



Figure S1 Virus shedding in hospitalized critically ill COVID-19 patients with hypotension who survived and died.

Table S1 Demographics and clinical characteristics of survivor and non-survivor

Characteristic	All hypotension patients (n=240)	Non-survivor (n=205)	Survivor (n=35)	P Value
Demographics characteristics				
Age, median (IQR), yr	67.0 (60.0–73.5)	68.0 (62.0–75.0)	57.0 (50.0–69.0)	0.00
Age ≤60, n (%)	68 (28.3)	43 (21.0)	25 (71.4)	0.00
Age >60, n (%)	172 (71.7)	162 (79.0)	10 (28.6)	
Male sex, n (%)	159 (66.2)	135 (65.9)	46 (68.6)	0.75
Comorbidities, n (%)				
Hypertension	166 (69.2)	155 (75.6)	12 (34.3)	0.00
Chronic heart disease	35 (14.6)	31 (15.1)	4 (11.4)	0.57
Diabetes	54 (22.5)	42 (20.5)	12 (34.3)	0.07
COPD	15 (6.3)	13 (6.3)	2 (5.7)	0.89
Chronic renal insufficiency	9 (3.8)	7 (3.4)	2 (5.7)	0.51
Solid malignancy	8 (3.3)	7 (3.4)	1 (3.0)	0.87
Severity and time of hypotension (IQR)				
APACHE II score on ICU admission	13.0 (9.0–17.0)	13.0 (10.0–17.0)	10.0 (8.0–14.0)	0.00
SOFA score on ICU admission	5.0 (3.0–9.0)	5.0 (3.0–9.0)	3.0 (2.0–6.0)	0.00
Symptoms on admission, n (%)				
Fever	206 (85.8)	177 (86.3)	29 (82.0)	0.59
Cough	180 (75.0)	152 (74.1)	28 (80.0)	0.46
Shortness of breath	173 (72.1)	149 (72.7)	24 (68.6)	0.62
Diarrhea	33 (13.8)	25 (12.2)	8 (22.9)	0.09
Fatigue	156 (65.0)	136 (66.3)	20 (57.1)	0.29
Vital sign on admission (IQR)				
Temperature (degrees centigrade)	36.6 (36.5–37.3)	36.7 (36.5–37.5)	36.6 (36.2–37.9)	0.96
Heart rate (beats/min)	96.0 (82.0–108.0)	96.0 (82.0–108.0)	100.0 (80.0–117.0)	0.67
Respiratory rate (beats/min)	26.0 (21.0–32.0)	26.0 (22.0–32.0)	24.0 (20.0–28.0)	0.04
Mean arterial pressure (mmHg)	95.5 (83.3–103.7)	96.3 (83.0–105.0)	92.7 (83.8–100.3)	0.29

Table S1 (continued)

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Characteristic	All hypotension patients (n=240)	Non-survivor (n=205)	Survivor (n=35)	P Value
Laboratory data on ICU admission (IQR)				
PaO ₂ /FiO ₂ (mmHg)	86.6 (57.5–156.2)	83.1 (52.4–130.2)	118.5 (83.4–228.0)	0.00
Leukocyte count ($\times 10^9/L$)	10.4 (7.9–14.8)	10.4 (7.9–14.8)	10.0 (7.4–15.5)	0.95
Lymphocyte count ($\times 10^9/L$)	0.5 (0.3–0.8)	0.5 (0.3–0.8)	0.5 (0.3–0.8)	0.19
Platelet ($\times 10^9/L$)	169.0 (116.8–235.0)	168.0 (114.5–233.5)	185.0 (136.5–246.5)	0.17
Lactate dehydrogenase (U/L)	543.0 (402.0–812.0)	570.5 (422.8–831.3)	417.0 (295.0–624.5)	0.00
Alanine aminotransferase (U/L)	33.50 (21.1–51.0)	33.0 (21.0–54.5)	34.0 (23.0–64.0)	0.77
Aspartate aminotransferase (U/L)	38.0 (27.3–63.8)	39.0 (28.0–64.5)	31.0 (22.0–57.0)	0.16
C-reactive protein (mg/L)	82.7 (43.5–150.9)	86.0 (45.7–156.3)	62.2 (24.4–90.3)	0.01
Procalcitonin (ng/mL)	0.3 (0.1–0.9)	0.3 (0.1–1.0)	0.2 (0.1–0.5)	0.63
Prothrombin time (s)	14.2 (12.2–15.7)	14.2 (12.2–15.9)	14.1 (12.1–15.2)	0.72
D-dimer (ug/L)	5.2 (1.3–17.4)	5.6 (1.3–18.6)	2.5 (1.2–8.0)	0.05
Creatinine ($\mu\text{mol}/L$)	72.4 (57.0–94.4)	74.0 (60.0–99.2)	61.5 (46.4–75.2)	0.00
Troponin I (ng/mL)	30.0 (10.6–138.9)	30.0 (10.2–155.0)	30.0 (13.4–93.8)	0.88
Creatine kinase (ng/mL)	98.0 (49.8–246.5)	102.0 (52.0–273.0)	65.4 (38.0–132.0)	0.03
Therapy, and outcome				
Antiviral therapy, n (%)	177 (73.8)	150 (73.2)	27 (77.1)	0.62
Glucocorticoid therapy, n (%)	148 (61.7)	129 (62.9)	19 (54.3)	0.33
IV immunoglobulin therapy, n (%)	215 (52.8)	103 (50.2)	23 (65.7)	0.09
IMV, n (%)	201 (80.3)	172 (83.9)	29 (82.9)	0.88
Initiated within 48h of hypotension	169 (70.4)	158 (77.1)	11 (31.4)	0.03
Initiated earlier more than 48h of hypotension	32 (13.3)	18 (8.8)	14 (40.0)	
Intubation after HFNC + NIV	181 (90.0)	163 (79.5)	18 (51.4)	0.02
Direct intubation	20 (8.3)	12 (5.9)	8 (22.9)	
CRRT, n (%)	64 (26.7)	56 (27.3)	8 (22.9)	0.58
Virus Shedding, n (%)*	28 (11.7)	16 (7.8)	12 (34.3)	0.00
ICU length of stay, (IQR), d	8.0 (5.0–14.0)	8.0 (5.0–13.0)	33.0 (27.3–40.5)	0.00
Hospital length of stay, (IQR), d	12.0 (8.0–21.0)	11.0 (7.0–18.5)	33.0 (27.3–40.5)	0.00

*, All shock patients (n=73), Non-survivor (n=34), Survivor (n=39). COPD, chronic obstructive pulmonary disease; APACHE II, Acute Physiology and Chronic Health Evaluation II; SOFA, Sequential Organ Failure Assessment; PaO₂/FiO₂, arterial partial pressure of oxygen/fraction of inhalation oxygen; HFNC, high-flow nasal cannula; NIV, noninvasive mechanical ventilation; IMV, invasive mechanical ventilation; CRRT, continuous renal replacement therapy.