

Figure S1 Flowchart of this study.

Table S1 Multivariable logistic regression for operation duration in CMO

Operation duration	β	S.E.	Wald	OR	95% CI	P value
Circulatory arrest duration (per 5 min)	0.081	0.103	0.619	1.085	0.886–1.328	0.431
Aortic cross-clamping duration (per 10 min)	-0.133	0.100	1.778	0.875	0.719–1.065	0.182
Cardiopulmonary bypass duration (per 10 min)	0.168	0.062	7.372	1.183	1.048–1.336	0.007*
Intercept	-5.951	1.550	14.75	-	-	-

*, P value <0.05. CMO, composite major outcomes; S.E., standard error; OR, odds ratio; CI, confidence interval.

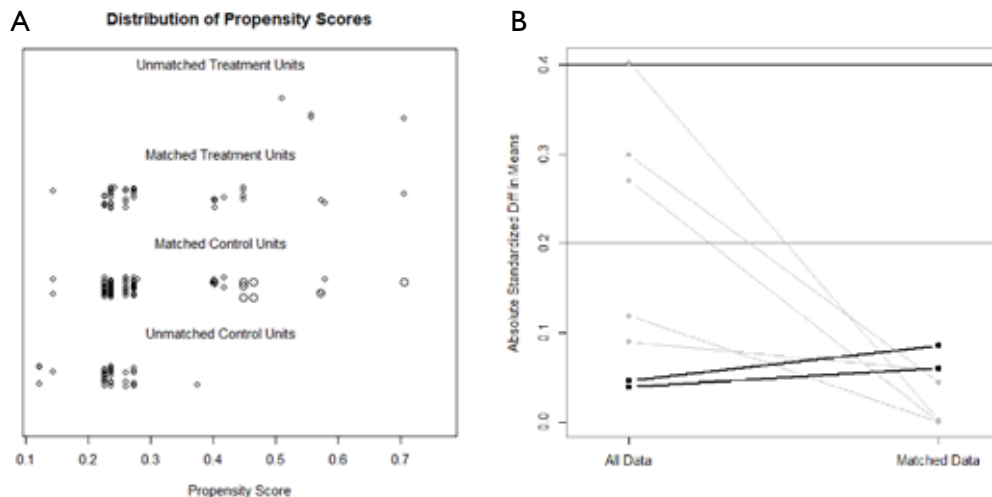


Figure S2 Jitter plot and line plot of individual cases before and after propensity score matching. (A) Jitter plot of individual cases. (B) line plot of individual cases.

Table S2 Two models for CMO

Model information	β	S.E.	Wald	OR	95% CI	P value
Model LVH						
Left ventricular hypertrophy	1.045	0.439	5.680	2.844	1.204–6.719	0.017*
Penn Ab	0.779	0.458	2.900	2.180	0.889–5.346	0.089
Penn Ac/Ab&c	2.742	0.776	12.49	15.51	3.391–70.94	<0.001*
Hyperlipidemia	1.102	0.436	6.375	3.010	1.280–7.081	0.012*
Emergency surgical repair	1.005	0.435	5.334	2.732	1.164–6.409	0.021*
CPB durations (per 10 min)	0.113	0.040	8.158	1.120	1.036–1.211	0.004*
Intercept	–6.592	1.270	26.94	–	–	–
Model LVMI						
LVMI (per 10 g·m ⁻²)	0.161	0.064	6.440	1.175	1.037–1.331	0.011*
Penn Ab	0.806	0.460	3.069	2.240	0.909–5.522	0.080
Penn Ac/Ab&c	2.524	0.804	9.857	12.48	2.581–60.32	0.002*
Hyperlipidemia	1.103	0.439	6.308	3.013	1.274–7.124	0.012*
Emergency surgical repair	1.096	0.442	6.138	2.992	1.257–7.120	0.013*
CPB durations (per 10 min)	0.116	0.040	8.465	1.123	1.039–1.215	0.004*
Intercept	–8.091	1.484	29.74	–	–	–

*, P value <0.05. CMO, composite major outcomes; S.E., standard error; OR, odds ratio; CI, confidence interval; LVH, left ventricular hypertrophy; LVMI, left ventricular mass index; CPB, cardiopulmonary bypass.

Table S3 Collinearity analysis of model LVH and model LVMI for postoperative CMO

Model information	Tolerance	VIF
Model LVH		
LVH	0.996	1.004
Penn classification	0.988	1.013
Hyperlipidemia	0.955	1.047
Emergency surgical repair	0.962	1.040
CPB durations (per 10 min)	0.970	1.031
Model LVMI		
LVMI (per 10 g·m ⁻²)	0.981	1.019
Penn classification	0.971	1.030
Hyperlipidemia	0.955	1.048
Emergency surgical repair	0.964	1.038
CPB durations (per 10 min)	0.971	1.030

LVH, left ventricular hypertrophy; LVMI, left ventricular mass index; CMO, composite major outcomes; VIF, variance inflation factor; CPB, cardiopulmonary bypass.

Table S4 Two models for postoperative cardiac event

Model information	β	S.E.	Wald	OR	95% CI	P value
Model LVH						
Left ventricular hypertrophy	1.193	0.603	3.920	3.297	1.012–10.74	0.048*
CPB durations (per 10min)	0.125	0.046	7.499	1.134	1.036–1.240	0.006*
Intercept	-6.732	1.485	20.56	-	-	-
Model LVMI						
LVMI (per 10 g·m ⁻²)	0.188	0.061	9.559	1.207	1.071–1.360	0.002*
CPB durations (per 10min)	0.133	0.047	8.169	1.143	1.043–1.252	0.004*
Intercept	-8.660	1.745	24.63	-	-	-

*, P value <0.05. S.E., standard error; OR, odds ratio; CI, confidence interval; LVH, left ventricular hypertrophy; LVMI, left ventricular mass index; CPB, cardiopulmonary bypass.

Table S5 Collinearity analysis of model LVH and model LVMI for postoperative cardiac event.

Model information	Tolerance	VIF
Model LVH		
LVH	0.999	1.001
CPB durations (per 10min)	0.999	1.001
Model LVMI		
LVMI (per 10 g·m ⁻²)	0.999	1.001
CPB durations (per 10min)	0.999	1.001

VIF, variance inflation factor; LVH, left ventricular hypertrophy; CPB, cardiopulmonary bypass; LVMI, left ventricular mass index.