

**Table S1** Univariate analysis of clinical factors in the training group

Characteristics	No RP (n, %)	RP (n, %)	P
n	50.00	17.00	
Age (year, mean $\pm$ SD)	64.0 $\pm$ 10.90	60.2 $\pm$ 9.50	0.20
Gender			
Female	5 (83.33)	1 (16.67)	0.98
Male	45 (73.77)	16 (26.23)	
Smoke			
No	24 (64.86)	13 (35.14)	0.08
Yes	26 (86.67)	4 (13.33)	
Emphysema			
No	33 (80.49)	8 (19.51)	0.27
Yes	17 (65.38)	9 (34.62)	
ILAS			
0	37 (74.00)	13 (26.00)	0.91
1	8 (80.00)	2 (20.00)	
2	5 (71.43)	2 (28.57)	
Diabetes			
No	44 (72.13)	17 (27.87)	0.31
Yes	6 (100.00)	0 (0.00)	
Pathology			
Adenocarcinoma	16 (61.54)	10 (38.46)	0.07
Others	3 (60.00)	2 (40.00)	
Squamous	31 (86.11)	5 (13.89)	
T			
1–2	28 (73.68)	10 (26.32)	1.00
3–4	22 (75.86)	7 (24.14)	
N			
0–1	12 (80.00)	3 (20.00)	0.84
2–3	38 (73.08)	14 (26.92)	
Stage			
II–III	44 (75.86)	14 (24.14)	0.86
IV	6 (66.67)	3 (33.33)	
Modality			
conCRT	13 (72.22)	5 (27.78)	0.57
RT alone	8 (88.89)	1 (11.11)	
seqCRT	29 (72.50)	11 (27.50)	

RP, radiation pneumonitis; ILAS, interstitial lung abnormality score; conCRT, concurrent chemoradiotherapy; RT, radiotherapy; seqCRT, sequential chemoradiotherapy.

**Table S2** Univariate analysis of dosimetric parameters of contralateral, ipsilateral, and total lungs

Dosimetric parameters	No RP	RP	P
n	50	17	
CMLD, median [IQR]	6.180 [4.168, 7.690]	6.590 [6.000, 7.410]	0.33
CV5, mean (SD)	34.059 (14.176)	42.235 (9.162)	0.03
CV10, median [IQR]	21.000 [12.250, 28.000]	24.000 [17.000, 28.000]	0.50
CV15, median [IQR]	10.000 [5.250, 18.000]	13.000 [9.000, 15.000]	0.38
CV20, median [IQR]	3.500 [1.000, 9.000]	8.000 [3.000, 12.000]	0.07
CV25, median [IQR]	1.500 [0.000, 5.000]	3.000 [0.000, 5.000]	0.63
CV30, median [IQR]	0.500 [0.000, 3.000]	2.000 [0.000, 3.000]	0.59
CV35, median [IQR]	0.000 [0.000, 2.000]	1.000 [0.000, 2.000]	0.44
CV40, median [IQR]	0.000 [0.000, 0.750]	0.000 [0.000, 1.000]	0.76
CV45, median [IQR]	0.000 [0.000, 0.000]	0.000 [0.000, 0.000]	0.88
CV50, median [IQR]	0.000 [0.000, 0.000]	0.000 [0.000, 0.000]	0.41
IMLD, median [IQR]	15.905 [13.037, 19.587]	18.120 [17.160, 19.790]	0.02
IV5, median [IQR]	61.500 [55.000, 70.500]	71.000 [65.000, 78.000]	0.014
IV10, median [IQR]	55.000 [45.000, 63.750]	61.000 [55.000, 69.000]	0.0245
IV15, median [IQR]	44.000 [34.250, 52.750]	50.000 [45.000, 55.000]	0.0406
IV20, mean (SD)	32.680 (12.286)	38.471 (6.746)	0.0696
IV25, mean (SD)	24.860 (10.150)	30.235 (5.750)	0.0427
IV30, mean (SD)	19.060 (8.515)	23.588 (4.611)	0.0411
IV35, mean (SD)	14.100 (6.855)	17.353 (3.534)	0.0664
IV40, median [IQR]	8.500 [7.000, 13.000]	12.000 [10.000, 14.000]	0.0137
IV45, median [IQR]	6.000 [4.000, 8.750]	7.000 [7.000, 9.000]	0.0703
IV50, median [IQR]	4.000 [3.000, 6.000]	5.000 [4.000, 6.000]	0.1031
TMLD, median [IQR]	10.950 [8.897, 11.677]	13.520 [12.530, 14.550]	<0.0001
TV5, median [IQR]	48.000 [39.500, 52.000]	54.310 [51.000, 58.000]	0.0036
TV10, median [IQR]	37.000 [28.250, 42.000]	41.000 [38.000, 43.000]	0.0377
TV15, median [IQR]	28.000 [18.750, 32.750]	31.000 [27.000, 33.000]	0.1028
TV20, median [IQR]	17.000 [13.000, 20.750]	25.000 [21.000, 26.000]	<0.0001
TV25, median [IQR]	14.000 [9.250, 17.000]	16.000 [14.000, 19.000]	0.0281
TV30, mean (SD)	9.701 (3.993)	12.347 (3.029)	0.0152
TV35, median [IQR]	6.500 [5.000, 8.000]	9.000 [7.000, 13.000]	<0.0001
TV40, mean (SD)	4.673 (2.095)	6.187 (1.697)	0.0091
TV45, median [IQR]	3.000 [2.000, 4.000]	3.050 [3.000, 4.000]	0.0511
TV50, median [IQR]	2.000 [1.000, 3.000]	2.000 [2.000, 3.000]	0.3309

RP, radiation pneumonitis; C, contralateral lung; I, ipsilateral lung; T, total lungs; MLD, mean lung dose; IQR; interquartile range; Vx, the percentage of normal lungs receiving a dose of  $\geq x$  Gy.