

**Supplementary Table 1.** Summary of the study results

parameter	surgery start	CPB on	CPB off
CO/perfusion (l/min)	4.6 (4.0 – 5.0)	4.9 (4.4 – 5.3)	5.5 (4.7 – 6.4)
CI/perfusion index (l/min/m <sup>2</sup> )	2.3 (2.0 – 2.5)	2.4 (2.3 – 2.5)	2.6 (2.3 – 3.1)
MAP (mmHg)	69 (61 – 77)	68 (60 – 76)	71 (62 – 77)
Body temperature (°C)	36.2 (35.8 – 36.5)	35.7 (35.2 – 36.0)	36.7 (36.4 – 37.0)
Hemoglobin (g/dl)	13 (12 – 14)	11 (10 – 12)	11 (10 – 11)
Lactate (mg/dl)	8.5 (7.0 – 11.0)	8.5 (7.4 – 9.9)	10.0 (8.6 – 11.0)
paCO <sub>2</sub> (mmHg)	45 (41 – 49)	44 (43 – 50)	42 (39 – 45)
paO <sub>2</sub> (mmHg)	209 (110 – 314)	246 (191 – 308)	181 (119 – 278)
DaO <sub>2</sub> (ml/min/m <sup>2</sup> )	410 (376 – 447)	379 (351 – 409)	394 (341 – 463)
O <sub>2</sub> extraction rate (%)	20 (16 – 24)	24 (20 – 27)	20 (18 – 26)
ScO <sub>2</sub> left (%)	74 (67 – 80)	71 (64 – 77)	71 (66 – 76)
ScO <sub>2</sub> right (%)	74 (68 – 80)	72 (65 – 78)	72 (64 – 75)
ScO <sub>2</sub> average (%)	75 (68 – 79)	73 (64 – 78)	72 /67 – 77)

CPB: cardiopulmonary bypass; MAP: mean arterial pressure; CO: cardiac output; CI: cardiac index; DaO<sub>2</sub>: oxygen delivery; ScO<sub>2</sub>: cerebral oxygen saturation; paO<sub>2</sub>: arterial oxygen partial pressure; paCO<sub>2</sub>: arterial CO<sub>2</sub> partial pressure; values represent medians with quartiles.