

Table S1 Predictive value analysis of different models for central compartment lymph node metastasis

Methods	Sen, %	Spe, %	PPV, %	NPV, %	Acc, %	AUROC (95% CI)	P
Conventional US DT	73.3	74.0	74.3	73.0	73.6	0.773 (0.696–0.849)	0.569*
Multimodal US DT	80.0	76.7	77.9	78.9	78.4	0.837 (0.771–0.902)	0.009 [#]
Multimodal US RF	64.0	74.0	71.6	66.7	68.9	0.753 (0.675–0.832)	0.017 [^]

*, multimodal US RF vs. conventional US DT; [#], conventional US DT vs. multimodal US DT; [^], multimodal US RF vs. multimodal US DT. US, ultrasound; DT, decision tree; RF, random forest; Sen, sensitivity; Spe, specificity; PPV, positive predictive value; NPV, negative predictive value; Acc, accuracy; AUROC, area under the receiver operating characteristic curve; CI, confidence interval.

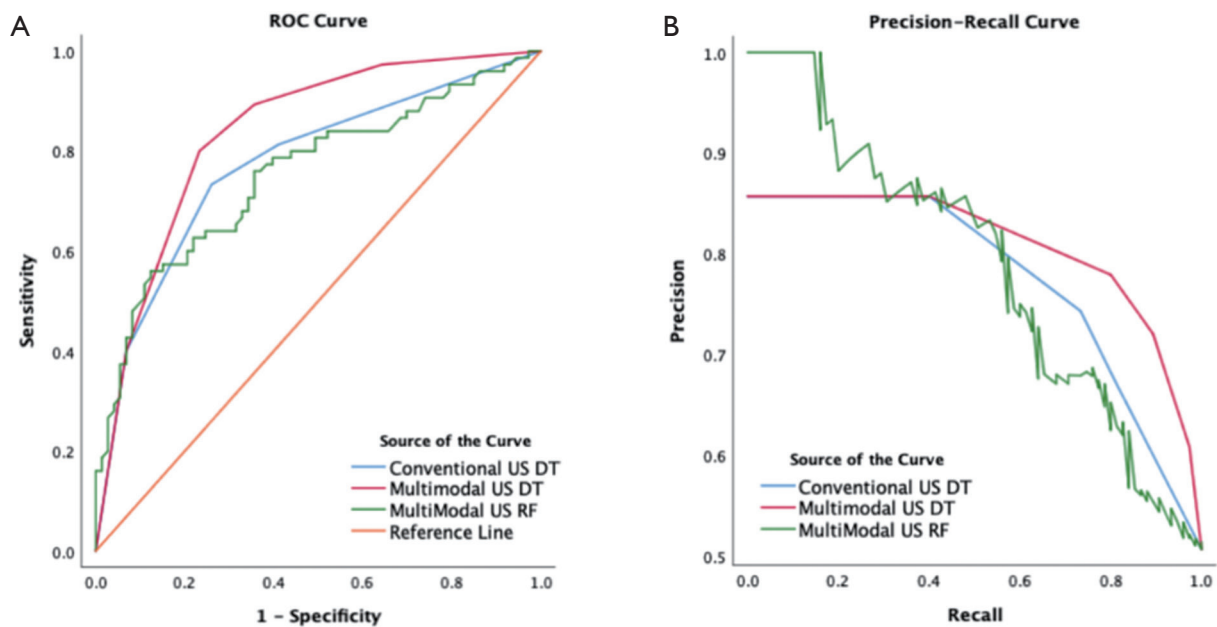


Figure S1 Evaluation of the RF predictive models. (A) The left picture shows the receiver operating characteristic curve analysis for predicting central compartment lymph node metastasis based on the RF and DT algorithm. The area under the ROC curve for the multimodal US RF was the smallest among the 3 models. (B) The right picture shows the precision-recall curves of the 3 models. US, ultrasound; DT, decision tree; RF, random forest; ROC, receiver operating characteristic.