

**Table S1** Baseline characteristics (451 patients with follow-up data)

Variables	AA $\geq$ 45 mm (n=96)	AA <45 mm (n=355)	P value
Age (years)	73 [69–77]	75 [70–80]	0.017
Male	60 (62.5)	207 (56.3)	0.278
Body mass index (kg/m <sup>2</sup> )	23.8 [21.2–26.8]	24.1 [22.1–27.2]	0.226
STS score (%)	3.9 [3.4–5.0]	4.1 [3.6–5.1]	0.059
NYHA class III/IV	85 (88.5)	316 (89.0)	0.896
Smoking	31 (32.3)	111 (31.3)	0.848
Serum creatinine (mg/dL)	1.0 [0.9–1.2]	1.0 [0.9–1.3]	0.650
Hypertension	46 (47.9)	232 (65.4)	0.002
Diabetes mellitus	15 (15.6)	103 (29.0)	0.008
Dyslipidemia	70 (72.9)	284 (80.0)	0.134
History of coronary artery disease	32 (33.3)	184 (51.8)	0.001
History of cerebrovascular disease	17 (17.7)	58 (16.3)	0.749
Peripheral artery disease	26 (27.1)	119 (33.5)	0.231
Prior coronary artery intervention	6 (6.3)	61 (17.2)	0.008
Prior coronary artery bypass grafting	0	19 (5.4)	0.021
Bicuspid aortic valve	59 (61.5)	76 (21.4)	<0.001
Baseline echo characteristics			
Left ventricular ejection fraction (%)	60 [45–65]	60 [51–65]	0.150
Peak aortic valve velocity (m/s)	4.7 [4.3–5.2]	4.6 [4.2–5.2]	0.300
Maximum aortic valve pressure gradient (mmHg)	88.4 [74.0–108.2]	84.6 [70.6–108.2]	0.323
Moderate-to-severe aortic regurgitation	22 (22.9)	88 (24.8)	0.705

Values are presented as n (%) or median [interquartile range]. AA, ascending aorta; STS, Society of Thoracic Surgery; NYHA, New York Heart Association.

**Table S2** Details of patients who were converted to SAVR

Patient number	Age (years)	Gender	AA diameter	Reasons for converting to SAVR	In-hospital death
1	72	Male	54 mm	Cardiac tamponade	No
2	63	Male	38 mm	Coronary artery obstruction	Yes
3	51	Female	38 mm	Coronary artery obstruction	No
4	60	Male	42 mm	Severe paravalvular leak	No
5	70	Male	40.6 mm	THV malposition	No
6	65	Female	41 mm	THV malposition	Yes
7	63	Male	44 mm	THV malposition	No
8	56	Male	41 mm	THV malposition	Yes

SAVR, surgical aortic valve replacement; AA, ascending aorta; THV, transcatheter heart valve.