

Supplementary material

**Elevated D-dimers and lack of anticoagulation predict PE in severe
COVID-19 patients**

Supplementary Table S1: Univariable predictors of in-hospital CTPA-confirmed pulmonary embolism in severe COVID 19 patients, using the Firth's Penalized Likelihood estimator

Variable	Univariate analysis	
	OR (95% CI)	p-value
Male sex	2.7 (1.1-6.1)	0.02
Extension CTPA findings	1.51(1.1-2.1)	0.03
White blood cell count (per quartile)	1.6 (1.1-2.1)	0.005
Blood urea (per quartile)	1.7 (1.2-2.4)	0.001
Gamma-GT (per quartile)	1.7 (1.2-2.3)	<0.001
Alkaline phosphatase (per quartile)	1.5 (1.1-2.1)	0.005
PaCO ₂ (per quartile)	1.8 (1.3-2.5)	<0.001
HCO ₃ ⁻ (per quartile)	1.7 (1.2-2.4)	0.001
No anticoagulant therapy	2.3 (0.9-5.9)	0.08
Conventional wards vs ICU	3.8 (1.8-7.9)	<0.001
D-dimer (per quartile)	4.7 (2.9-7.5)	<0.001
Model with D-dimer cut-off derived from ROC curve		
D-dimer > 2590 ng/mL	29.2 (11.6-73.2)	<0.001

CTPA: computed tomography pulmonary angiogram; Gamma-GT: Gamma-glutamyltranspeptidase; HCO₃⁻: bicarbonates; LMWH: low molecular weight heparin; ICU: intensive care unit.

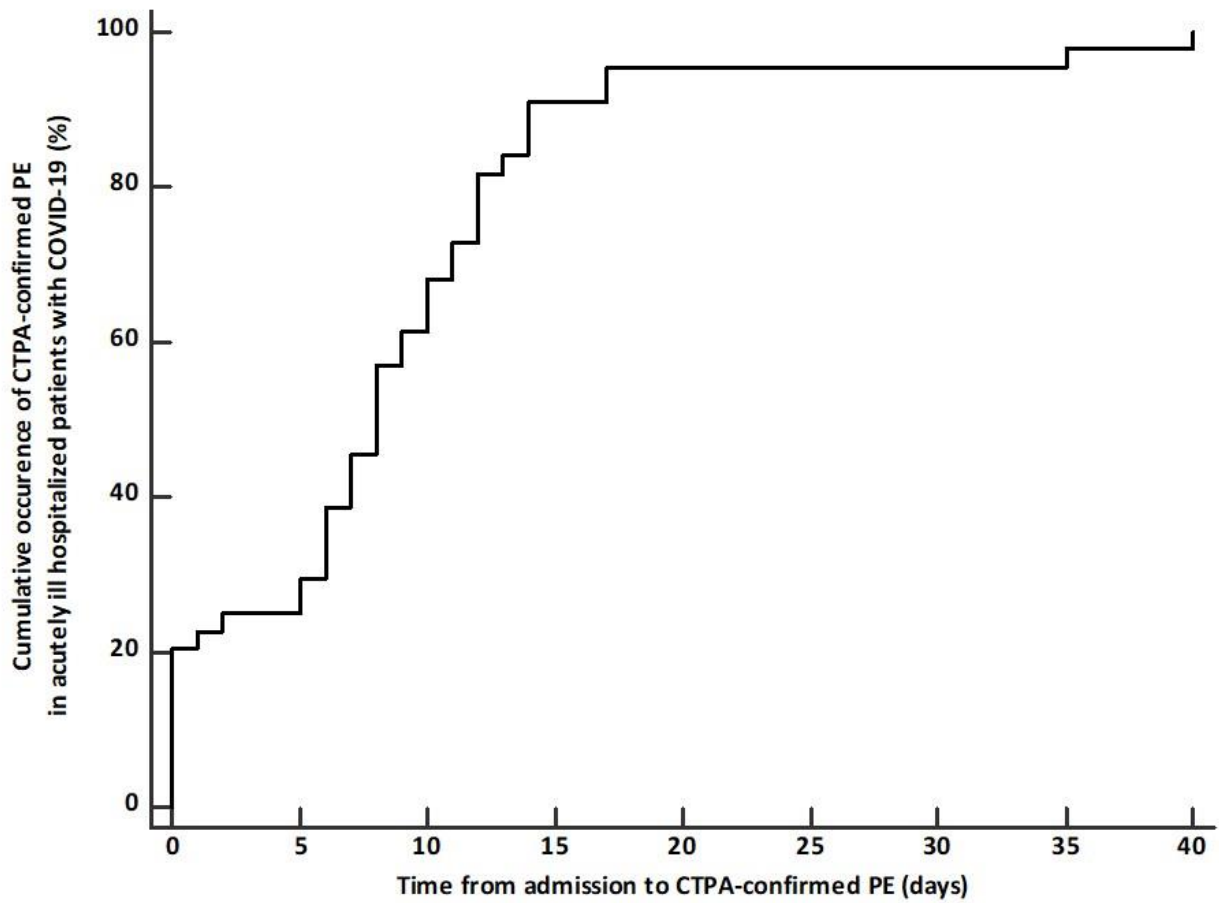


Figure S1: Cumulative occurrence of CTAP-confirmed pulmonary embolism between admission and CTPA in acutely ill hospitalized COVID-19 patients

COVID-19: coronavirus disease 2019; CTPA: computed tomography pulmonary angiography;

PE: pulmonary embolism

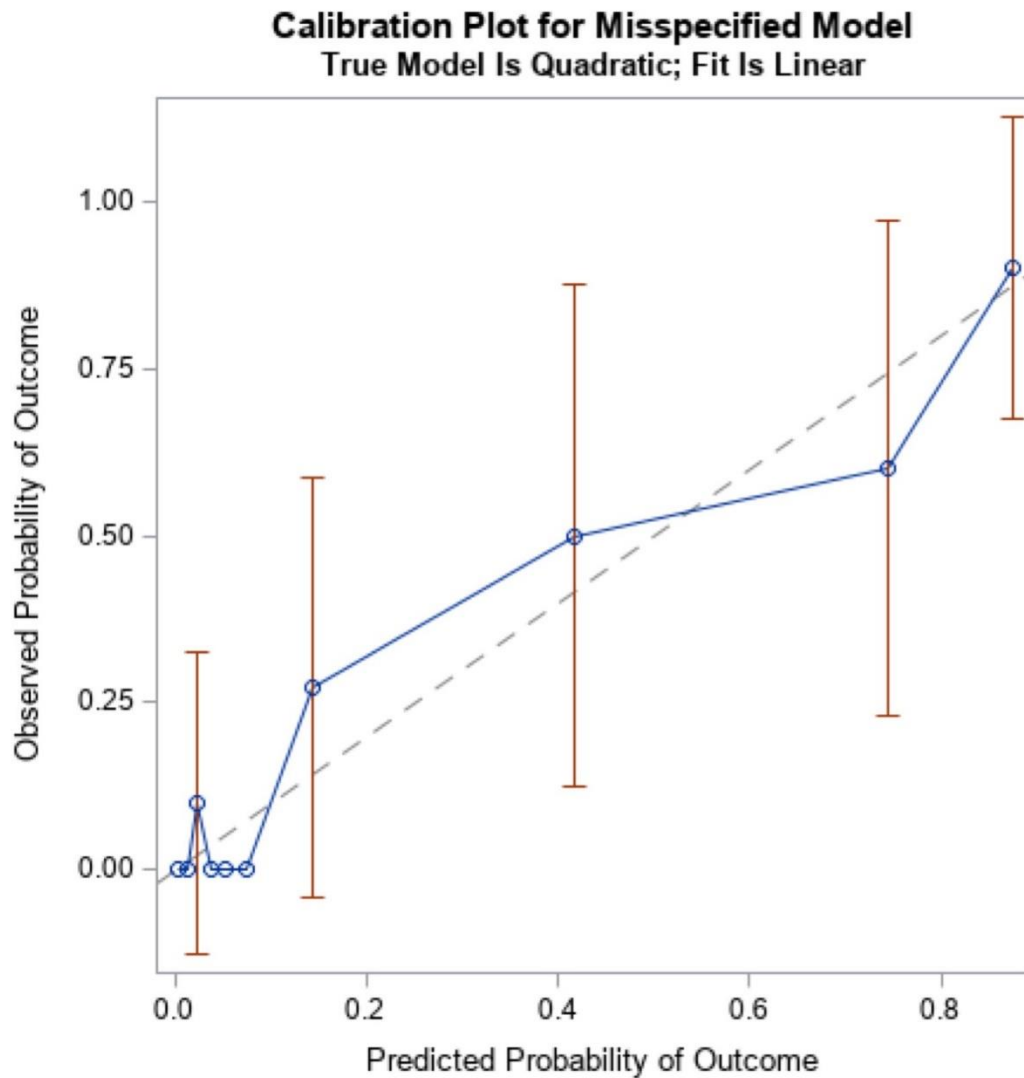


Figure S2: Decile calibration plots of the model predicting CTPA confirmed pulmonary embolism in severe Covid-19 patients. Model including D-dimer per quartile was well calibrated with the predicted risks and their confidence intervals distributed around the observed risk of pulmonary embolism. CTPA: computed tomography pulmonary angiography.

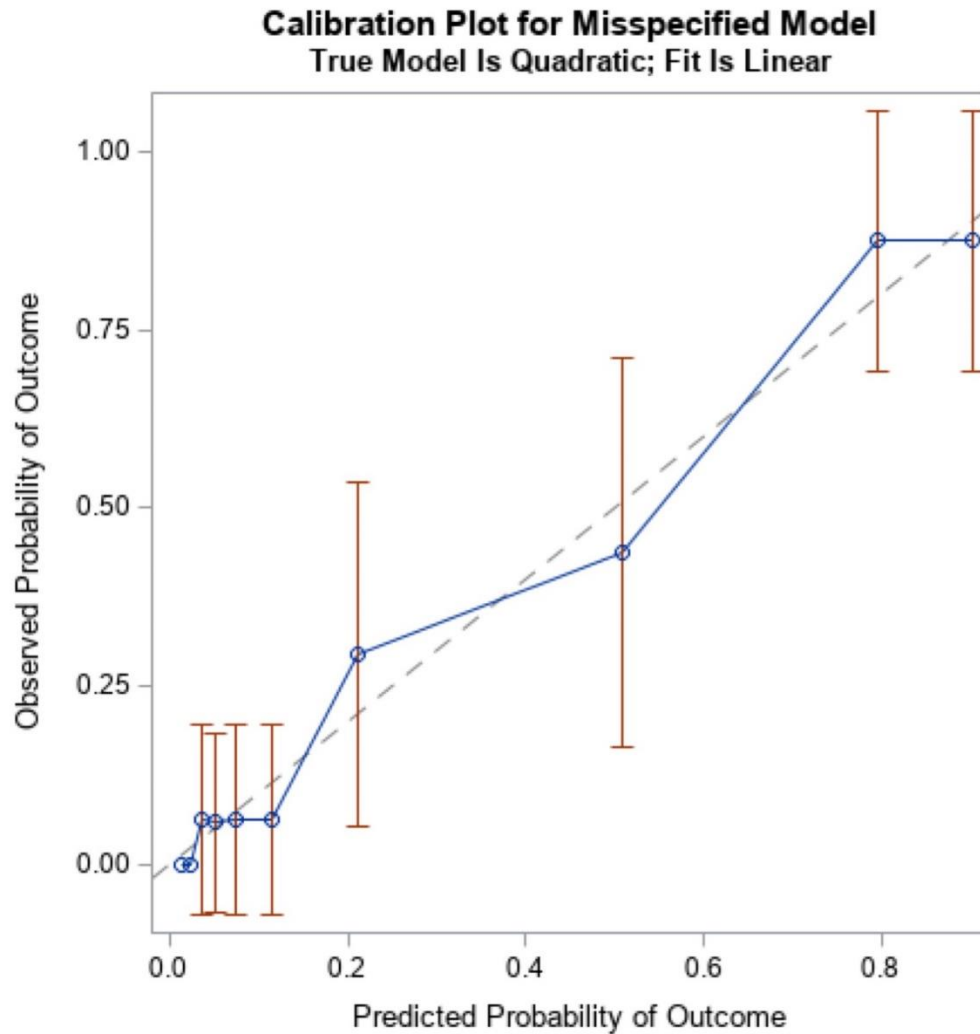


Figure S3: Decile calibration plots of the model predicting CTPA confirmed pulmonary embolism in severe Covid-19 patients. Model including the optimal ROC curve-derived cut-off value of D-dimer level (i.e. 2590 ng/mL) was well calibrated with the predicted risks and their confidence intervals distributed around the observed risk of pulmonary embolism. CTPA: computed tomography pulmonary angiography