

Supplementary Table S4. Association of depression severity with the risk of each severe clinical COVID-19 events.

Outcomes	Depressive symptoms ^a			P for trend
	No	Mild	Moderate-to-severe	
COT				
Event/total	2233 (7.7)	381 (1.3)	195 (0.7)	
aOR (95% CI)	1.00 (reference)	1.06 (0.94–1.19)	1.48 (1.26–1.74) ^d	<.001
HFNV				
Event/total	444 (1.5)	71 (0.2)	23 (0.1)	
aOR (95% CI)	1.00 (reference)	1.12 (0.87–1.46)	0.92 (0.60–1.41)	0.71
CPAP				
Event/total	7 (0.0)	2 (0.0)	1 (0.0)	
aOR (95% CI)	1.00 (reference)	1.94 (0.39–9.79)	1.95 (0.32–15.61)	0.66
MV				
Event, n (%)	159 (0.6)	12 (0.0)	7 (0.0)	
aOR (95% CI)	1.00 (reference)	0.59 (0.33–1.07)	0.86 (0.39–1.79)	0.18
ICU				
Event, n (%)	204 (0.7)	29 (0.1)	12 (0.0)	
aOR (95% CI)	1.00 (reference)	0.99 (0.66–1.47)	0.99 (0.54–1.89)	0.92
ECMO				
Event, n (%)	24 (0.1)	0 (0.0)	4 (0.0)	
aOR (95% CI)	1.00 (reference)	NA	2.43 (0.80–8.01)	0.22
Death after severe COVID-19 event				
Event, n (%)	155 (0.7)	23 (0.5)	9 (0.5)	
aOR (95% CI)	1.00 (reference)	1.25 (0.80–1.96)	1.18 (0.59–2.34)	0.59

aOR was calculated using multivariable logistic regression after adjusting for age, sex, household income, body mass index (BMI), smoking, alcohol consumption, MVPA, history of hypertension, diabetes mellitus, dyslipidaemia, autoimmune disorder, history of organ transplantation, and Charlson comorbidity index and presented with 95% CI. Event number of severe COVID-19 was presented as n (%).

^aDegree of depression severity was measured by PHQ-9 at the NHIS health screening test from 2019 to 2020. By adding the scores of each 9 items, total score was calculated and categorised by 3 levels: no depressive symptoms (scores of 0–4), mild depressive symptoms (scores of 5–9), moderate-to-severe depressive symptoms (scores of 10–27).

^b $P < 0.05$.

^c $P < 0.01$.

^d $P < 0.001$.

Acronyms: MVPA, moderate-to-vigorous physical activity; COVID-19, coronavirus disease 2019; OR, odds ratio; CI, confidence interval; aOR, adjusted odds ratio; COT, conventional oxygen therapy; HFNC, high-flow nasal cannula; CPAP, continuous positive airway pressure; ICU, intensive care unit; MV, mechanical ventilation; ECMO, extracorporeal membrane oxygenation; NA, not applicable.