

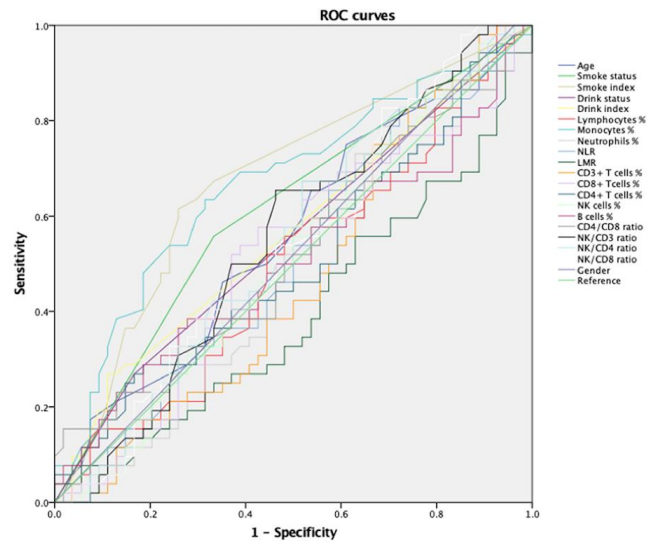
Supplementary materials

Supplementary Table 1 Optimal cut-off values of variables defined by ROC curves

Variables	Cut-off values	Variables	Cut-off values
Age	57	CD8+ T cell %	22.2
Smoke index	240	CD4+ T cell %	41.8
Drink index	5.5	NK cells %	19
Lymphocytes %	35.3	B cells %	14.2
Monocytes %	7.2	CD4/CD8 ratio	2.7
Neutrophils %	57.5	NK/CD3 ratio	0.3
NLR	1.4	NK/CD4 ratio	0.6
MLR	3.3	NK/CD8 ratio	0.7
CD3+ T cell %	66.9		

Supplementary Table 2 Clinical data and immune parameters of patients in the validation cohort

Variables	Laryngeal premalignant lesion	Laryngeal malignant lesion	P
Age, years	59.11±10.17	63.22±9.26	0.122
Gender, male, No. (%)	23 (82.1%)	27 (100%)	0.067
Smokers, No. (%)	10 (35.7%)	19 (70.4%)	0.01
Smoke index	376.79±525.195	461.11±406.754	0.018
Drinkers, No. (%)	7 (25.0%)	8 (29.6%)	0.700
Drinker index	4.39±9.53	4.41±7.29	0.995
Lymphocytes (%)	32.60±9.57	29.74±8.68	0.252
Monocytes (%)	6.87±1.93	7.36±2.49	0.420
Neutrophils (%)	58.23±10.22	60.46±9.16	0.399
NLR	2.27±2.17	2.30±1.01	0.944
LMR	5.03±1.96	4.42±1.88	0.246
CD3+ T cells (%)	62.81±11.07	58.53±11.48	0.166
CD8+ T cells (%)	23.76±8.58	21.62±10.30	0.406
CD4+ T cells (%)	36.98±7.98	34.41±7.46	0.224
NK cells (%)	23.17±12.54	28.80±12.39	0.099
B cells (%)	12.68±4.55	11.58±5.91	0.442
CD4/CD8+ T cell ratio	1.74±0.63	2.04±1.13	0.218
NK/CD3+ T cell ratio	0.42±0.35	0.55±0.34	0.155
NK/CD4+ T cell ratio	0.70±0.56	0.92±0.52	0.147
NK/CD8+ T cell ratio	1.23±1.09	1.83±1.51	0.098



Supplementary Figure 1 ROC analysis of variable for diagnosis of laryngeal malignant lesion