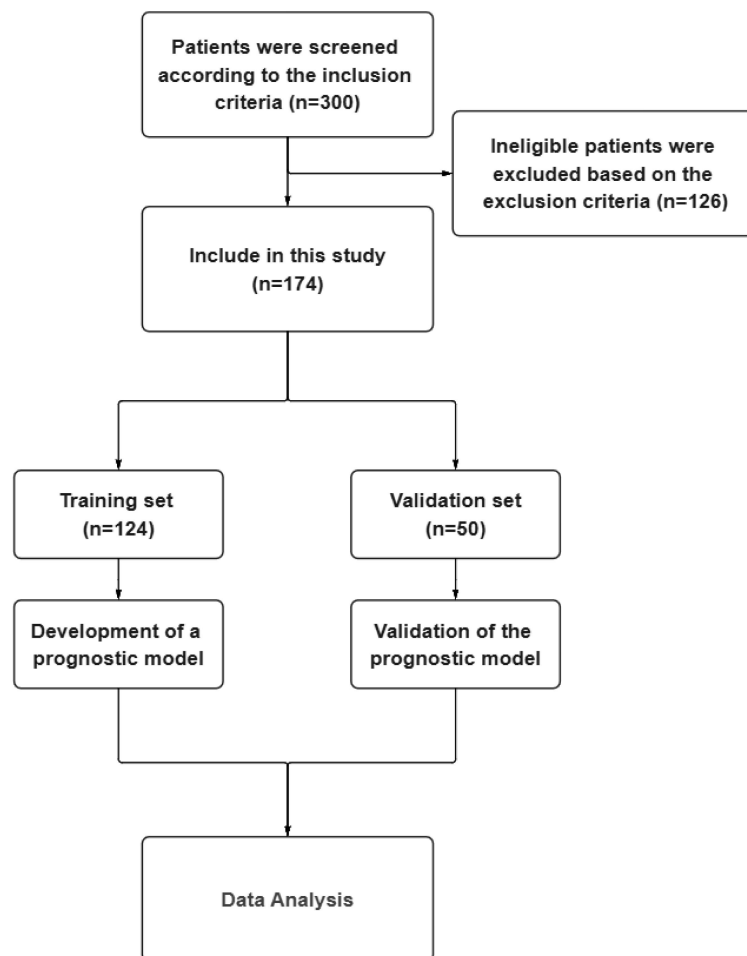




Supplementary Figure 1. Flow Diagram of Study Enrollment

Supplementary Table 1. Patient-Level Baseline Characteristics

Characteristics	Training set	Validation set	P value
n	124	50	
Age (year), median (IQR)	58.5 (53.75, 65)	57 (54.25, 64.5)	0.960
Male, n (%)	119 (96)	49 (98)	0.837
Survival time, median (IQR)	1675.5 (637.5, 2121.5)	1575 (548.5, 2044.2)	0.335
T.stage, n (%)			0.354
T1a	9 (7.3)	2 (4)	
T1b	21 (16.9)	8 (16)	
T2	27 (21.8)	18 (36)	
T3	66 (53.2)	22 (44)	
T4a	1 (0.8)	0 (0)	
N.stage, n (%)			0.895
N0	68 (54.8)	28 (56)	
N1	30 (24.2)	10 (20)	
N2	21 (16.9)	9 (18)	
N3	5 (4)	3 (6)	
M.stage, n (%)			0.204
M0	121 (97.6)	46 (92)	
M1	3 (2.4)	4 (8)	
Differentiation, n (%)			0.997
Well-differentiated	25 (20.2)	10 (20)	
Moderately-differentiated	65 (52.4)	26 (52)	
Poorly-differentiated	34 (27.4)	14 (28)	
Depth(cm), median (IQR)	0.4 (0.2, 0.6)	0.4 (0.2, 0.5)	0.659
TSR(low=0, high=1), n (%)			0.092
1	72 (58.1)	22 (44)	

0	52 (41.9)	28 (56)	
TIL(%), median (IQR)	10 (5, 26.25)	12.5 (10, 20)	0.156
TLS(0=non,1=yes), n (%)			0.219
0	102 (82.3)	37 (74)	
1	22 (17.7)	13 (26)	
MTV, median (IQR)	26.13 (15.89, 39.04)	28.535 (18.31, 42.75)	0.322
SUV, median (IQR)	12.95 (10.25, 20.65)	14.46 (10.36, 23.20)	0.591
TLG, median (IQR)	66.34 (43.53, 87.29)	64.23 (44.10, 87.40)	0.913
SUR, median (IQR)	5.57 (4.0658, 7.94)	6.5717 (4.5, 8.1892)	0.331
Length-width(cm), median (IQR)	3 (2, 4)	3.5 (3, 4.5)	0.037
LNM(0=non,1=yes), n (%)			0.269
0	68 (54.8)	32 (64)	
1	56 (45.2)	18 (36)	

Italicized values indicate statistical significance. Nominal variables are expressed as numbers (percentages); continuous variables as medians (IQR). IQR, interquartile ranges. LNM, lymph node metastasis status; TIL, tumor-infiltrating lymphocyte density; TSR, stromal-to-tumor ratio; TLS, tertiary lymphoid structures; MTV, metabolic tumor volume; SUV, standardized uptake value; SUR, standardized uptake ratio; TLG, total lesion glycolysis.