

## Supplementary

**Table S1** Preoperative clinical characteristics, within 2 weeks from the onset of stroke

Variable	Group C (n=46)	Group D (n=20)	P value
Sex, female	16 (34.8)	4 (20.0)	0.262
Age, years	56.09±15.36	51.90±18.31	0.341
BMI, kg/m <sup>2</sup>	21.77±3.38	22.79±3.78	0.283
BSA, m <sup>2</sup>	1.67±0.20	1.78±0.19	0.036
Atrial fibrillation	3 (6.5)	3 (15.0)	0.357
Coronary artery disease	10 (21.7)	2 (10.0)	0.319
Chronic kidney disease	7 (15.2)	3 (15.0)	1.000
Dialysis	2 (4.3)	1 (5.0)	1.000
Diabetes	11 (23.9)	2 (10.0)	0.314
Hypertension	17 (37.0)	4 (20.0)	0.252
Malignancy	6 (13.0)	1 (5.0)	0.666
Peripheral arterial occlusive disease	3 (6.5)	0 (0.0)	0.548
NYHA class, III–IV	18 (39.1)	9 (45.0)	0.786
Ejection Fraction, %	60.09±6.51	58.47±7.01	0.366
Staphylococcus aureus	7 (15.2)	5 (25.0)	0.488
Aortic valve involvement	19 (41.3)	12 (60.0)	0.188
Mitral valve involvement	28 (60.9)	12 (60.0)	1.000
Previous cardiac surgery	8 (17.4)	2 (10.0)	0.711
Prosthetic IE	5 (10.9)	2 (10.0)	1.000
Emergency operation	20 (43.5)	9 (45.0)	1.000
Stroke occurrence to surgery time, days	3.04±3.52	5.55±5.04	0.024
Nosocomial infection	17 (37.0)	6 (30.0)	0.779
Modified Rankin score	1.09±1.59	1.95±1.73	0.053
NIH stroke scale	2.33±4.61	2.90±4.10	0.633
EuroSCORE II, %	12.32±14.82	10.06±11.77	0.547
Predicted 6-month mortality, %	28.33±14.55	26.97±12.37	0.717

Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation. BSA, body surface area; BMI, body mass index; NYHA, New York Heart Association; IE, infective endocarditis; NIH, National Institutes of Health; EuroSCORE, European System for Cardiac Operative Risk Evaluation.

**Table S2** Operative data, within 2 weeks from the onset of stroke

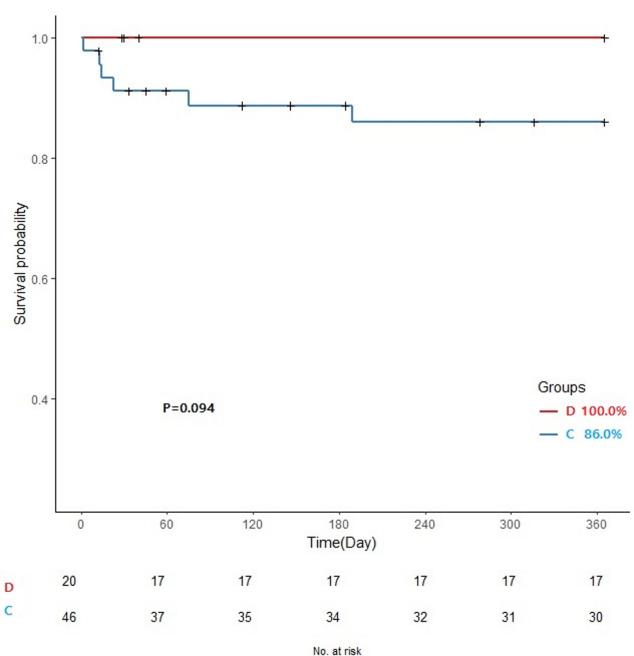
Variable	Group C (n=46)	Group D (n=20)	P value
Aortic valve replacement	19 (41.3)	12 (60.0)	0.188
Mitral valve repair	2 (4.3)	1 (5.0)	1.000
Mitral valve replacement	26 (56.5)	11 (55.0)	1.000
Double valve replacement	2 (4.3)	3 (15.0)	0.159
Aortomitral curtain reconstruction	2 (4.3)	2 (10.0)	0.579
Tissue valve implantation	13 (28.3)	9 (45.0)	0.257
Aortic cross clamp time, minutes	92.13±41.10	95.25±41.55	0.778
Cardiopulmonary bypass time, minutes	121.11±53.52	129.40±70.31	0.602

Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation.

**Table S3** Postoperative outcomes, within 2 weeks from the onset of stroke

Variable	Group C (n=46)	Group D (n=20)	P value
Total CVA	4 (8.7)	4 (20.0)	0.232
Postoperative ICH	4 (8.7)	3 (15.0)	0.425
Surgery for ICH	2 (4.3)	0 (0.0)	1.000
Acute kidney injury	8 (17.4)	1 (5.0)	0.257
Postoperative bleeding	4 (8.7)	1 (5.0)	1.000
Pneumonia	1 (2.2)	0 (0.0)	1.000
Permanent pacemaker	2 (4.3)	1 (5.0)	1.000
ICU stay, days	3.83±6.37	5.60±8.82	0.360
30 days mortality	4 (8.7)	0 (0.0)	0.306

Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation. CVA, cerebrovascular accident; ICH, intracranial hemorrhage; ICU, intensive care unit.



**Figure S1** Kaplan-Meier survival curve (1-year). The 1-year survival rate year after open heart surgery for infective endocarditis was 86.0%±5.3% in group C and 100.0% in group D (P=0.094).

**Table S4** Preoperative clinical characteristics, within 1 week from the onset of stroke

Variable	Group E (n=39)	Group F (n=12)	P value
Sex, female	12 (30.8)	2 (16.7)	0.471
Age, years	53.49±14.28	49.83±21.23	0.495
BMI, kg/m <sup>2</sup>	21.88±3.19	21.20±2.51	0.500
BSA, m <sup>2</sup>	1.68±0.19	1.77±0.14	0.160
Atrial fibrillation	2 (5.1)	2 (16.7)	0.232
Coronary artery disease	8 (20.5)	0 (0.0)	0.173
Chronic kidney disease	3 (7.7)	2 (16.7)	0.580
Dialysis	0 (0.0)	1 (8.3)	0.235
Diabetes	7 (17.9)	1 (8.3)	0.662
Hypertension	11 (28.2)	2 (16.7)	0.706
Malignancy	4 (10.3)	1 (8.3)	1.000
Peripheral arterial occlusive disease	2 (5.1)	0 (0.0)	1.000
NYHA class, III–IV	13 (33.3)	6 (50.0)	0.325
Ejection fraction, %	60.26±6.48	58.23±8.16	0.378
Staphylococcus aureus	4 (10.3)	4 (33.3)	0.076
Aortic valve involvement	17 (43.6)	7 (58.3)	0.511
Mitral valve involvement	24 (61.5)	8 (66.7)	1.000
Previous cardiac surgery	7 (17.9)	1 (8.3)	0.662
Prosthetic IE	5 (12.8)	1 (8.3)	1.000
Emergency operation	18 (46.2)	8 (66.7)	0.324
Stroke occurrence to surgery time, days	1.77±1.69	1.83±1.80	0.910
Nosocomial infection	13 (33.3)	3 (25.0)	0.730
Modified Rankin score	0.95±1.43	2.00±2.00	0.049
NIH stroke scale	1.69±3.16	3.00±5.13	0.289
EuroSCORE II, %	10.61±13.27	8.24±5.59	0.552
Predicted 6-month mortality, %	25.63±11.76	27.52±14.43	0.648

Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation. BSA, body surface area; BMI, body mass index; NYHA, New York Heart Association; IE, infective endocarditis; NIH, National Institutes of Health; EuroSCORE, European System for Cardiac Operative Risk Evaluation.

**Table S5** Operative data, within 1 weeks from the onset of stroke

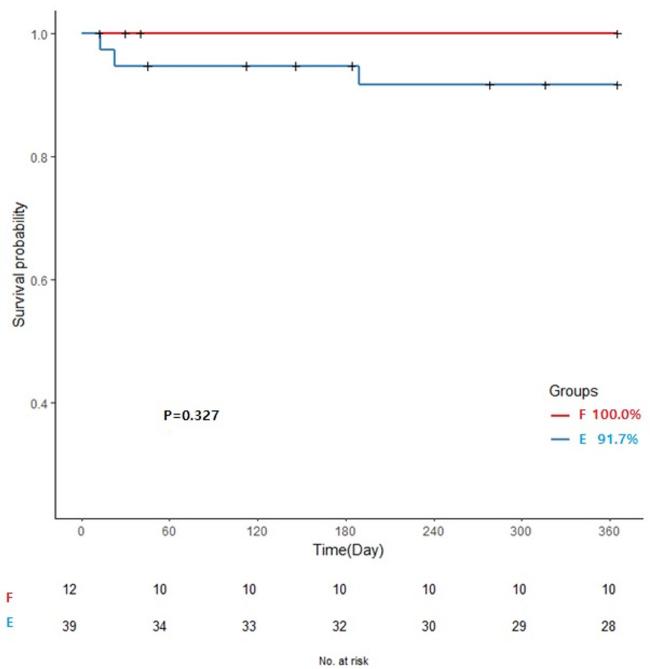
Variable	Group E (n=39)	Group F (n=12)	P value
Aortic valve replacement	17 (43.6)	7 (58.3)	0.511
Mitral valve repair	1 (2.6)	1 (8.3)	0.419
Mitral valve replacement	23 (59.0)	7 (58.3)	1.000
Double valve replacement	2 (5.1)	2 (16.7)	0.232
Aortomitral curtain reconstruction	2 (5.1)	0 (0.0)	1.000
Tissue valve implantation	10 (25.6)	7 (58.3)	0.076
Aortic cross clamp time, minutes	93.69±41.54	88.33±37.79	0.692
Cardiopulmonary bypass time, minutes	118.59±48.84	112.75±49.35	0.719

Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation.

**Table S6** Postoperative outcomes, within 1 weeks from the onset of stroke

Variable	Group E (n=39)	Group F (n=12)	P value
Total CVA	4 (10.3)	3 (25.0)	0.334
Postoperative ICH	4 (10.3)	2 (16.7)	0.616
Surgery for ICH	2 (5.1)	0 (0.0)	1.000
Acute kidney injury	4 (10.3)	1 (8.3)	1.000
Postoperative bleeding	1 (2.6)	1 (8.3)	0.419
Pneumonia	1 (2.6)	0 (0.0)	1.000
Permanent pacemaker	2 (5.1)	1 (8.3)	0.561
ICU stay, days	3.26±6.52	7.33±10.89	0.116
30 days mortality	2 (5.1)	0 (0.0)	1.000

Categorical variables are shown as numbers with percentages, and continuous variables are shown as mean ± standard deviation. CVA, cerebrovascular accident; ICH, intracranial hemorrhage; ICU, intensive care unit.



**Figure S2** Kaplan-Meier survival curve (1-year). The 1-year survival rate after open heart surgery for infective endocarditis was 91.7%±4.6% in group E and 100.0% in group F ( $P=0.327$ ).