Supplementary

Table S1 ICD codes used for defining comorbidities

Baseline comorbidities	ICD-9	ICD-10
Ischaemic stroke	434, 436	I63, I64
Diabetes	250	E10-E14
Hypertension	401–405	I10–I15
Heart failure	425, 428	142, 143, 150
Atrial fibrillation	427D	148
Peripheral vascular disease	440–444	170–174, 177
Hyperlipidemia	-	E78
History of cancer	200–208	С
Myocardial infarction	410	1210–1214, 1219
NSTEMI	410B	1214
STEMI	410A	I210–I213
Stroke	-	I61–I64, I69

ICD, International Classification of Disease; NSTEMI, non-ST Elevation Myocardial Infarction; STEMI, ST-Elevation Myocardial Infarction.

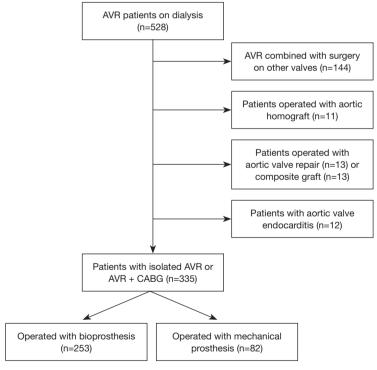


Figure S1 Flow-chart over included and excluded patients. AVR, aortic valve replacement; CABG, coronary artery bypass grafting.

Table S2 Preoperative patient's characteristics in 335 dialysis patients that underwent aortic valve replacement with or without concomitant CABG

Variables	Total population (n=335)	AVR (n=260)	AVR + CABG (n=75)	P value
Gender (male)	248 (74%)	185 (71.2%)	63 (84%)	0.032
Age (years)	67.1±10.5	65.8±10.6	71.5±8.7	<0.001
Body mass index	27.0±5.2	26.8±5.3	27.8±4.7	0.16
Logistic Euroscore (%)	8.3±4.26	8.0±4.2	9.3±4.2	0.016
Previous myocardial infarction	71 (21.2%)	42 (16.2%)	29 (38.7%)	0.001
Previous stroke	31 (9.3%)	29 (11.2%)	2 (2.7%)	0.030
Diabetes	114 (34%)	77 (29.6%)	37 (49.3%)	0.003
Hypertension	241 (71.9%)	182 (70%)	59 (78.7%)	0.18
Heart failure	125 (37.3%)	88 (33.8%)	37 (49.3%)	0.022
Atrial fibrillation	94 (28.1%)	73 (28.1%)	21 (28%)	1.00
Peripheral vascular disease	73 (21.8%)	55 (21.2%)	18 (24%)	0.70
History of cancer	70 (20.9%)	57 (21.9%)	13 (17.3%)	0.49
Hyperlipidemia	69 (20.6%)	43 (16.5%)	26 (34.7%)	0.002

Mean ± standard deviation or numbers and percentages. AVR, aortic valve replacement; CABG, coronary artery bypass grafting.

Table S3 Early complications in 335 dialysis patients that underwent aortic valve replacement with or without concomitant CABG

Variables	Total population (n=335)	AVR (n=260)	AVR + CABG (n=75)	P value
Thirty-day mortality	29 (8.7%)	24 (9.2%)	5 (6.7%)	0.47
Reoperation for bleeding	53 (15.8%)	45 (17.3%)	8 (10.6%)	0.17
Postoperative heart failure	44 (13.1%)	29 (11.1%)	15 (20%)	0.046
Perioperative stroke	36 (10.7%)	26 (10%)	10 (13.3%)	0.41
Deep sternal wound infection	14 (4.2%)	9 (3.4%)	5 (6.6%)	0.22

Number and percentage. AVR, aortic valve replacement; CABG, coronary artery bypass grafting.

Table S4 Early postoperative complications in the propensity score matched population

Variables	Total population (n=130)	Mechanical valve (N=60)	Biological valve (N=70)	P value
Thirty-day mortality	8 (6.1%)	5 (8.3%)	3 (4.2%)	0.34
Reoperation for bleeding	3 (2.3%)	0	3 (4.2%)	0.25
Postoperative heart failure	21 (16.1%)	7 (11.6%)	14 (20%)	0.24
Perioperative stroke	5 (3.8%)	2 (3.3%)	3 (4.2%)	1.0
Deep sternal wound infection	3 (2.3%)	2 (3.3%)	1 (1.4%)	0.60

Table S5 Demographics and patient characteristics of matched groups

Variables	Total population (n=130)	Mechanical valve (n=60)	Biological valve (n=70)	P value
Gender				0.57
Male	91 (70%)	44 (73.3%)	47 (67.1%)	
Female	39 (30%)	16 (26.7%)	23 (32.9%)	
Age (years)	62.2±7	61.6±7.1	62.8±6.9	0.15
Body mass index	26.9±6.1	27.3±7.4	26.4±4.8	0.52
Length of stay (day)	23.7±21.1	24.5±23.1	23.1±19.4	0.98
Logistic Euroscore (%)	7.2±4.1	7.2±4.4	7.1±4	0.93
Previous myocardial infarction	27 (20.8%)	12 (20.0%)	15 (21.4%)	1.00
Previous stroke	17 (13.1%)	7 (11.7%)	10 (14.3%)	0.86
Previous TIA	5 (3.8%)	3 (5.0%)	2 (2.9%)	0.85
Diabetes	39 (30.0%)	18 (30.0%)	21 (30.0%)	1.00
Hypertension	91 (70.0%)	43 (71.7%)	48 (68.6%)	0.85
Heart failure	47 (36.2%)	21 (35.0%)	26 (37.1%)	0.94
Atrial fibrillation	36 (27.7%)	17 (28.3%)	19 (27.1%)	1.00
PCI	7 (5.4%)	4 (6.7%)	3 (4.3%)	0.83
Pulmonary disease	13 (10.0%)	7 (11.7%)	6 (8.6%)	0.77
Congenital heart disease	4 (3.1%)	2 (3.3%)	2 (2.9%)	1.00
Peripheral vascular disease	22 (16.9%)	10 (16.7%)	12 (17.1%)	1.00
History of cancer	19 (14.6%)	9 (15.0%)	10 (14.3%)	1.00
Hyperlipidemia	15 (11.5%)	9 (15.0%)	6 (8.6%)	0.39
Concomitant CABG	10 (7.7%)	6 (10.0%)	4 (5.7%)	0.56

TIA, transient ischemic attack; PCI, percutaneous coronary intervention; CABG, coronary artery bypass grafting.

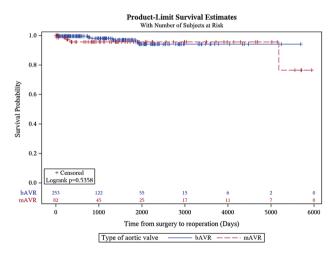


Figure S2 Kaplan-Meier analysis of aortic valve reoperations in the bAVR and the mAVR groups. bAVR, biological aortic valve replacement; mAVR, mechanical aortic valve replacement.