

## Supplementary

**Table S1** Comparison of clinical data between the modeling group and validation group

Characteristics	Modeling group (n=703)	Validation group (n=301)	P value
Age (years)	65 (57–71)	64 (56–70)	0.09
Gender (n)			0.20
Women	95 (31.56%)	192 (27.31%)	
Men	206 (68.44%)	511 (72.69%)	
Blood type			0.07
A	115 (38.21%)	235 (33.43%)	
AB	28 (9.30%)	69 (9.82%)	
B	84 (27.91%)	183 (26.03%)	
O	74 (24.58%)	216 (30.72%)	
D-dimer (mg/L)	0.37 (0.22–0.68)	0.37 (0.25–0.69)	0.39
NLR	2.05 (1.52–2.71)	2.10 (1.67–2.88)	0.06
PLR	133.12 (99.52–182.21)	139.18 (105.43–188.81)	0.054
FLR	1.87 (1.42–2.55)	2.03 (1.51–2.65)	0.12
LMR	3.74 (2.83–4.85)	3.77 (2.59–4.58)	0.20
ALR	26.67 (21.45–33.62)	27.66 (22.58–35.61)	0.06
LDH (mmol/L)	175.00 (155.00–199.00)	172.00 (153.00–191.50)	0.08
CEA (ng/mL)	2.20 (1.37–3.79)	2.30 (1.31–4.01)	0.87
CA72-4 (U/mL)	2.05 (1.50–4.66)	2.21 (1.50–4.53)	0.32
CA19-9 (U/mL)	9.61(5.71–17.30)	10.20 (6.57–20.25)	0.053
AFP (ng/mL)	2.42 (1.76–3.38)	2.38 (1.70–3.35)	0.68
CA125 (U/mL)	9.46 (6.77–14.10)	9.94 (7.24–14.20)	0.31

The measurement data are expressed as the median and quartile (25–75%), and the enumeration data are expressed as frequency and rate (%). PNI, perineural invasion; NLR, neutrophil-to-lymphocyte ratio; PLR, platelet-to-lymphocyte ratio; FLR, fibrinogen-to-lymphocyte ratio; LMR, lymphocyte-to-monocyte ratio; ALR, albumin-to-lymphocyte ratio; LDH, lactic dehydrogenase; CEA, carcinoembryonic antigen; CA72-4, carbohydrate antigen 72-4; CA19-9, carbohydrate antigen 19-9; AFP, Alpha-fetoprotein; CA125, carbohydrate antigen 125.