

Variable		$\beta$ -Coefficient	Odds ratio (95% CI)	Diagnostic score points
Age	50-70	0.4 (0.2 - 0.6)	1.5 (1.2-1.8)	1
Sex	Male	0.2 (0.0 - 0.3)	1.2 (1.0-1.4)	1
Ethnicity	Asian	0.6 (0.4 - 0.8)	1.8 (1.4-2.1)	1
	Black	0.6 (0.4 - 0.9)	1.9 (1.4-2.5)	1
	Mixed/Other	0.8 (0.4 - 1.1)	2.2 (1.5-3.1)	1
	Unknown	0.5 (0.3 - 0.8)	1.7 (1.3-2.2)	1
Cough, fever or shortness of breath		1.3 (1.2 - 1.5)	3.8 (3.2-4.5)	2
NEWS2 Score	>5	0.9 (0.7 - 1.1)	2.4 (2.0-2.9)	2
CRP	>50	1.1 (1.0 - 1.3)	3.0 (2.6-3.7)	2
Lymphocytes	<1	0.6 (0.4 - 0.8)	1.8 (1.5 - 2.2)	1
Chest x-ray	lung infiltrates	1.3 (1.0 - 1.5)	3.6 (2.8 -4.5)	2
	other abnormality	0.7 (0.4 - 0.9)	1.9 (1.4-2.6)	1

Supplementary Table 3. Logistic regression multivariable model for COVID-19 diagnosis using multivariate multiple imputation using chained equations for missing data in candidate predict variables, with odds ratio and  $\beta$  co-efficients. N=3,968. Area under the receiver operator curve 0.86 (95% CI 0.84 - 0.87).