## **Supplementary**

Table S1 Preoperative clinical characteristics of patients with bicuspid aortic valves

Variables	Group B1 (n=8)	Group B0 (n=6)	P value
Sex, female	3 (37.5)	2 (33.3)	>0.99
Age, years	61.00±16.14	70.00±2.76	0.206
BMI, kg/m²	25.73±3.30	24.36±3.28	0.453
BSA, m²	1.71±0.13	1.65±0.12	0.346
Atrial fibrillation	0	0	-
Chronic kidney disease	1 (12.5)	0	>0.99
Cerebrovascular disease	1 (12.5)	0	>0.99
Chronic obstructive lung disease	1 (12.5)	1 (16.7)	>0.99
Diabetes mellitus	3 (37.5)	2 (33.3)	>0.99
Hypertension	5 (62.5)	1 (16.7)	0.138
PCI	2 (25.0)	1 (16.7)	>0.99
NYHA class, III–IV	5 (62.5)	5 (83.3)	0.580
Ejection fraction, %	63.02±6.13	56.65±13.20	0.248
EuroSCORE II, %	1.48±1.01	3.53±1.72	0.016
STS PROM, %	1.14±0.51	1.44±0.63	0.339

Group B0, six participants classified as Sievers type 0; group B1, eight participants classified as Sievers type 1. Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation. BMI, body mass index; BSA, body surface area; PCI, percutaneous coronary intervention; NYHA, New York Heart Association; EuroSCORE, European System for Cardiac Operative Risk Evaluation; STS PROM, Society of Thoracic Surgeons 30-day Predicted Risk of Mortality.

Table S2 Operative data of patients with bicuspid aortic valve

Variables	Group B1 (n=8)	Group B0 (n=6)	P value
Concomitant procedures			
Aortic aneurysm repair	1 (12.5)	4 (66.7)	0.091
CABG	0	1 (16.7)	0.429
Mitral valve replacement	0	1 (16.7)	0.429
Maze procedure (left side)	0	0	_
Valve size, mm	22.75±1.98	23.00±2.83	0.849
Aortic cross-clamp time, minutes	97.25±8.28	129.83±15.84	<0.001
Cardiopulmonary bypass time, minutes	138.25±10.28	169.50±20.92	0.003

Group B0, six participants classified as Sievers type 0; group B1, eight participants classified as Sievers type 1. Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation. CABG, coronary artery bypass grafting.

Table S3 Postoperative outcomes in patients with bicuspid aortic valves

Variables	Group B1 (n=8)	Group B0 (n=6)	P value
Stroke	0	0	-
Postoperative bleeding	0	0	_
ICU stay, days	4.50±5.93	2.17±2.40	0.384
Hospital stay, days	13.88±12.43	9.17±3.71	0.391
30 days mortality	0	0	-
Paravalvular leakage	0	0	-
Mean pressure gradient, mmHg	12.86±4.94	11.33±4.49	0.563
Peak pressure gradient, mmHg	22.96±8.73	20.83±8.46	0.655
Peak aortic velocity, m/s	2.35±0.46	2.25±0.48	0.700
Permanent pacemaker implantation	1 (12.5)	0	>0.99

Group B0, six participants classified as Sievers type 0; group B1, eight participants classified as Sievers type 1. Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean  $\pm$  standard deviation. ICU, intensive care unit.