

# Risk Factors and a Prognostic Scoring System for Severe Disease in Patients with COVID-19: A Retrospective Cohort Study

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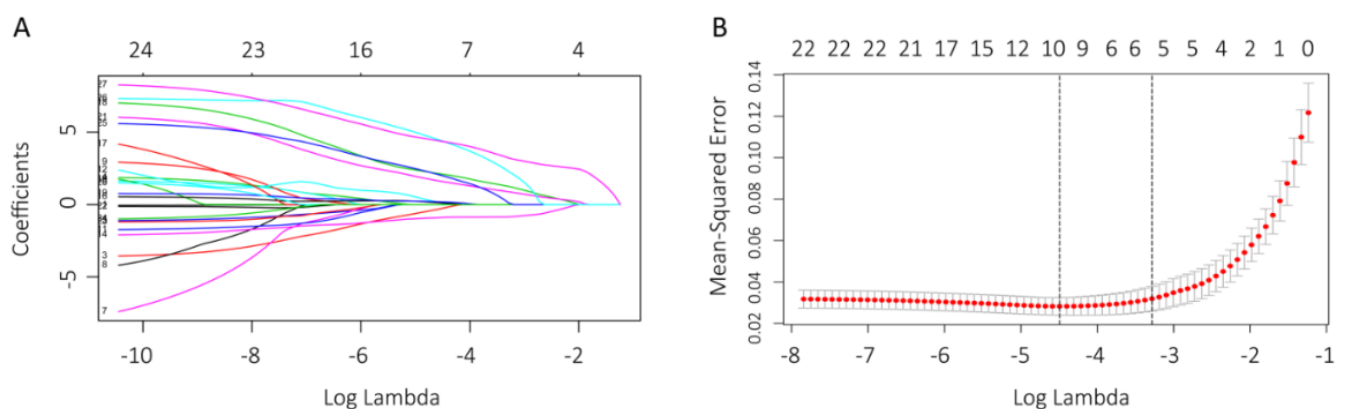
## SUPPLEMENTARY MATERIAL

	Total (n=463)	Non-critically ill patients (n=397)	Critically ill patients (n=66)	p value
<b>Treatments</b>				
Antiviral treatment	363 (78.4%)	333 (83.9%)	30 (45.5%)	<0.0001
Antibiotics	231 (49.9%)	172 (43.3%)	59 (89.4%)	<0.0001
Corticosteroids	58 (12.5%)	41 (10.3%)	17 (25.8%)	0.0005
Human serum albumin	72 (15.6%)	19 (4.8%)	53 (80.3%)	<0.0001
Intravenous immunoglobulin	8 (1.7%)	7 (1.8%)	1 (1.5%)	0.886
Traditional Chinese medicine	341 (73.7%)	335 (84.4%)	6 (9.1%)	<0.0001
Renal replacement therapy	10 (2.2%)	1 (0.3%)	9 (13.6%)	<0.0001
Convalescent plasma transfusion	8 (1.7%)	0	8 (12.1%)	<0.0001
Nasal catheter or face-masked	388 (83.8%)	384 (96.7%)	4 (6.1%)	<0.0001

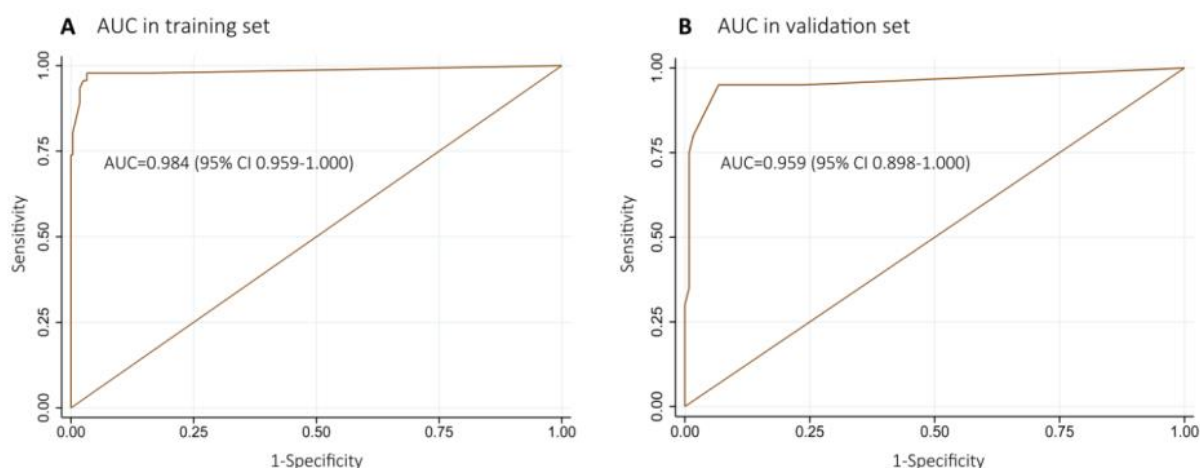
oxygen inhalation				
Non-invasive mechanical ventilation	11 (2.4%)	0	11 (16.7%)	<0.0001
Invasive mechanical ventilation	36 (7.8%)	0	36 (54.5%)	<0.0001
ECMO	4 (0.9%)	0	4 (6.1%)	<0.0001
<b>Complications</b>				
Respiratory failure	35 (7.6%)	5 (1.3%)	30 (45.5%)	<0.0001
ARDS	16 (3.5%)	0	16 (24.2%)	<0.0001
Septic shock	11 (2.4%)	0	11 (16.7%)	<0.0001
Acute cardiac injury	34 (7.3%)	8 (2.0%)	26 (39.4%)	<0.0001
Acute kidney injury	35 (7.6%)	16 (4.0%)	19 (28.8%)	<0.0001
Acute liver injury	123 (26.6%)	105 (26.4%)	18 (27.3%)	0.888
Hypoproteinemia	62 (13.4%)	19 (4.8%)	43 (65.2%)	<0.0001
DIC	3 (0.6%)	0	3 (4.5%)	0.003

Data are n (%). *p* values were calculated by  $\chi^2$  test, or Fisher's exact test, as appropriate. ARDS=acute respiratory distress syndrome. DIC=disseminated intravascular coagulation. ECMO=extracorporeal membrane oxygenation.

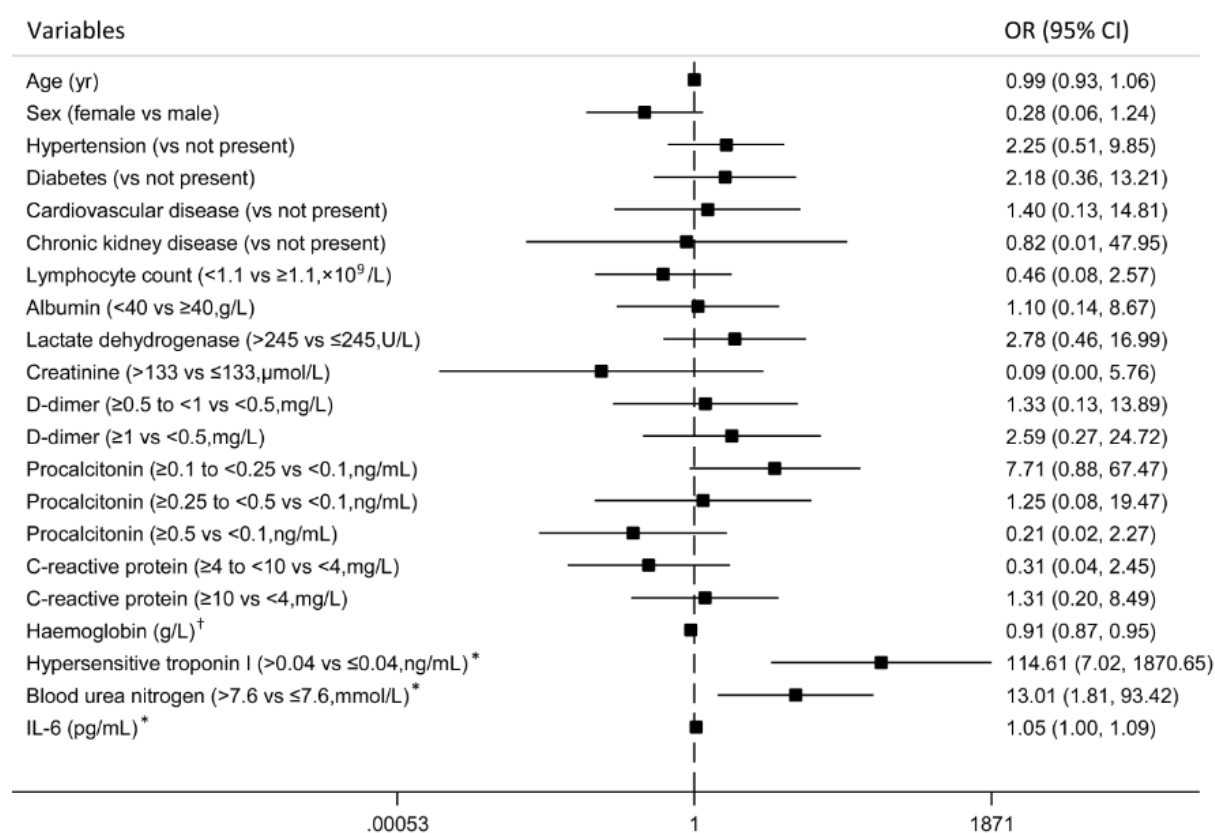
**Table S1:** Treatments and complications.



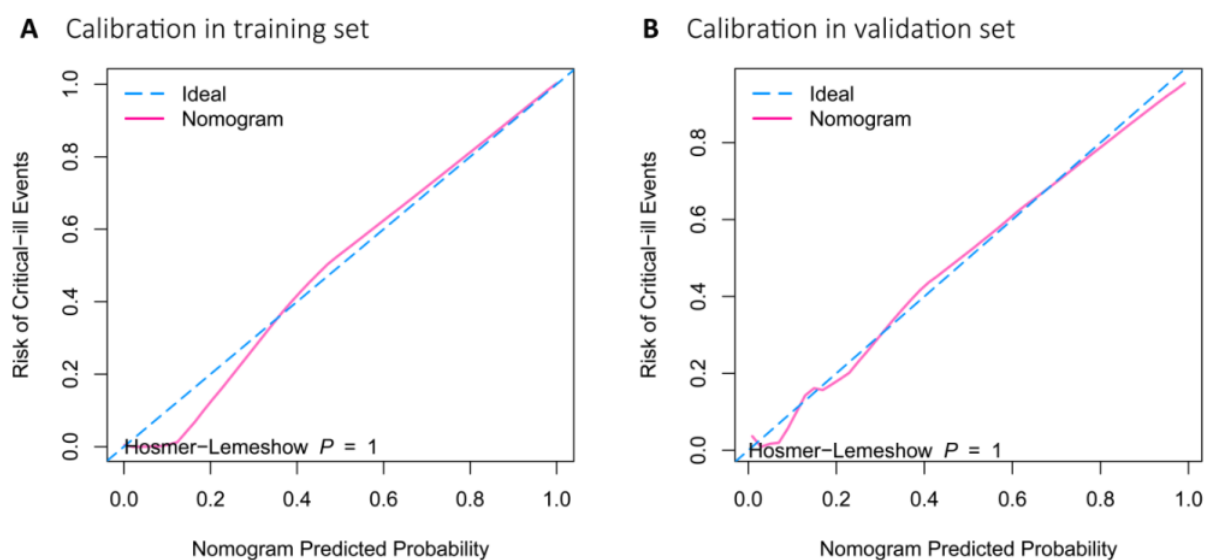
**Figure S1:** Coefficients and Mean-squared error.



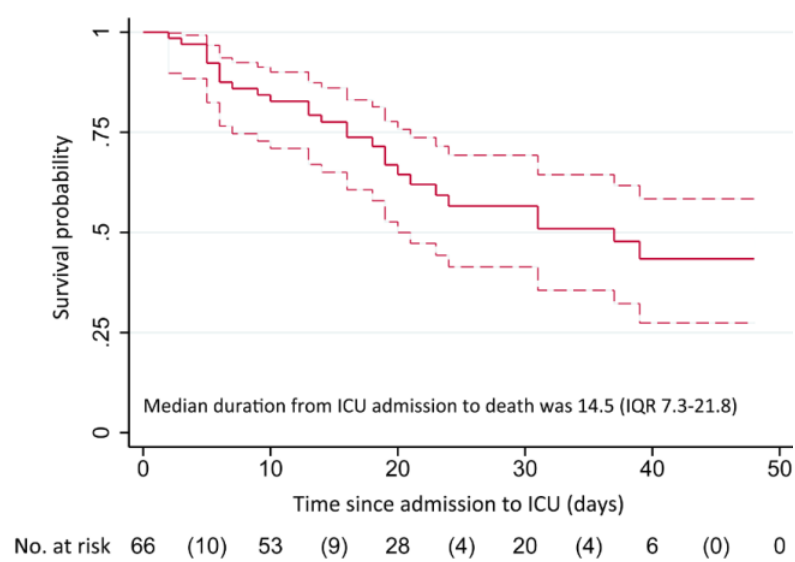
**Figure S2:** AUC in training set and AUC in validation set.



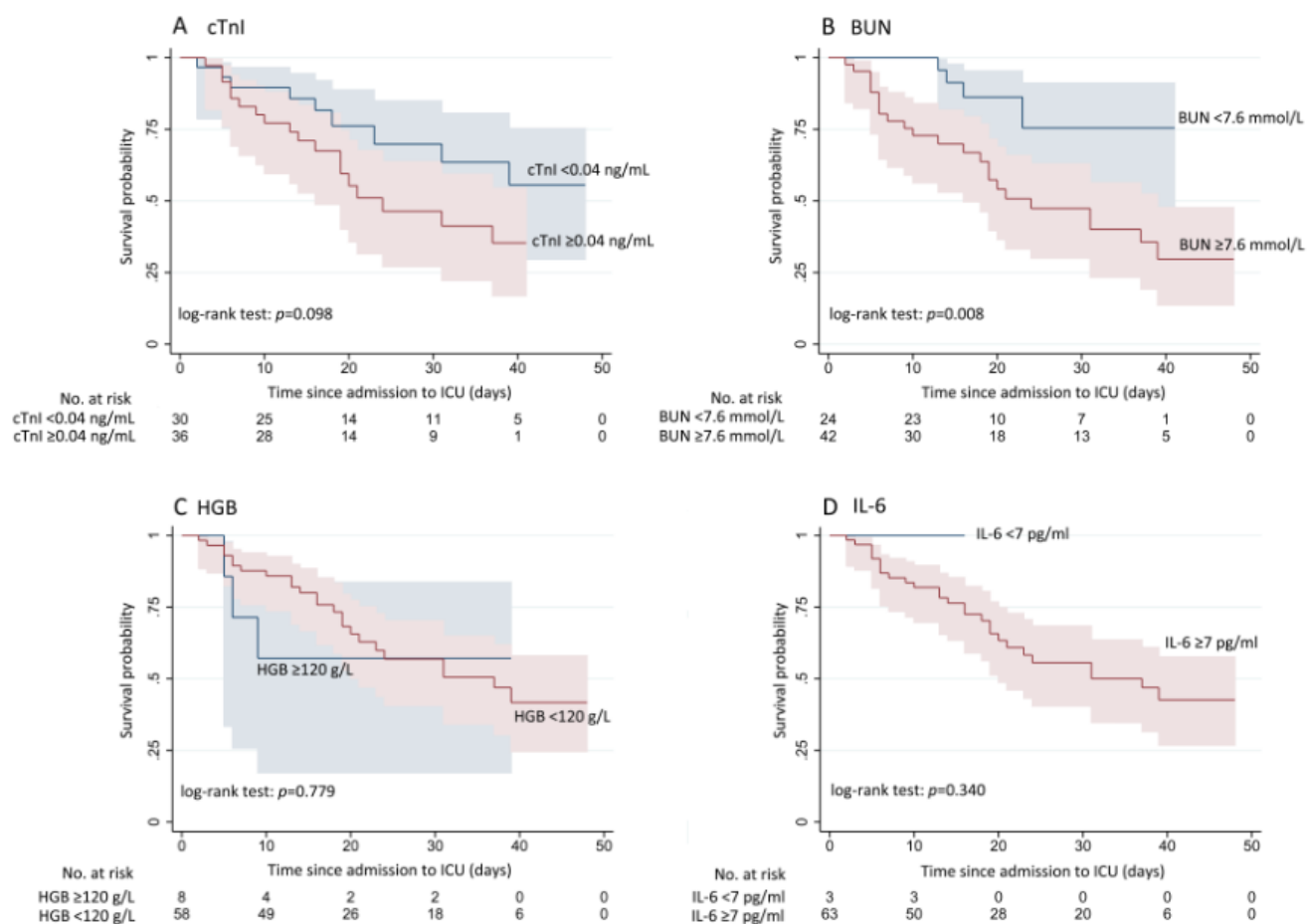
**Figure S3:** Variables.



**Figure S4:** Calibration in training set and Calibration in validation set.



**Figure S5:** Survival probability vs. Time since admission to ICU.



**Figure S6:** Survival probability.