

Supplemental Table 3. Redefined area under the ROC curve and goodness-of-fit test of the multivariate models for predicting troponin elevation

Models for prediction of elevated and minimally-elevated troponin levels				Diff.	<i>P</i> -value*	Diff.	<i>P</i> -value*	D:ff	D.volue*
Description		AUC	95% CI	DIII.	<i>P</i> -value	DIII.	<i>P</i> -value	Diff.	<i>P</i> -value*
Model 1	Six comorbidities [†]	0.745	0.716-0.774	Ref.					
Model 2	Eight factors [†]	0.760	0.731-0.789	0.015	0.032	Ref.			
Model 3	Eight factors and four other determinants [†]	0.794	0.767-0.821	0.049	< 0.01	0.034	< 0.01	Ref	
Model 4	All variables (total of 27 variables) [†]	0.804	0.777-0.831	0.059	< 0.01	0.044	< 0.01	0.010	0.038

Model 1 included six comorbidities, such as AF, IHD, MH, HF, RI, and active cancer. Model 2 included the NIHSS score and insular cortical lesions in addition to the factors included in model 1. Model 3 included age, leukocyte count, and LDL and albumin levels in addition to the factors included in model 2. Model 4 included age, sex, conventional risk factors, and all laboratory results mentioned in Table 1.

ROC, receiver operating characteristic; AUC, area under the curve; Cl, confidence interval; Diff., difference; Ref., reference; AF, atrial fibrillation; IHD, ischemic heart disease; MH, myocardial hypertrophy; HF, heart failure; RI, renal impairment; NIHSS, National Institutes of Health Stroke Scale; LDL, low-density lipoprotein; CAD, coronary artery disease.

*Comparing the AUC of paired data ROC curves using the method of DeLong et al.²⁷; *Two-dimensional transthoracic echocardiography was conducted on patients who fulfilled the prescreening criteria: (1) suspected as having preassigned comorbidities; (2) suspected as having other cardiac comorbidities including arrhythmia and valvular or structural heart disease in the known history; (3) suspected as having potential embolic sources contributing to embolic stroke pattern; and (4) suspected as having medical conditions possibly contributing to embolism, including active cancer, hematologic or autoimmune disease, aortic problem, or other coagulopathic conditions. Finally, echocardiography was conducted on a total of 774 out of 1,092 patients. Then, cardiac comorbidity was redefined based on the echocardiographic abnormalities: (1) IHD was redefined as known history or having an echocardiographic wall motion abnormality which was defined as wall motion score index >1 using a standard 16-segment model compatible with CAD; (2) MH was redefined as known history or having echocardiographic ventricular hypertrophy which was defined as ventricular mass index >95 g/m² for women and >15 g/m² for men; and (3) HF was redefined as known history or having a reduced ejection fraction which was defined as <50%.