

## Supplementary

**Table S1** The co-variates included in the final model between cytokine levels and outcome in 40 patients with COVID-19 in ICU

Variables	Survivors (n=29)	Non-survivors (n=11)	P value
Age (y)	0 (ref)	0.008 (0.005, 0.115)	<0.001
Sex	0 (ref)	-0.083 (-0.19, 0.235)	0.13
Absolute lymphocyte count (per mL)	0 (ref)	0.32 (0.09, 0.54)	0.005
Absolute neutrophils count (per mL)	0 (ref)	-0.01 (-0.31, 0.12)	0.37
Direct bilirubin (mmol/L)	0 (ref)	0.60 (0.43, 0.78)	<0.001
Lactate dehydrogenase (U/L)	0 (ref)	0.11 (-0.14, 0.36)	0.39
Blood Urea Nitrogen (mmol/L)	0 (ref)	-0.11 (-0.33, 0.11)	0.32
D-dimer (mg/L)	0 (ref)	0.29 (-0.12, 0.70)	0.16
C-reactive protein (mg/L)	0 (ref)	0.29 (-0.12, 0.70)	0.16
History of hypertension (yes vs. no)	0 (ref)	0.356 (0.270, 0.442)	<0.001
History of diabetes mellitus (yes vs. no)	0 (ref)	0.048 (-0.062, 0.157)	0.39
History of COPD (yes vs. no)	0 (ref)	0.292 (0.113, 0.472)	0.002
History of cancer (yes vs. no)	0 (ref)	0.733 (0.624, 0.843)	<0.001