

Supplementary materials

<i>Parameters</i>	<i>Specificity (%)</i>	<i>Sensitivity (%)</i>	<i>Cut-off</i>	<i>AUC</i>	<i>p-value</i>
SCORE	56.52	88.24	0.4476	0.753	0.0002
GGO_kurtosis	83.33	50.00	0.3333	0.614	0.1761
GGO_skewness	66.67	78.12	0.4479	0.706	0.0094
GGO_mode	77.78	59.38	0.3715	0.707	0.0059
GGO_mean	83.33	62.5	0.4583	0.742	0.0008
CLO_kurtosis	65.00	65.38	0.3038	0.579	0.3778
CLO_skewness	45.00	73.08	0.1808	0.563	0.4698
CLO_mode	80.00	57.69	0.3769	0.680	0.024
CLO_mean	70.00	76.92	0.4692	0.746	0.001

Table.S1 Statistical values of histogram parameters for ROC analysis in COVID-19 patient classification (mild/moderate vs severe type) GGO, ground-glass opacity; CLO, Consolidation opacity. * $p < 0.05$

<i>Parameters</i>	<i>mean $\pm$ std</i>		<i>Odds ratio (OR)</i>	<i>95% CI</i>	<i>p value</i>
	<i>Survival (n=42)</i>	<i>Deceased (n=15)</i>			
Age	62.33 $\pm$ 18.50	75.47 $\pm$ 16.99	1.085	0.990 to 1.189	0.081
Gender	N/A	N/A	10.716	0.546 to 210.351	0.118
GGO_kurtosis	3.50 $\pm$ 1.10	3.18 $\pm$ 0.81	7.607	1.383 to 41.829	0.02*
GGO_skewness	0.35 $\pm$ 0.52	0.11 $\pm$ 0.53	0.122	0.019 to 0.773	0.026*
GGO_mode	8.60 $\pm$ 6.62	9.45 $\pm$ 3.43	3.566	1.425 to 8.925	0.007*
GGO_mean	9.25 $\pm$ 6.17	9.55 $\pm$ 2.59	0.254	0.097 to 0.665	0.005*
CLO_kurtosis	3.12 $\pm$ 0.90	2.92 $\pm$ 0.40	1.703	0.357 to 8.116	0.504
CLO_skewness	-0.32 $\pm$ 0.64	-0.05 $\pm$ 0.35	3.185	0.472 to 21.507	0.234
CLO_mode	12.68 $\pm$ 5.32	16.59 $\pm$ 7.83	0.609	0.383 to 0.968	0.036*
CLO_mean	11.55 $\pm$ 5.11	17.41 $\pm$ 7.63	2.016	1.206 to 3.371	0.007*

Table.S2 Statistical values of Cox survival model for histogram parameters in patients with COVID-19. GGO, ground-glass opacity; CLO, Consolidation opacity. * $p < 0.05$

<i>Parameters</i>	<i>mean $\pm$ std</i>		<i>Odds ratio (OR)</i>	<i>95% CI</i>	<i>p value</i>
	<i>Prolonged LOS (n=22)</i>	<i>Normal LOS (n=20)</i>			
Age	58.50 $\pm$ 17.15	66.55 $\pm$ 19.44	0.972	0.903 to 1.047	0.455
Gender	N/A	N/A	1.193	0.153 to 9.277	0.866
GGO_kurtosis	3.74 $\pm$ 1.36	3.23 $\pm$ 0.64	0.416	0.041 to 4.184	0.456
GGO_skewness	0.54 $\pm$ 0.46	0.14 $\pm$ 0.51	13.927	0.01 to 19484.806	0.476
GGO_mode	9.12 $\pm$ 7.83	8.03 $\pm$ 5.12	0.290	0.076 to 1.113	0.071
GGO_mean	9.67 $\pm$ 7.39	8.79 $\pm$ 4.63	3.155	0.551 to 17.613	0.199
CLO_kurtosis	3.25 $\pm$ 1.158	2.95 $\pm$ 0.44	0.11	0 to 0.445	0.017*
CLO_skewness	-0.30 $\pm$ 0.79	-0.33 $\pm$ 0.43	0.202	0.019 to 2.136	0.184
CLO_mode	12.94 $\pm$ 6.60	12.37 $\pm$ 3.42	1.439	0.571 to 3.626	0.440
CLO_mean	11.77 $\pm$ 6.50	11.29 $\pm$ 2.86	0.965	0.273 to 3.410	0.956

Table.S3 Statistical values of Cox proportional hazards regression model for predicting median length of hospital stay (LOS) in survival patients with CORV-2019. GGO, ground-glass opacity; CLO, Consolidation opacity. * $p < 0.05$

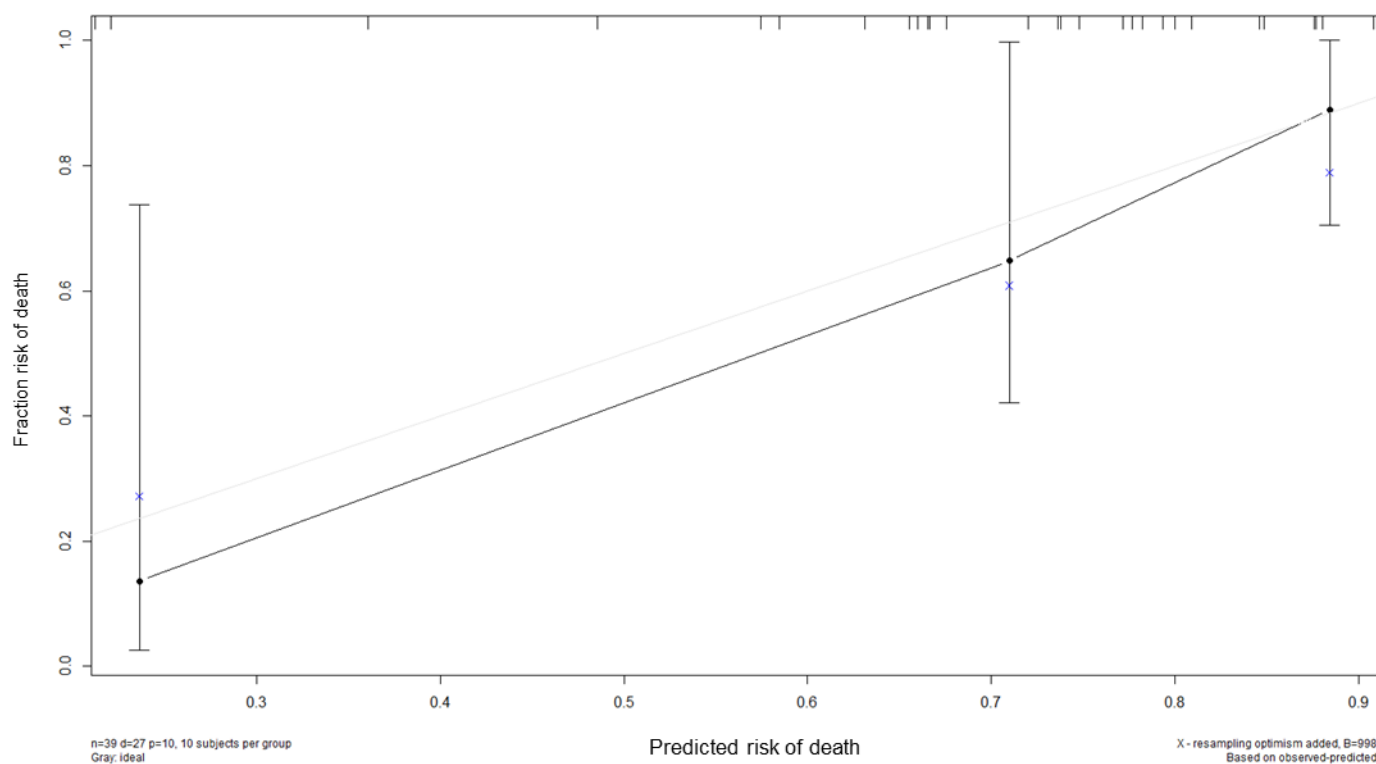


Figure.S1 Calibration curve for 30-day risk of death using the nomogram for COVID-19 patient

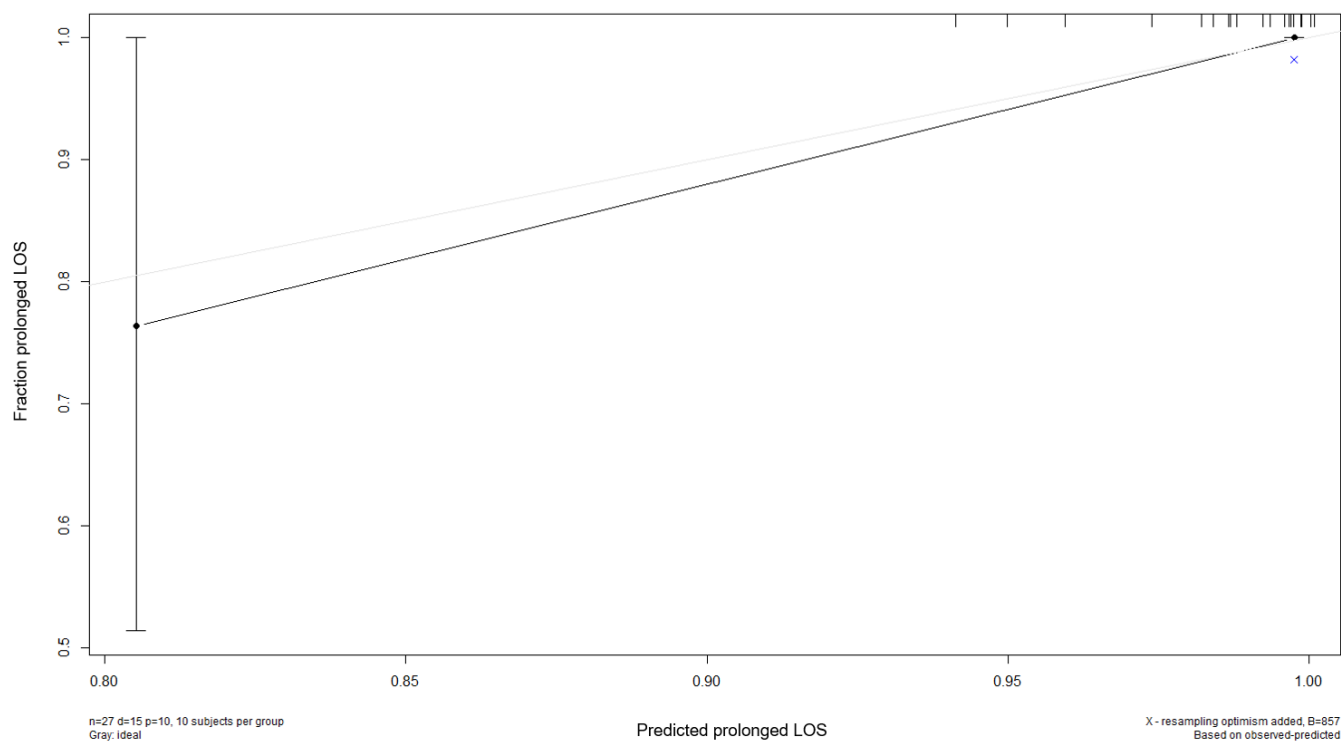


Figure.S2 Calibration curve for prolonged LOS (>30 days) using the nomogram for COVID-19 survival patients.