

Figure S1 The Bland-Altman plot for the intra- (A) and interobserver (B) consistency test of volume measurement. SD, standard deviation.

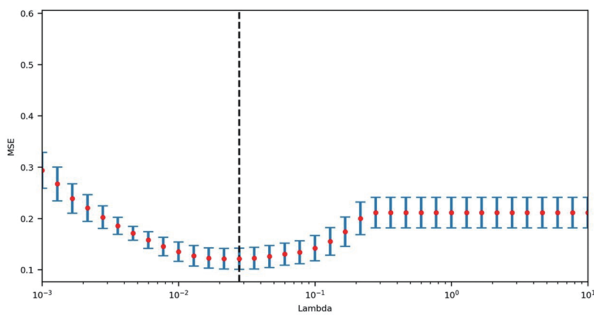


Figure S2 Selection for the optimal parameter (λ) for radiomics feature selection. MSE, mean square error.

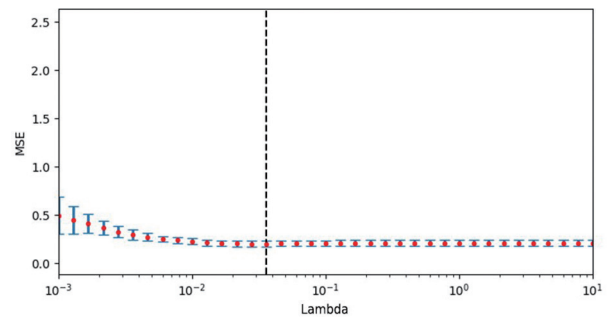


Figure S3 Selection of the optimal parameter (λ) for delta radiomics feature selection. MSE, mean square error.

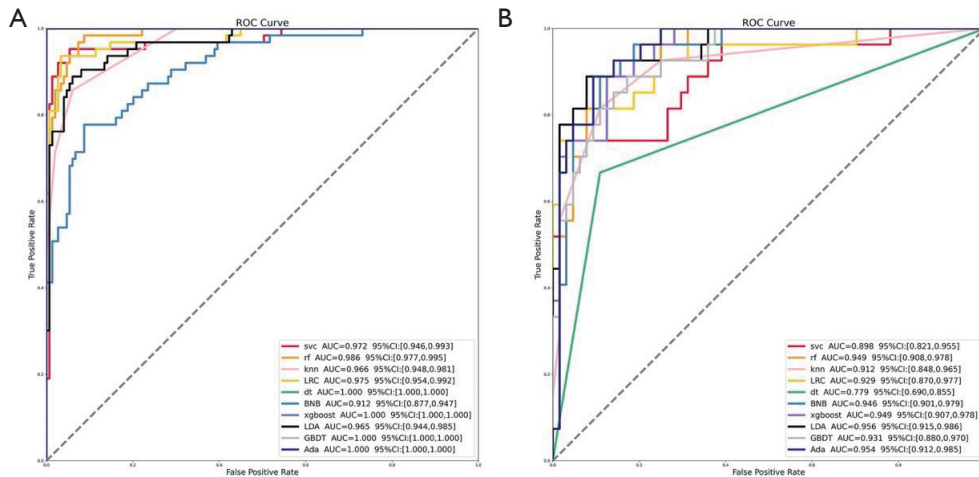


Figure S4 ROCs of the radiomics-clinical models of 10 different algorithms in the training set (A) and the test set (B). ROC, receiver operating characteristic; svc, support vector classifier; AUC, area under curve; CI, confidence interval; rf, random forest classifier; knn, K-nearest neighbor classifier; LRC, logistic regression classifier; dt, decision tree classifier; BNB, Bernoulli Naïve Baye classifier; xgboost, extreme gradient boosting classifier; LDA, linear discriminant analysis classifier; GBDT, gradient boosting decision tree classifier; Ada, AdaBoost classifier.

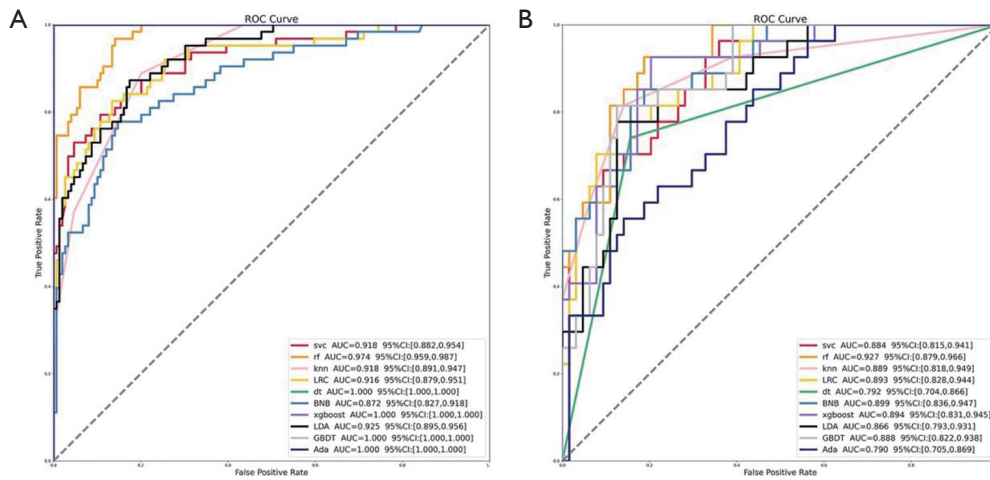


Figure S5 ROCs of the delta-radiomics clinical models of 10 different algorithms in the training set (A) and the test set (B). ROC, receiver operating characteristic; svc, support vector classifier; AUC, area under curve; CI, confidence interval; rf, random forest classifier; knn, K-nearest neighbor classifier; LRC, logistic regression classifier; dt, decision tree classifier; BNB, Bernoulli Naïve Baye classifier; xgboost, extreme gradient boosting classifier; LDA, linear discriminant analysis classifier; GBDT, gradient boosting decision tree classifier; Ada, AdaBoost classifier.

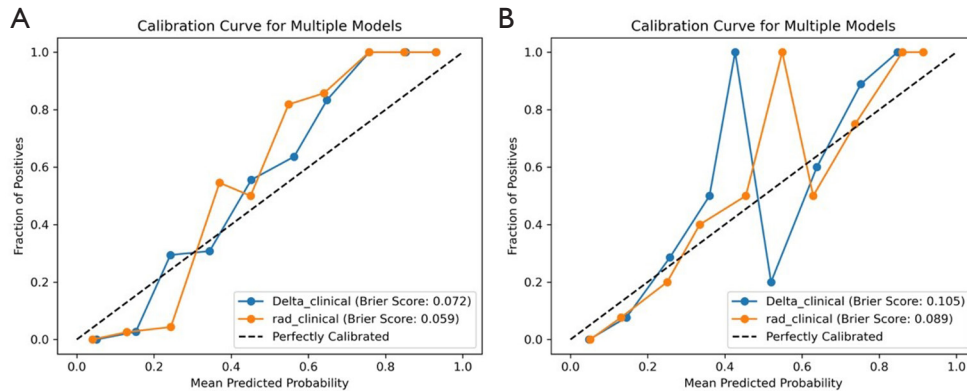


Figure S6 The calibration curve and the Brier score of the two models in the training set (A) and test set (B).

Table S1 The statistics of the Bland-Altman plot

Statistics	Intraobserver	Interobserver
Sample size (count)	20	20
Arithmetic mean (mm ³)	3.7715	18.4640
95% confidence interval (mm ³)	-8.8561 to 16.3991	-2.6903 to 39.6183
P (H0: mean =0)	0.5393	0.0835
Lower limit (mm ³)	-49.1118	-70.1284
95% confidence interval (mm ³)	-71.0631 to -27.1604	-106.9023 to -33.3545
Upper limit (mm ³)	56.6548	107.0564
95% confidence interval (mm ³)	34.7034 to 78.6061	70.2825 to 143.8303

Table S2 The complete list of radiomics and delta radiomics features after selection

Feature category	Feature
Radiomics features	original_firstorder_90Percentile
	original_gldm_SmallDependenceLowGrayLevelEmphasis
	original_glrlm_LongRunLowGrayLevelEmphasis
	exponential_firstorder_RootMeanSquared
	logarithm_firstorder_90Percentile
	logarithm_firstorder_Kurtosis
	logarithm_glrlm_LongRunLowGrayLevelEmphasis
	squareroot_firstorder_InterquartileRange
	squareroot_glrlm_LongRunLowGrayLevelEmphasis
	wavelet-LLH_glcM_Contrast
	wavelet-LLH_glcM_Id
	wavelet-LLH_glszm_GrayLevelNonUniformityNormalized
	wavelet-LLH_glszm_GrayLevelVariance
	wavelet-LHL_gldm_DependenceEntropy
	wavelet-LHL_glszm_GrayLevelNonUniformityNormalized
	wavelet-LHL_glszm_HighGrayLevelZoneEmphasis
	wavelet-LHL_glszm_LowGrayLevelZoneEmphasis
	wavelet-LHL_glszm_SizeZoneNonUniformityNormalized
	wavelet-LHH_glcM_MaximumProbability
	wavelet-LHH_glszm_GrayLevelNonUniformityNormalized
	wavelet-LHH_glszm_SizeZoneNonUniformityNormalized
	wavelet-LHH_glszm_ZoneEntropy
	wavelet-HLL_glrlm_HighGrayLevelRunEmphasis
	wavelet-HLL_glrlm_LowGrayLevelRunEmphasis
	wavelet-HLL_glszm_SmallAreaHighGrayLevelEmphasis
	wavelet-HLH_glszm_GrayLevelNonUniformityNormalized
	wavelet-HLH_glszm_SmallAreaHighGrayLevelEmphasis
	wavelet-HHL_glszm_GrayLevelNonUniformityNormalized
	wavelet-HHL_glszm_GrayLevelVariance
	wavelet-HHL_glszm_SizeZoneNonUniformityNormalized
	wavelet-HHH_glrlm_LongRunLowGrayLevelEmphasis
	wavelet-HHH_glrlm_RunVariance
	wavelet-LLL_firstorder_RootMeanSquared
	wavelet-LLL_glrlm_RunEntropy
Delta radiomics features	original_firstorder_RootMeanSquared
	lbp-2D_firstorder_90Percentile
	wavelet-LLH_ngtdm_Strength
	wavelet-LHH_firstorder_Skewness
	wavelet-LHH_glszm_ZoneEntropy
	wavelet-HHL_glcM_Autocorrelation
	wavelet-HHL_glcM_ClusterShade
	wavelet-HHH_ngtdm_Coarseness
	wavelet-LLL_gldm_HighGrayLevelEmphasis
wavelet-LLL_gldm_LowGrayLevelEmphasis	

glcM, gray-level co-occurrence matrix; gldm, gray-level difference matrix; glrlm, gray-level run length matrix; glszm, gray-level size zone matrix; ngtdm, neighboring gray-tone difference matrix; lbp, local binary patterns; LLH/LHL/LHH/HLL/HLH/HHL/HHH/LLL, where L and H are low- and high-pass filters, respectively.