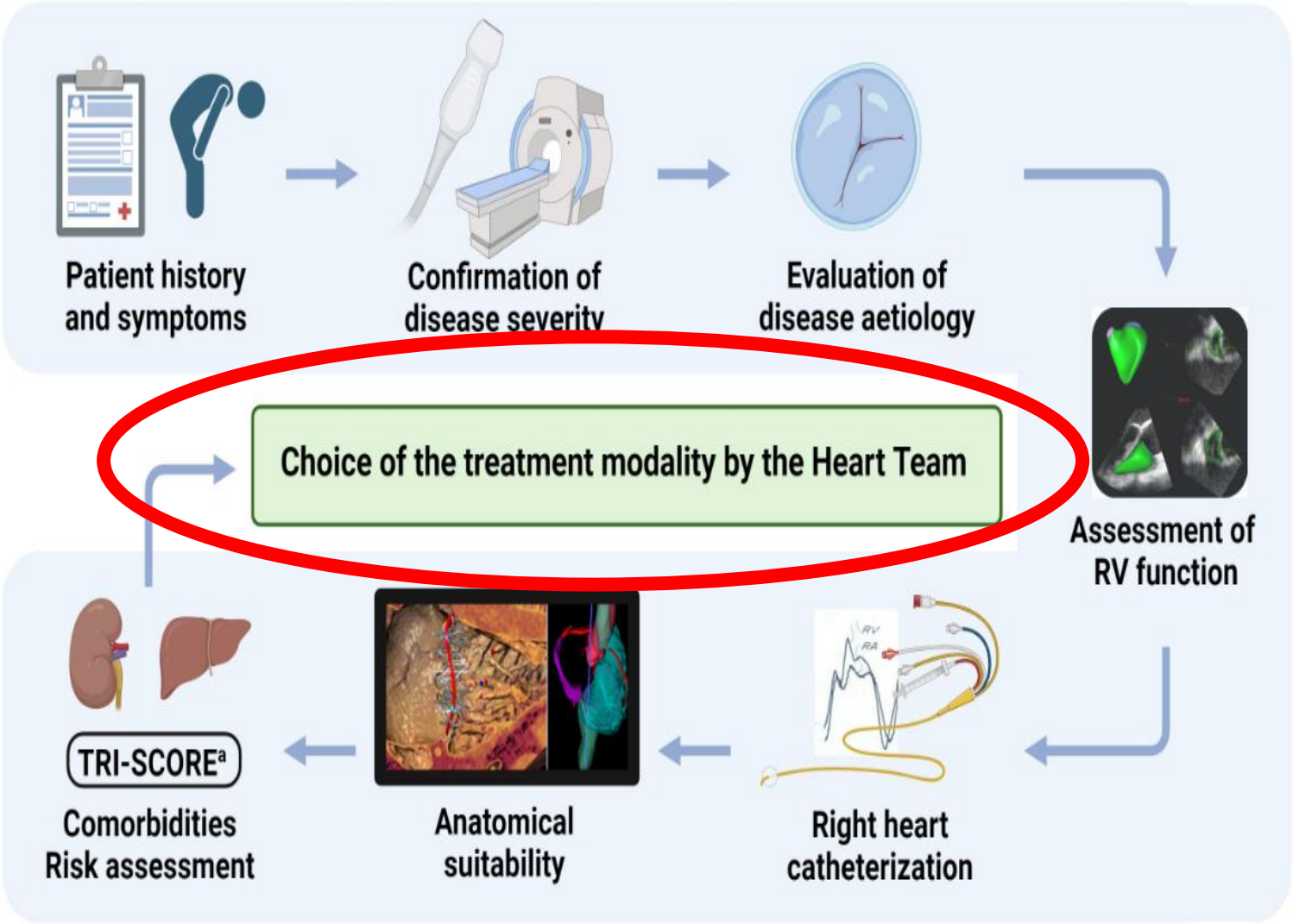
Transcatheter Repair for Patients with Tricuspid Regurgitation

CONCLUSIONS

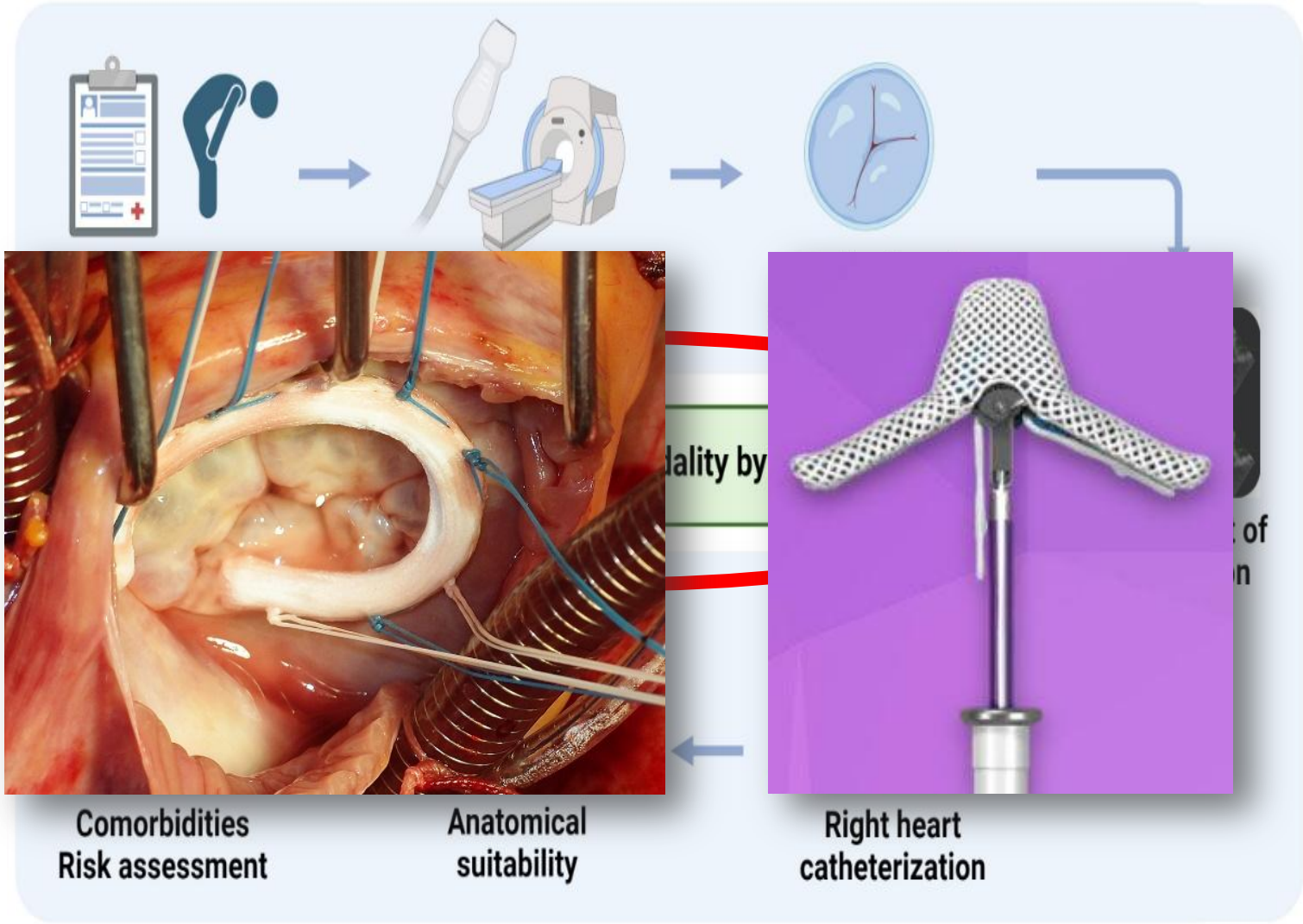
In patients with symptomatic, severe tricuspid regurgitation, TEER was safe and was associated with a greater improvement in quality of life than medical therapy alone.





RV, right ventricular.

[a] See Supplementary data online *Table S7*.



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