

## Running title

**Supplementary Table 1.** Preoperative LVEF and APACHE II scores of the two groups

	Delirium group (n = 49)	Non-delirium group (n = 165)	$\chi^2$	P value
LVEF (%)	51.87±4.61	56.02±3.61	6.615	<0.0001
APACHE II score (points)	12.52±3.38	10.75±4.20	2.697	0.0076

Notes: LVEF: Left Ventricular Ejection Fraction; APACHE II: Acute Physiology and Chronic Health Evaluation II.

**Supplementary Table 2.** Surgical parameters of the two groups

	Delirium group (n = 49)	Non-delirium group (n = 165)	$\chi^2$	P value
Anesthesia duration (h)	5.54±0.60	5.41±0.83	1.059	0.2908
Surgery duration (h)	4.66±0.52	4.56±0.61	1.062	0.2895
Aortic cross-clamp time (min)	142.74±16.70	139.06±18.26	1.264	0.2077
Intraoperative mean arterial pressure (mmHg)	59.09±13.22	57.44±12.67	0.7943	0.4279
Intraoperative blood loss (mL)	268.39±54.75	273.77±56.73	0.5880	0.5572

**Supplementary Table 3.** Postoperative surgical parameters of the two groups

	Delirium group (n = 49)	Non-delirium group (n = 165)	$\chi^2$	P value
Length of ICU stay	4.47±2.30	2.09±0.86	11.03	<0.0001
Postoperative mechanical ventilation duration	16.01±4.98	10.62±3.80	8.075	<0.0001
Postoperative mean arterial pressure (mmHg)	62.70±13.05	60.07±13.65	1.196	0.2332

Note: ICU: intensive care unit.