## **SUPPLEMENTARY TABLES**

Supplementary Table 1. Comparison of baseline characteristics between excluded and included patients.

	Excluded patients $(N = 33)$	Study cohort $(N = 156)$	P value
Female sex	21 (63.6%)	88 (56.4%)	0.445
Age (year)	$82.3 \pm 8.8$	$80.2 \pm 7.8$	0.169
Body mass index, kg/m2	$23.6 \pm 4.6$	$24.3 \pm 4.3$	0.416
Hypertension	24 (72.7%)	99 (63.5%)	0.310
Diabetes mellitus	13 (39.4%)	55 (35.3%)	0.653
Hyperlipidemia	9 (27.3%)	41 (26.3%)	0.907
Coronary artery disease	16 (48.5%)	63 (40.4%)	0.391
Peripheral artery disease	7 (21.2%)	19 (12.2%)	0.171
Prior myocardial infarction	3 (9.1%)	4 (2.6%)	0.103
Prior stroke or transient ischemic attack	6 (18.2%)	10 (6.4%)	0.039
Chronic kidney disease	14 (42.4%)	47 (30.1%)	0.170
Chronic lung disease	1 (3.0%)	12 (7.7%)	0.336
Permanent pacemaker	1 (3.0%)	7 (4.5%)	1.000
EuroSCORE II, %	$10.4 \pm 10.1$	$3.9 \pm 3.2$	< 0.0001
STS-PROM, %	$7.8 \pm 4.3$	$5.1 \pm 3.9$	0.0006
NYHA Fc 3/4	33 (100%)	121 (77.6%)	0.001
Echocardiography			
LVEF, %	$65.2 \pm 14.1$	$65.0 \pm 13.0$	0.939
Aortic valve area, cm <sup>2</sup>	$0.76 \pm 0.21$	$0.77 \pm 0.18$	0.730
Mean pressure gradient, mmHg	$42.2 \pm 22.6$	$42.6 \pm 17.6$	0.918

Values are n (%) or mean  $\pm$  SD. Abbreviations: Euroscore: European System for Cardiac Operative Risk Evaluation; STS-PROM: Society of Thoracic Surgeons Predicted Risk of Mortality; NYHA Fc: New York Heart Association functional class; LVEF: left ventricular ejection fraction.

## Supplementary Table 2. Baseline characteristics in intermediate-high and low risk group.

	Intermediate-high risk $(N = 75)$	Low risk $(N = 81)$	P value
Female sex	46 (61.3%)	42 (51.9%)	0.233
Age (year)	$82.9 \pm 6.8$	$77.6 \pm 7.8$	< 0.0001
Body mass index, kg/m2	$23.3 \pm 3.9$	$25.3 \pm 4.4$	0.0035
Hypertension	48 (64.0%)	51 (62.9%)	0.893
Diabetes mellitus	34 (45.3%)	21 (25.9%)	0.011
Hyperlipidemia	17 (22.7%)	24 (29.6%)	0.324
Coronary artery disease	37 (49.3%)	26 (32.1%)	0.028
Peripheral artery disease	14 (18.7%)	5 (6.2%)	0.017
Prior myocardial infarction	3 (4.0%)	1 (1.2%)	0.352
Prior stroke or transient ischemic attack	7 (9.3%)	3 (3.7%)	0.352
Chronic kidney disease	37 (49.3%)	10 (12.4%)	< 0.0001
Chronic lung disease	5 (6.7%)	7 (8.6%)	0.644

Permanent pacemaker	4 (5.3%)	3 (3.7%)	0.711
EuroSCORE II, %	$5.6 \pm 3.8$	$2.4 \pm 1.1$	< 0.0001
STS-PROM, %	$8.1 \pm 3.8$	$2.4 \pm 0.8$	< 0.0001
NYHA Fc 3/4	70 (93.3%)	51 (63.0%)	< 0.0001
Echocardiography			
LVEF, %	$63.3 \pm 15.1$	$66.7 \pm 10.4$	0.126
Aortic valve area, cm <sup>2</sup>	$0.75 \pm 0.20$	$0.79 \pm 0.15$	0.176
Mean pressure gradient, mmHg	$42.9 \pm 19.6$	$42.2 \pm 15.6$	0.821

Values are n (%) or mean  $\pm$  SD. Abbreviations: Euroscore: European System for Cardiac Operative Risk Evaluation; STS-PROM: Society of Thoracic Surgeons Predicted Risk of Mortality; NYHA Fc: New York Heart Association functional class; LVEF: left ventricular ejection fraction.

Supplementary Table 3. Comparison of procedural characteristics and clinical outcomes between low and intermediate-high risk groups.

	Intermediate-high risk $(N = 75)$	Low risk $(N = 81)$	P Value
Trans-femoral Approach	75 (100.0%)	81 (100.0%)	1.000
Valve Type			0.059
CoreValve/ Evolute R	39 (52.0%)	29 (35.8%)	
Sapien XT/ Sapien 3	29 (38.7%)	46 (56.8%)	
Lotus	6 (8.0%)	3 (3.7%)	
Portico	1 (1.3%)	3 (3.7%)	
Need for 2nd Valve	1 (1.3%)	2 (2.5%)	1.000
Total contrast medium used, ml	$170.8 \pm 50.5$	$168.3 \pm 65.7$	0.801
Total procedural time, min	$102.6 \pm 35.8$	$93.9 \pm 37.8$	0.146
In-hospital outcome			
Acute kidney injury	3 (5.4%)	4 (4.9%)	1.000
New LBBB	29 (38.7%)	12 (14.8%)	0.001
New permanent pacemaker	11 (14.7%)	3 (3.7%)	0.023
Vascular complication, major	3 (4.0%)	1 (1.2%)	0.358
1 Year Clinical outcome,			
Death	6 (8.0%)	2 (2.5%)	0.155
Cardiovascular Death	1 (1.3%)	0 (0.0%)	0.481
Rehospitalization	27 (36.0%)	16 (19.8%)	0.124
Heart failure rehospitalization	8 (10.7%)	6 (7.4%)	0.477
Stroke or transient ischemic attack	2 (2.7%)	0 (0.0%)	0.230

Values are n (%), mean  $\pm$  SD or median (interquartile range). Abbreviation: LBBB: left bundle branch block.

Supplementary Table 4. Comparison of baseline neurologic and cognitive assessments between low and intermediate-high risk groups.

	Intermediate-high risk $(N = 75)$	<b>Low risk</b> ( <i>N</i> = 81)	P Value
NIHSS			
Score	0 (0–0)	0 (0-0)	0.001
Number of score $> 0$	16 (21.3%)	2 (2.5%)	< 0.0001
Barthel index			
Score	100 (85–100)	100 (100–100)	0.0012
Number of score < 100	28 (37.3%)	12 (14.8%)	0.001
MMSE			
Score	25 (22–29)	29 (25–30)	< 0.0001
Number of score < 26	39 (52.0%)	22 (27.2%)	0.001
ADAS-cog	7 (3–11)	1 (0–7)	< 0.0001
Color Trail Test A (category)	8 (6–8)	6 (3–8)	0.023
Color Trail Test B (category)	8 (8–8)	8 (4–8)	0.121
Verbal fluency	$24.9 \pm 9.9$	$30.4 \pm 8.2$	0.0002

Values are number (%), median (interquartile range) or mean (standard deviation) if normally distributed. Abbreviations: NIHSS: National Institutes of Health Stoke Scale; ADAS-cog: Alzheimer Disease Assessment Scale—Cognitive Subtest; MMSE: Mini-Mental State Examination score.