

**Supplementary Table 2. Univariate analysis for intensive care unit admission in derivation and validation cohorts**

Characteristic	Derivation cohort	Validation cohort
	OR (95% CI)	OR (95% CI)
Age, yr	1.00 (0.99–1.02)	1.00 (0.98–1.01)
Male sex	1.10 (0.64–1.90)	0.84 (0.54–1.32)
Underlying malignancies		
Acute myeloid leukemia	1.13 (0.67–1.93)	0.65 (0.41–1.04)
Acute lymphoblastic leukemia	1.54 (0.74–3.21)	1.66 (0.87–3.18)
Lymphoma	0.73 (0.37–1.44)	0.81 (0.50–1.30)
Myeloma	1.14 (0.32–4.10)	2.20 (0.92–5.25)
Aplastic anemia	0.28 (0.30–2.52)	0.98 (0.20–4.90)
Myelodysplasia	1.63 (0.63–4.22)	1.17 (0.59–2.32)
Comorbidity		
Chronic lung disease	0.28 (0.03–2.52)	0.78 (0.20–2.94)
Chronic heart disease	1.74 (0.95–3.18)	1.10 (0.63–1.91)
Chronic renal disease	1.14 (0.16–8.23)	3.00 (0.60–15.09)
Chronic liver disease	1.89 (0.60–6.00)	0.28 (0.08–1.03)
Cerebral vascular disease	1.15 (0.39–3.38)	0.38 (0.07–2.00)
Disease status at admission		
Newly diagnosis	0.95 (0.50–1.81)	2.22 (1.20–4.11) <sup>a</sup>
Relapsed/refractory	1.46 (0.85–2.51)	0.76 (0.48–1.21)
Partial remission	0.37 (0.04–3.64)	1.27 (0.46–3.49)
Complete remission	0.70 (0.31–1.58)	0.56 (0.28–1.12)
BMT/HSCT recipient	1.89 (1.10–3.25) <sup>a</sup>	1.49 (0.94–2.40)
ECOG performance status	1.12 (0.84–1.50)	1.07 (0.88–1.29)
Major reasons for MET activation		
Respiratory distress	1.15 (0.67–2.00)	1.22 (0.78–1.89)
Sepsis/septic shock	1.14 (0.63–2.07)	0.86 (0.50–1.49)
Hypovolemic shock	0.44 (0.08–2.33)	0.64 (0.18–2.32)
Altered mental status	4.84 (1.00–23.35)	2.59 (0.98–6.84)
Metabolic acidosis	0.32 (0.89–1.20)	0.58 (0.23–1.44)
Laboratory at MET activation		
Lactic acid, mmol/L	0.98 (0.91–1.05)	1.08 (1.00–1.18)
Neutropenia <sup>b</sup>	1.04 (0.61–1.77)	1.16 (0.67–2.00)
Modified early warning score	1.89 (1.57–2.28) <sup>c</sup>	1.47 (1.30–1.66) <sup>d</sup>
SpO <sub>2</sub> /FiO <sub>2</sub> score <sup>e</sup>	1.59 (1.30–1.95) <sup>c</sup>	1.87 (1.57–2.23) <sup>d</sup>
qSOFA score	1.07 (0.65–1.77)	0.83 (0.58–1.17)
SOFA score	1.12 (1.02–1.24) <sup>a</sup>	1.35 (1.22–1.50) <sup>d</sup>

OR, odds ratio; CI, confidence interval; BMT, bone marrow transplantation; HSCT, hematopoietic stem cell transplantation; ECOG, Eastern Cooperative Oncology Group; MET, medical emergency team; qSOFA, quick sequential organ failure assessment; SOFA, sequential organ failure assessment.

<sup>a</sup> $p < 0.05$ .

<sup>b</sup>Neutropenia, absolute neutrophil count  $< 500/\mu\text{L}$ .

<sup>c</sup> $p < 0.01$ .

<sup>d</sup> $p < 0.001$ .

<sup>e</sup>SpO<sub>2</sub>/FiO<sub>2</sub> score, 0 points for  $> 315$ , 2 points for  $\leq 315$  SpO<sub>2</sub>/FiO<sub>2</sub> ratio  $< 235$ , 3 points for  $\leq 235$ .