Appendix 1 Sample size calculation
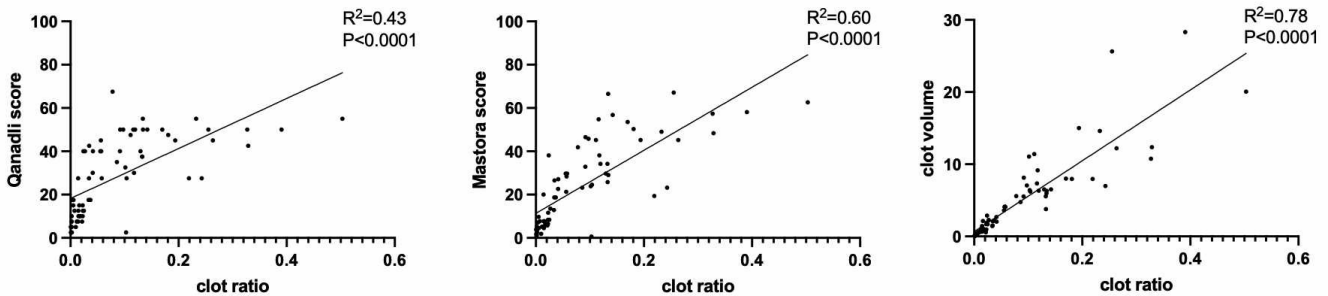
In the phase of designing, we calculated the minimal sample size based on the reference to the preliminary study (15) and the sample size calculation formula. The formula is as follows.

$$n = \left(\frac{z_{1-\alpha/2} * \sqrt{p*(1-p)}}{\delta} \right)^2$$

In the formula, α=0.05, δ=0.1, sensitivity =0.9, specificity =0.8. Therefore, the final number of total sample size was 62. Our sample size (n=70) fit the minimal requirement.

Figure S1 Correlation analysis of clot ratio with Qanadli score, Mastora score and clot volume.

Table S1 AUC of the clot burden in predicting the risk stratification of patients with APE

Clot burden scores	AUC (95% CI)	Sensitivity	Specificity	Threshold
Qanadli score (%)	0.688 (0.520–0.857)	0.706	0.66	36.00
Mastora score (%)	0.652 (0.529–0.762)	0.647	0.736	29.4
Clot volume (mL)	0.695 (0.545–0.844)	0.824	0.623	3.24
Clot ratio (%)	0.719 (0.569–0.868)	0.824	0.623	5.00

AUC, area under the curve; CI, confidence interval; APE, acute pulmonary embolism.

Table S2 AUC of the clot burden scores to predict risk stratification in hemodynamically stable patients with APE

Clot burden scores	AUC (95% CI)	Sensitivity	Specificity	Threshold
Qanadli score (%)	0.613 (0.480–0.735)	0.625	0.660	36.25
Mastora score (%)	0.603 (0.469–0.726)	0.750	0.604	22.9
Clot volume (mL)	0.731 (0.602–0.837)	0.750	0.792	6.36
Clot ratio (%)	0.752 (0.625–0.854)	0.875	0.717	0.09

AUC, area under the curve; APE, acute pulmonary embolism; CI, confidence interval.