

Table S1 Sample distribution of the training and validation sets

All (n=264)	Training (n=184)	Validation (n=80)
Symptomatic	84	35
Asymptomatic	100	45

Table S2 Model and scanning parameters of the four CT devices used in the study

Device	Tube voltage (kV)	Tube current (mA)	FOV	Matrix size	Slice thickness (mm)	Slice spacing
Aquilion ONE (Canon Medical Systems)	100	90–170	240×240	512×512	0.5	0.5
Discovery CT750 HD (GE HealthCare)	100	240–480	250×250	512×512	0.625	0.625
SOMATOM Definition AS+ (Siemens Healthineers)	100	160–220	250×250	512×512	0.6	0.6
SOMATOM Force (Siemens Healthineers)	100	80–150	250×250	512×512	0.75	0.75

FOV, field of view.

Table S3 Performance of the four models in selecting deep learning features in the training cohort

ML model	Conventional				DenseNet121				Swin Transformer				Fusion			
	Accuracy	Precision	Recall	F1-score	Accuracy	Precision	Recall	F1-score	Accuracy	Precision	Recall	F1-score	Accuracy	Precision	Recall	F1-score
KNN	0.604	0.584	0.467	0.516	0.907	0.914	0.883	0.898	0.917	0.920	0.898	0.909	0.919	0.915	0.909	0.912
SVM	0.637	0.644	0.477	0.543	0.913	0.926	0.883	0.903	0.925	0.928	0.907	0.917	0.926	0.932	0.907	0.919
SGD	0.653	0.662	0.565	0.565	0.907	0.913	0.883	0.898	0.923	0.926	0.906	0.916	0.921	0.920	0.909	0.914
RF	0.621	0.615	0.474	0.530	0.888	0.893	0.860	0.876	0.904	0.920	0.868	0.893	0.902	0.913	0.871	0.891

The SVM classifier demonstrated the highest performance and was subsequently selected for model construction. KNN, k-nearest neighbors; ML, machine learning; RF, random forest; SGD, stochastic gradient descent; SVM, support vector machine.