

Supplementary Table 1. Hemodynamic and laboratory variables

	Total (N=109)	Patients with MAE (n=32)	Patients without MAE (n=77)	P- value
MAP (mmHg)				
T0	92.5 ± 13.7	87.7 ± 14.5	94.0 ± 13.7	0.035
T1	84.6 ± 17.48*	83.8 ± 15.6	85.4 ± 17.6*	0.664
T2	71.2 ± 9.8*†	69.3 ± 12.2*†	71.8 ± 9.5*†	0.260
T3	69.5 ± 10.4*†	66.5 ± 11.1*†	70.8 ± 10.2*†	0.054
T4	70.0 ± 9.7*†	67.4 ± 8.1*†	70.9 ± 10.1*†	0.085
Heart rate (bpm)				
T0	80.2 ± 18.9	85.5 ± 21.7†	77.4 ± 17.7	0.045
T1	71.3 ± 14.0*	72.6 ± 12.4	68.5 ± 12.9*	0.133
T3	88.6 ± 14.4*†	87.7 ± 14.8†	88.4 ± 14.0*†	0.804
T4	89.5 ± 13.5*†	90.8 ± 13.4†	88.5 ± 13.1*†	0.413
CVP (mmHg)				
T1	10.0 (7.0-12.0)	10.0 (8.0-12.0)	9.0 (7.0-11.0)	0.178
T3	8.0 (6.0-10.8)†	9.0 (7.0-11.8)†	8.0 (6.0-10.0)	0.198
T4	9.0 (7.0-12.0)§	10.0 (8.0-13.0)§	9.0 (7.0-12.0)	0.221
Cardiac index (mL)				
T1	2.2 (1.9-2.8)	2.4 (1.7-3.1)	2.2 (1.9-2.6)	0.863
T3	3.4 (2.7-4.2)†	3.4 (2.5-4.1)†	3.4 (2.7-4.2)†	0.732
T4	3.7 (3.1-4.3)†	3.7 (3.0-4.7)†	3.7 (3.1-4.3)†	0.983
SVR (dyn·s·cm⁻⁵)				
T1	1567.5 (1168.0-2035.7)	1509.4 (1104.7-1921.7)	1614.8 (1186.9-2092.3)	0.700
T3	860.3 (638.1-1187.0)†	814.6 (620.6-1001.7)†	889.7 (643.3-1197.6)†	0.373
T4	813.5 (638.7-1005.6)†	776.2 (612.3-1011.9)†	825.0 (689.7-999.1)†	0.313
PaO₂ (mmHg)				
T1	194.2 ± 75.2‡	170.5 ± 78.2‡	204.0 ± 72.2‡	0.034

T2	315.4 ± 52.0	327.2 ± 56.0	305.9 ± 53.8	0.067
T3	$194.5 \pm 90.0^\ddagger$	$193.0 \pm 103.0^\ddagger$	$196.0 \pm 86.0^\ddagger$	0.877
T4	$168.8 \pm 82.1^\ddagger\ddagger$	$152.1 \pm 65.0^\ddagger$	$175.8 \pm 87.7^\ddagger$	0.172
PaCO₂ (mmHg)				
T1	38.6 ± 5.1	40.1 ± 5.7	37.9 ± 4.7	0.037
T2	38.1 ± 7.6	37.4 ± 8.2	38.4 ± 7.4	0.506
T3	$41.7 \pm 6.2^\dagger\ddagger$	$42.8 \pm 6.2^\ddagger$	$41.3 \pm 6.2^\dagger$	0.249
T4	$43.3 \pm 5.9^\dagger\ddagger$	$43.7 \pm 4.1^\dagger\ddagger$	$43.1 \pm 6.5^\dagger\ddagger$	0.677
Hemoglobin (g/dL)				
T1	12.0 ± 1.8	11.1 ± 1.7	12.3 ± 1.8	0.001¶
T2	$9.6 \pm 1.3^\dagger$	$9.2 \pm 1.2^\dagger$	$9.7 \pm 1.3^\dagger$	0.043
T3	$10.4 \pm 0.9^\dagger\ddagger$	$10.2 \pm 0.9^\dagger\ddagger$	$10.5 \pm 0.8^\dagger\ddagger$	0.053
T4	$10.3 \pm 1.0^\dagger\ddagger$	$10.2 \pm 1.0^\ddagger$	$10.3 \pm 1.1^\dagger\ddagger$	0.481
Temperature (°C)				
T1	36.4 (36.1-36.7)	36.4 (36.1-36.7)‡	36.5 (36.0-37.7)	0.655
T2	31.0 (29.9-32.1)	30.8 (29.1-31.8)	31.3 (30.4-33.0)	0.014
T3	36.3 (36.0-36.5)	36.3 (36.0-36.6)‡	36.3 (36.0-36.5)	0.984
T4	36.2 (35.9-36.5)	36.2 (35.8-36.5)‡	36.2 (35.9-36.5)	0.870
Lactate (mmol/L)				
T1	0.8 (0.6-1.2)	0.6 (0.5-1.0)	1.0 (0.7-1.3)	0.001¶
T2	1.7 (1.2-2.4)†	1.7 (1.2-2.3)†	1.6 (1.3-2.5)†	0.868
T3	2.9 (2.2-4.2)†‡	2.8 (2.0-3.8)†‡	3.1 (2.2-4.4)†‡	0.373
T4	2.9 (2.0-4.5)†‡	2.6 (1.8-4.1)†‡	3.2 (2.2-4.6)†‡	0.272

Data are presented as mean \pm standard deviation, median (interquartile range). *P < 0.05 compared to T0; †P < 0.05 compared to T1; ‡P < 0.05 compared to T2; §P < 0.05 compared to T3. ¶P < 0.013 represented a significant difference between patients with and without MAE following Bonferroni correction. T0, prior to the induction of anesthesia; T1, 30 minutes after induction of anesthesia; T2, 30 minutes after initiation of cardiopulmonary bypass; T3, 10 minutes after protamine injection; T4, after sternal closure; MAE, major adverse events; MAP, mean arterial pressure; CVP, central venous pressure; SVR, systemic vascular resistance; PaO₂, arterial partial pressure of oxygen; PaCO₂, arterial partial pressure of carbon dioxide.