



UPWARD RISING ▲  
The 34<sup>th</sup> Annual Meeting  
**EACTS**  
European Association For Cardio-Thoracic Surgery  
8-10 October 2020 • Barcelona, Spain

**Transcatheter mitral valve implantation  
versus  
conventional redo surgery  
for degenerated mitral valve prostheses  
in a multicenter registry**

**Harald Hausmann, Michal Szlapka,  
Dietrich Metz, Adrian Bauer, Theodor Fischlein  
on behalf of  
the Arbeitsgemeinschaft Leitender  
herzchirurgischer Krankenhausärzte e.V. (ALHK)**



## Conclusions

Higher mortality-risk in transcatheter group

Similar observed mortality in transcatheter and surgical group

Procedure shortening-related clinical benefit

≥ moderate TR predictive of mortality

Prospective studies, longer follow-up needed





## Patients and Methods

Multicenter registry, retrospective analysis

273 patients with degenerated mitral prosthesis (DMVP):

- 79 in transcatheter mitral valve-in-valve (TM-ViV)
- 194 in repeat mitral valve replacement (Re-MVR) Group

Primary end-point: 30-day and mid-term mortality

Secondary end-point: MVARC-assessed outcome

P-value <0.05 statistically significant



## Conclusion-supporting results

Variable	Group TM-ViV N = 79	Group Re-MVR N = 194	p-value
EuroScore I (%)	32.9 ± 18.6	18.4 ± 17.2	<0.0001
Distribution of EuroScore II			0.0057
- low < 4%	10.1	24.7	
- intermediate 4-8%	20.3	25.3	
- high > 8%	69.6	50.0	
Duration of procedure (minutes)	83.5 ± 32.7	241.9 ± 87.2	<0.0001
Duration of ventilation (hours)	29.9 ± 100.7	79.6 ± 342.7	<0.0001
ICU- LOS (days)	3.96 ± 5.86	7.23 ± 13.04	0.0026
30-day mortality	9 (11.40)	25 (12.90)	0.8413
Mid-term mortality	7 (8.90)	18 (9.30)	1.000
Values are mean ± SD; n (%). ICU= intensive care unit; LOS= length of stay			

Tricuspid regurgitation (TR)-related 30-day mortality (%)	No/mild TR	≥ moderate TR	p-value
	7.34	23.6	0.0002





## Take home message

Transcatheter mitral valve-in-valve implantation in high-risk patients:

- can be performed alternatively to repeat surgery without increased mortality
- provides procedure shortening-related clinical benefit
- should be combined with tricuspid valve intervention to reduce mortality



**Thank you for your attention!**



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