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CAN THE SURTAVI MODEL FACILITATE RISK ASSESSMENT FOR TRANSCATHETER AORTIC VALVE IMPLANTATION: TIME TO RETHINK

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Session Title: Valvular Heart Disease: Clinical III - Aortic Valve Stenosis Abstract Category: 31. Valvular Heart Disease: Clinical Presentation Number: 1155-77

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Background: A new concept of risk stratification for patients with aortic stenosis, based upon age combined with a fixed number of predefined risk factors, was proposed during the design of SURTAVI trial. The purpose of this study was to compare the SURTAVI model with surgical risk scores i.e. logistic EuroSCORE (LES), EuroSCORE II (ES II) and STS score in patients selected by the "Heart Team" for TAVI after formal surgical turn down.

Methods: Eighty eight consecutive patients underwent TAVI via trans-femoral, trans-apical and other approaches. LES, ES II and STS score were calculated retrospectively. Patients were classified into low (\geq 70yrs and <2 risk factors, \geq 75yrs and no risk factor), intermediate (\geq 70yrs and 2-3 risk factors, \geq 75yrs and 1-2 risk factors, \geq 80yrs and \leq 1 risk factor) and high risk (\geq 70yrs and >3 risk factors, \geq 75yrs and >2 risk factors, \geq 80yrs and \leq 1 risk factor) and high risk (\geq 70yrs and >3 risk factors, \geq 75yrs and >2 risk factors, \geq 80yrs and >1 risk factor) groups according to SURTAVI model and surgical risk scores (LES <10, 10 - 20, >20%, ES II <4, 4 -10, >10% and STS <4, 4 -10, >10% respectively) and actual 30-day and 1-year mortality was compared.

Results: are summarised in the table below.

30- day mortality				
Groups	LES	ESII	STS-score	SURTAVI model
Low Risk	8.33	5.88	10.00	16.66
Intermediate Risk	11.43	11.11	8.16	11.11
High Risk	4.88	5.71	5.26	6.25
p - Value	0.562	0.875	1.0	0.376
1-year mortality				ł
Low Risk	25.00	23.53	10.00	16.66
Intermediate Risk	22.86	19.44	30.61	11.11
High Risk	26.83	31.43	26.32	29.68
p - Value	0.943	0.502	0.203	0.254

Table: Actual 30-day and 1-year mortality (%) according to risk groups.

Conclusion: SURTAVI model was no better than other risk scores in predicting mortality, both at 30 days and 1 year, in patients undergoing TAVI after formal surgical turn down. This highlights deficiencies of the proposed SURTAVI risk model and thus emphasises on the role of a multidisciplinary "Heart Team" in risk assessment.