

Supplementary Table S1. Demographics and baseline characteristics of initially nonintubated patients

	Initially Nonintubated (N = 24)		P Value
	Never Intubated (N = 8)	Late Intubation (N = 16)	
Age	72 (63–78)	66 (59–77)	0.520
Male	4 (50)	10 (62.5)	0.673
Body mass index, kg/m ²	26.1 (21.7–26.7)	25.1 (22.7–27.3)	0.947
Smoking status			0.325
Never smoker	5 (62.5)	10 (62.5)	
Former smoker	2 (25)	6 (37.5)	
Current smoker	1 (12.5)	0 (0)	
Comorbidities			
Any comorbidities	6 (75)	13 (81.2)	>0.999
Hypertension	3 (37.5)	8 (50)	0.679
Diabetes	1 (12.5)	7 (43.8)	0.189
Chronic kidney disease	0 (0)	2 (12.5)	0.536
Dementia	2 (25)	1 (6.2)	0.249
Cerebrovascular disease	1 (12.5)	1 (6.2)	>0.999
Malignancy	0 (0)	4 (25)	0.262
Cardiovascular disease	2 (25)	2 (12.5)	0.578
Chronic lung disease	0 (0)	1 (6.2)	>0.999
Chronic liver disease	2 (25)	0 (0)	0.101
Duration of symptoms before admission, days	7 (5–14)	5 (3–10)	0.157
Presenting symptoms			
Fever	7 (87.5)	9 (56.2)	0.189
Dyspnea	5 (62.5)	12 (75)	0.647
Cough	6 (75)	8 (50)	0.388
Sputum	4 (50)	6 (37.5)	0.673
Myalgia	1 (12.5)	4 (25)	0.631
Fatigue	1 (12.5)	6 (37.5)	0.352
Diarrhea	3 (37.5)	2 (12.5)	0.289
Vital signs at the time of ICU admission			
Mean arterial pressure, mmHg	93 (87–110)	93 (86–97)	0.902
Heart rate, beats/min	84 (81–106)	92 (74–100)	0.951
Respiratory rate, breaths/min	21 (20–24)	21 (20–29)	0.679
Body temperature, °C	36.7 (36.3–37.6)	36.9 (36.6–37.4)	0.296

Data are presented as median (interquartile range) or N (%). ICU, intensive care unit.

Supplementary Table S2. Initial laboratory findings of initially nonintubated patients

	Initially Nonintubated (N = 24)		P Value
	Never Intubated (N = 8)	Late Intubation (N = 16)	
White blood cells, 10 ³ /L	7.23 (4.17–9.55)	7.16 (5.9–9.96)	0.582
Neutrophil, %	76.2 (65.4–82.4)	81.9 (79.3–89.5)	0.050
Lymphocyte, %	14.8 (7.6–25)	9.2 (6.8–13.7)	0.159
Hemoglobin, g/dL	13.6 (12.2–14.4)	13.1 (10.9–14.1)	0.581
Hematocrit, %	40.5 (35.4–43.2)	38.7 (31.8–40.6)	0.374
Platelets, 10 ³ /L	186 (153–286)	220 (156–295)	0.582
C-reactive protein, mg/dL	7.35 (4.34–12.18)	11 (7.39–17.43)	0.221
Procalcitonin, mmol/L	0.11 (0.08–0.39)	0.13 (0.1–0.21)	0.685
Lactate, mmol/L	1.5 (1–1.8)	1.8 (1.3–2.4)	0.185
Albumin, g/dL	3.4 (3.1–3.5)	3.4 (3.3–3.7)	0.877
AST, U/L	67 (41–94)	50 (33–65)	0.519
ALT, U/L	20 (11–62)	22 (13–53)	0.736
Total bilirubin, mg/dL	0.5 (0.38–1.04)	0.6 (0.3–0.83)	0.646
BUN, mg/dL	12.4 (6.8–20.2)	16.8 (11.8–35.3)	0.221
Creatinine, mg/dL	0.76 (0.64–1.25)	0.95 (0.7–1.9)	0.327
Sodium, mmol/L	136 (134–137)	137 (132–139)	0.422
Potassium, mmol/L	4.3 (3.2–5)	3.9 (3.3–4.6)	0.690
Glucose, mg/dL	107 (88–135)	161 (122–172)	0.030
LDH, U/L	433 (362–518)	468 (344–698)	0.772
D-dimer, ug/mL	2.76 (1.23–9.95)	2.03 (1.07–3.74)	0.673
Prothrombin time, INR	1.09 (1.01–1.95)	1.08 (1.02–1.27)	0.697
NT-proBNP, pg/mL	599 (139–1,044)	540 (372–2,026)	0.606
Troponin I, ng/mL	0.02 (0.01–0.02)	0.02 (0.01–0.02)	0.968
CK-MB, U/L	1.6 (0.7–2.8)	1 (0.8–1.4)	0.301

Data are presented as median (interquartile range). AST, aspartate aminotransferase; ALT, alanine aminotransferase; BUN, blood urea nitrogen; LDH, lactate dehydrogenase; NT-proBNP, N-terminal probrain natriuretic peptide; CK-MB, creatine kinase-MB.

Supplementary Table S3. Severity of illness and clinical course of initially nonintubated patients

	Initially Nonintubated (N = 24)		P Value
	Never Intubated (N = 8)	Late Intubation (N = 16)	
Severity of illness on ICU admission			
Septic shock	1 (12.5)	1 (6.2)	>0.999
Acute kidney injury	1 (12.5)	4 (25)	0.631
Acute cardiac injury	1 (12.5)	2 (12.5)	>0.999
SOFA score	2 (2–4)	3 (2–4)	0.250
APACHE II score	10 (8–11)	14 (8–15)	0.176
ABGA at the time of diagnosis of ARDS			
pH	7.47 (7.45–7.51)	7.43 (7.4–7.49)	0.076
PaCO ₂ , mmHg	32.2 (29.1–34.8)	32.3 (23.8–37.1)	0.783
PaO ₂ , mmHg	63.8 (51.4–111)	67.8 (55.7–79.7)	0.951
HCO ₃ , mmol/L	22.8 (22.1–24.4)	20.8 (17.4–26.3)	0.220
PF ratio	173 (114–238)	120 (62–188)	0.220
ICU management			
HFNC	8 (100)	16 (100)	
NM blockade	0 (0)	9 (56.2)	0.009
CRRT	0 (0)	5 (31.2)	0.130
Tracheostomy	0 (0)	7 (43.8)	0.054
ECMO	0 (0)	4 (25)	0.262
Medical treatment			
Antiviral agents			
Lopinavir-ritonavir	5 (62.5)	11 (68.8)	>0.999
Darunavir-cobicistat	2 (25)	5 (31.2)	>0.999
Antibiotics	8 (100)	16 (100)	
Hydroxychloroquine	8 (100)	14 (87.5)	0.536
Glucocorticoid	4 (50)	15 (93.8)	0.028
Medical event during ICU care			
Septic shock	1 (12.5)	14 (87.5)	0.001
Acute kidney injury	0 (0)	7 (43.8)	0.054
Acute cardiac injury	1 (12.5)	4 (25)	0.631
VAP or HAP	0 (0)	1 (6.2)	>0.999
CRBSI	0 (0)	3 (18.8)	0.526
Bleeding	0 (0)	3 (18.8)	0.526
CPCR	1 (12.5)	2 (12.5)	>0.999

Data are presented as median (interquartile range) or N (%). ICU, intensive care unit; SOFA, Sepsis-related Organ Failure Assessment; APACHE II, Acute Physiology and Chronic Health Evaluation; ABGA, arterial blood gas analysis; PF ratio, arterial partial pressure of oxygen (PaO₂)/fraction of inspired oxygen (FiO₂) ratio; HFNC, high-flow nasal cannula; NM blockade, neuromuscular blockade; CRRT, continuous renal replacement therapy; ECMO, extracorporeal membrane oxygenation; VAP, ventilator-associated pneumonia; HAP, hospital-acquired pneumonia; CRBSI, catheter-related bloodstream infection; CPCR, cardiopulmonary-cerebral resuscitation.