

Table S1 Cross-tabulation of MRI-positive and negative results with histological validation in CC patients undergoing PLND at Lishui Central Hospital

MRI result	Number of patients with positive lymph nodes by histology	Number of patients with negative lymph nodes by histology
Number of patients with positive lymph nodes on MRI	6	9
Number of patients with negative lymph nodes on MRI	12	75

Table S2 Cross-tabulation of MRI-positive and negative results with histological validation in CC patients undergoing PLND at the First Affiliated Hospital of Ningbo University

MRI result	Number of patients with positive lymph nodes by histology	Number of patients with negative lymph nodes by histology
Number of patients with positive lymph nodes on MRI	7	8
Number of patients with negative lymph nodes on MRI	24	98

Table S3 Cross-tabulation of MRI-positive and negative results with histological validation in CC patients undergoing PLND at the First Affiliated Hospital of Wenzhou Medical University

MRI result	Number of patients with positive lymph nodes by histology	Number of patients with negative lymph nodes by histology
Number of patients with positive lymph nodes on MRI	42	40
Number of patients with negative lymph nodes on MRI	108	598

Table S4 The accuracy of MRI in evaluating LNM in three centers

Parameter	Ningbo	Wenzho	Lishui	P value
Sensitivity (%)	22.58 (10.36–41.12)	28.00 (21.23–35.84)	33.33 (14.25–57.55)	0.652
Specificity (%)	92.45 (85.66–96.24)	93.73 (91.43–95.54)	89.29 (81.23–94.26)	0.034
PPV (%)	46.67 (23.57–71.14)	51.22 (41.18–61.18)	40.00 (18.17–65.76)	0.295
NPV (%)	80.33 (71.48–87.06)	84.70 (82.00–87.07)	86.21 (76.28–92.63)	0.600

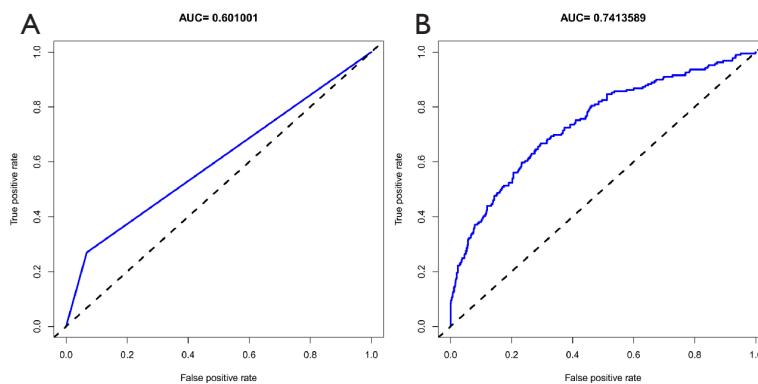


Figure S1 (A) ROC curve of lymph node metastasis was evaluated by MRI. (B) ROC curve of clinical features combined with MRI to evaluate LNM.

Table S5 C-index results of clinical nomograms

	Coef	S.E.	Wald Z	P
Intercept	-2.3285	0.1363	-17.09	<0.0001
SCCA	0.0459	0.0094	4.87	<0.0001
CEA	0.0340	0.0127	2.67	0.0075
CA125	0.0135	0.0038	3.56	0.0004
MRI=Yes	1.2950	0.2339	5.54	<0.0001

Table S6 The correlation between HPV status, tumor size and positive pathological lymph nodes

Clinical features	Category	Pathological positivity	Totality	Positive rate
HPV status	HPV 16	30	158	19.00%
	HPV 18	8	47	17.00%
	Non-16/18 HPV positive	7	91	7.70%
	negative	3	35	8.60%
	NA	7	123	5.70%
Tumor size (cm)	≤2	10	163	6.10%
	2.1-4	25	204	12.30%
	>4	20	97	20.60%

Table S7 Logistic regression analysis of the association between HPV status, tumor size, and pathological positivity

Parameter	β	OR	95% CI	P value
HPV negative	Reference			
HPV 16	1.52	4.57	2.05-10.18	<0.001
HPV 18	1.18	3.25	1.25-8.47	0.016
Non-16/18 HPV positive	0.31	1.36	0.48-3.85	0.562
HPV NA	-0.29	0.75	0.24-2.34	0.618
Tumor size	0.82	2.27	1.60-3.22	<0.001