

## Supplement

### Validation of Clinical Risk Models for Predicting COVID Severity

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**Supplementary Table 1. COVID-GRAM and CURB-65 Predictors**

<b>COVID-GRAM Predictor</b>	<b>Odds Ratio (95% CI)</b>	<b>P-Value</b>
<b>Chest Xray Abnormality</b>	2.62 (1.51, 4.70)	<0.001
<b>Age</b>	1.01 (0.99, 1.02)	0.43
<b>Hemoptysis</b>	1.59 (0.39, 5.61)	0.49
<b>Dyspnea</b>	1.43 (0.92, 2.22)	0.111
<b>Altered Mental Status</b>	1.92 (1.17, 3.17)	0.010
<b>Comorbidity Count</b>	1.30 (0.98, 1.87)	0.102
<b>Cancer History</b>	1.59 (0.9, 2.77)	0.105
<b>Neutrophil-Lymphocyte-ratio</b>	1.09 (1.05, 1.13)	<0.001
<b>LDH</b>	1.002 (1.001, 1.003)	<0.001
<b>Total Bilirubin</b>	0.18 (0, 63.74)	0.56
<b>Overall C-Statistic</b>	<b>0.72 (0.67-0.76)</b>	<b>&lt;0.001</b>
<b>CURB-65 Predictors</b>	<b>Odds Ratio (95% CI)</b>	<b>P-Value</b>
<b>Altered Mental Status</b>	1.33 (0.83, 2.12)	0.23
<b>Uremia</b>	1.69 (1.08, 2.68)	0.023
<b>Respiratory Rate</b>	2.23 (0.94, 5.27)	0.058
<b>Critical Blood Pressure</b>	1.23 (0.72, 2.09)	0.44
<b>Age ≥65 Years</b>	0.88 (0.55, 1.39)	0.58
<b>Overall C-Statistic</b>	<b>0.61 (0.56-0.66)</b>	<b>&lt;0.001</b>

Presented are the odds ratios for each predictor in COVID-GRAM & CURB-65 for the primary outcome of critical illness. Critical illness was defined as an individual requiring mechanical ventilation or death. P<0.05 indicates that the risk factor was predictive of critical illness. Chest Xray abnormalities were based on chart review by medical professionals. All risk factors were collected within 48 hours of presentation to the hospital.